

Final Remedial Investigation Report

FORMER REMCO HYDRAULICS FACILITY

Volume I - Text

prepared for

WILLITS ENVIRONMENTAL REMEDIATION TRUST

APRIL 2002

prepared by



MWH

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WILLITS
T R U S T

**FINAL REMEDIAL INVESTIGATION REPORT
FORMER REMCO HYDRAULICS FACILITY
WILLITS, CALIFORNIA**

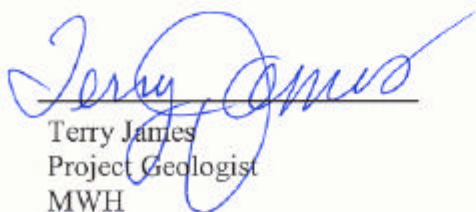
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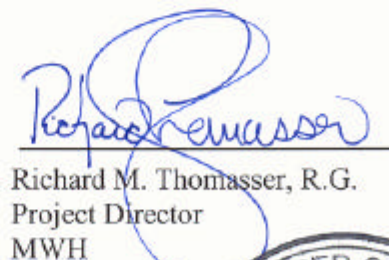

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*Provided on CD ROM only

ACRONYMS AND ABBREVIATIONS

1,1,1-TCA	1,1,1-trichloroethane
1,1-DCA	1,1-dichloroethane
AF	attenuation factor
ARAR	applicable or relevant and appropriate requirements
AST	above-ground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylene
CAO	cleanup and abatement order
CCTV	closed circuit television
CEC	cation exchange capacity
cis-1,2-DCE	cis-1,2-dichloroethylene
cm	centimeter
cm/s	centimeters per second
CPT	cone penetrometer test
Cr ⁺⁶	hexavalent chromium
CSM	conceptual site model
CW	capture well
CWR	California Western Railway
DCE	dichloroethylene
°F	degrees Fahrenheit
dh/dl	hydraulic gradient
DHS	Department of Health Services
DNAPL	dense non-aqueous phase liquid
DPT	direct push technology
DQO	data quality objective
DRW	diesel recovery well
DTSC	Department of Toxic Substances Control
DTW	depth to water
Eh	reduction/oxidation (RedOx) potential
FS	Feasibility Study
FSP	field sampling plan
ft	feet or foot
ft/ft	feet per foot
ft/yr	feet per year
gm	grams
gal	gallons
gal/day/ft ²	gallons per day per square foot
GC	gas chromatogram
GC/MS	gas chromatogram/mass spectrometer
GFAA	graphite furnace atomic absorption spectroscopy
h	hydraulic head
HDPE	high density polyethylene
Henshaw	Henshaw Associates, Inc.
HP	hydro-punch

ACRONYMS AND ABBREVIATIONS

HSA	hollow stem auger
i	hydraulic gradient
ICP	inductively coupled argon plasma
IRA	interim remedial action
IRM	interim remedial measure
K	hydraulic conductivity
K _d	distribution coefficient
kg	kilogram
K _{oc}	organic carbon distribution coefficient
l	length
<	less than
L	liter
LBP	lead based paint
MAQMD	Mendocino Air Quality Management District
MCL	maximum contaminant level
MEK	methyl ethyl ketone (2-butanone)
µg/L	micrograms per liter
meq	milliequivalents
meq/kg	milliequivalents per kilogram
mg	milligram
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
Mhos	resistance (Ohms ⁻¹)
ml	milliliter
mph	miles per hour
MRP	monitoring and reporting program
MS	mass spectrometer
MSDS	material safety data sheets
msl	mean sea level
MTBE	methyl tert-butyl ether
mV	millivolt
n	porosity
NCP	National Contingency Plan
ND	not detected
NDMA	N-nitrosodimethylamine
NIOSH	National Institute for Occupational Safety and Health
No(s).	number(s)
NRTMC	National Remediation Trust Management Company, LLC
ORP	oxidation reduction potential
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PCOC	preliminary chemical of concern

ACRONYMS AND ABBREVIATIONS

PEA	preliminary endangerment assessment
ppm	parts per million
PRG	preliminary remediation goal
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAPP	quality assurance project plan
RCRA	Resource Conservation and Recovery Act
RF	retardation factor
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RW	receiving waters
RWQCB	California Regional Water Quality Control Board
SAP	sampling and analysis plan
SB	soil boring
SC	specific conductance
SM	Standard Method
SRB	sulfate-reducing bacteria
SVOC	semivolatile organic compound
SWD	storm water drain
SWRCB	State Water Resources Control Board
SWPPP	storm water pollution prevention plan
TCE	trichloroethylene
TDS	total dissolved solids
TIC	tentatively identified compound
TMB	trimethylbenzene
TOC	total organic carbon
TOX	total organic halides
TPH	total petroleum hydrocarbons
TPH-diesel	total petroleum hydrocarbons as diesel
TPH-fuel oil	total petroleum hydrocarbons as fuel oil
TPH-gasoline	total petroleum hydrocarbons as gasoline
TPH-motor oil	total petroleum hydrocarbons as motor oil
TSCA	Toxic Substances Control Act
TSS	total suspended solids
TWA	time-weighted average
USEPA	United States Environmental Protection Agency
UST	underground storage tank
UTL	upper tolerance limit
VC	vinyl chloride
VOA	volatile organic analysis
VOC	volatile organic compound
WDO	waste discharge order
WDR	waste discharge requirement

EXECUTIVE SUMMARY

INTRODUCTION

On behalf of the Willits Environmental Remediation Trust (“Willits Trust”), MWH has prepared this Final Remedial Investigation Report (“RI Report”) for the former Remco Hydraulics, Inc. Facility (“Remco Facility”)¹ located at 934 South Main Street (U.S. Highway 101) in Willits, California (Figure ES-1). The purpose of the RI Report is to present the results of the comprehensive investigative work conducted by the Willits Trust, governmental regulatory agencies, and others, to fully characterize the horizontal and vertical extent of Hazardous Substances, which might have been released into the environment as a result of past manufacturing operations associated with the Remco Facility. This characterization is based on the review of available information, former employee interviews, and the collection and analysis of numerous soil, groundwater, storm water, surface water, sediment, air, and building surface and material samples.

In formulating and drafting this RI Report, the Federal District Court for the Northern District of California (“the Court”) ordered that the Willits Trust follow the strict federal regulatory guidelines normally applicable to federal Superfund sites. In addition to requiring full characterization of the Site, these federal guidelines require substantive participation by the public, by responsible parties, and by the regulatory community (collectively the “Interested Parties”). To that end, the Draft RI Report was made available to all Interested Parties to review during the review period, December 21, 2001 through February 12, 2002. The Willits Trust held a public meeting during this review period on January 8, 2002 at 7:00 p.m. at the Willits City Hall to present the results of the Draft RI Report and answer questions from all Interested Parties. The Willits Trust responded in writing by March 14, 2002 to all written comments provided within the review period. The Willits Trust considered comments

¹ The terms “Remco Facility” or “Facility” as used in this RI Report refers to the former Remco Hydraulics, Inc. property, located at 934 South Main St. in Willits, California. The term “Site,” as used in this RI Report refers to the Remco Facility and contiguous areas where Hazardous Substances associated with Facility operations have come to be located. The Willits Trust recognizes that the term “Site,” as defined herein, is narrower than that set forth in the Amended Final Consent Decree, Final Order And Final judgment; And Order Establishing The Willits Environmental Remediation Trust, entered December 22, 2000 (the “Consent Decree”). Any investigatory results relating to either ongoing or future *non-contiguous* off-Facility locations will be presented in one or more Supplemental RI Report(s).

submitted to the Draft RI Report and made modifications to this Final RI Report, consistent with the responses to comments.

The RI Report is organized as follows:

Section 1.0 - Provides an introduction and describes the purpose of the RI Report.

Section 2.0 - Describes the Site background, including a description of the Site, Site history, regulatory background, and a summary of previous investigations completed.

Section 3.0 - Describes the remedial investigation conducted at the Site and summarizes the field and laboratory methodologies utilized.

Section 4.0 - Describes the physical characteristics of the study area, including Site surface features, meteorology, surface water hydrology, regional and Site specific geology, and hydrogeology and ecology.

Section 5.0 - Describes the nature and extent of the environmental impact at the Site. The results of the investigation are evaluated against preliminary screening criteria to develop a list of preliminary chemicals of concern ("PCOCs") for the Site.

Section 6.0 - Describes the Conceptual Site Model ("CSM"). The CSM identifies the sources of the observed PCOCs and estimates of their potential migration. A discussion of the fate and transport of the observed PCOCs in the environment is also provided.

Section 7.0 - Provides a summary and conclusions of the remedial investigation.

Section 8.0 - Presents the cited references.

SITE BACKGROUND

The Remco Facility is located immediately adjacent to and west of U.S. Highway 101 ("Main Street") in Willits, California. The entire Facility is currently paved with asphalt or concrete with the exception of a small, unpaved strip along the asphalt driveway in the southern portion of the Facility, and a small, unpaved strip along the northern property boundary of the Facility. A concrete-floored metal building occupies more than half of the Remco property, which is approximately seven acres in size. On the western portion of the property, a smaller building exists that was formerly utilized for storage of raw and spent materials utilized in the manufacturing processes at the Facility.

In approximately 1945, the Harrah Brothers Machine Works, a machine shop that fabricated and repaired sawmill equipment, was built on the Facility. A growing industrial machining and manufacturing business was operated under various owners at the Facility from approximately 1945 until 1995. In 1955, Harrah Brothers Machine Works changed its name to Remco. In 1961, Remco Manufacturing Company incorporated in the State of California and changed the business name to Remco Hydraulics, Inc. The business was acquired or merged with other businesses five times between 1968 until its sale in November 1988 to M-C Industries, Inc. Remco Hydraulics, Inc. operated the Facility, with M-C Industries acting as its parent company, until both M-C Industries and Remco Hydraulics, Inc. declared bankruptcy in 1995. The Facility was closed and most of its transportable assets were sold and removed in 1996.

The manufacturing of hydraulic cylinders began at the Facility in approximately 1959. Chrome plating of hydraulic cylinders was performed at the Facility from approximately 1963 until operations ceased in 1995. In addition to chrome plating, cadmium, manganese, and zinc plating, along with aluminum and phosphate coating operations, were reportedly conducted at the Facility. However, chromium plating was the primary plating operation. Two horizontal above ground storage tanks (“ASTs”) and five vertical underground storage tanks (“USTs”) were used to chrome plate hydraulic cylinders and other metal parts at the Remco Facility. Other plating operations were conducted in small tanks located inside the chrome plating area.

A variety of chemicals were used in the operations at the Remco Facility, including metals and acids for plating operations, coolants, and lubricants for the milling and lathing machines, solvents for cleaning machines and manufactured parts, petroleum products for fuel, and paints for finishing manufactured parts. Past potential sources of contamination at the Remco Facility include: chromium (and other metals) plating operations, petroleum storage tanks and fuel lines, cleaning of machines and manufactured parts, painting operations, hazardous materials storage, metal shavings storage, dust control operations, machining operations such as milling and lathing operations, oil testing laboratory and related sump area, and containment trenches used for spill control.

PREVIOUS INVESTIGATIONS AND INTERIM REMEDIAL ACTIONS

Numerous environmental investigations of the Remco Facility have taken place beginning in 1981. These prior investigations identified chromium, volatile organic compounds (“VOCs”), and petroleum hydrocarbons in soils and groundwater at the Remco Facility.

In addition to the remedial investigations, a Preliminary Endangerment Assessment (“PEA”) (Henshaw, 2000) was completed to determine the need for further assessment or remedial actions at the Site. The final PEA issued in July 2000 concluded that past waste handling and management procedures and operational practices at the Facility had resulted in the release of Hazardous Substances, which if left unabated, were likely to pose a risk to human health and the environment. In addition, the PEA indicated that both short term and long term remedial actions were required at the Site. Importantly, the PEA also concluded that the Site posed no current significant threat to the health of Willits residents, given the current Site use, institutional controls, and ongoing and completed IRAs designed to prevent significant exposure to hazardous substances at the Site.

The short term interim remedial action (“IRA”) activities undertaken by the Willits Trust have included waste removal and closure activities. Specifically, when the Willits Trust was established in 1997, various waste materials were identified within numerous sumps, pits, trenches, and tanks at the Facility. The wastes within these structures were removed, characterized, and disposed of in accordance with applicable laws by the Willits Trust. The structures were subsequently cleaned, backfilled with gravel, and sealed to grade with concrete. Former petroleum ASTs were also cleaned and removed from the Facility. These closure activities were documented in the Summary Report-Interim Remedial Action, Sump, Pit, Trench and Tank Closure Activities Report (Henshaw, 1999a).

In addition to these removal actions, the Willits Trust designed and installed an IRA treatment system to extract and treat impacted shallow groundwater adjacent to the storm-drain system. This system has been in operation since March 1999. The water collected and treated by the

IRA treatment system is cleaned to levels more stringent than required by drinking water standards, and is then discharged via permit to the City of Willits sanitary sewer.

SUMMARY OF REMEDIAL INVESTIGATION ACTIVITIES

The following investigation activities were conducted to fully evaluate the nature and extent of contamination at the Remco Site:

- Site background investigations
- Utility investigations
- Characterization of surface features
- Geophysical investigations
- Contaminant source area investigations
- Evaluation of the lateral and vertical extent of contaminants in soil and groundwater
- Storm water, surface water and sediment investigations
- Air sampling
- Aquifer testing
- Ecological surveying
- Periodic groundwater and storm water monitoring

These investigations have resulted in the characterization of the Site hydrology and geohydrology (Site physical characteristics), the nature and extent of contamination, and the fate and transport of contamination at the Site, as summarized below.

SITE PHYSICAL CHARACTERISTICS

Site Surface Water Hydrology

The Remco Facility is located within the Little Lake Valley. Broaddus Creek is located approximately 1,800 feet to the north of the Facility, and Baechtel Creek is located approximately 600 feet to the east of the Facility, as shown on [Figure ES-1](#). A tributary to Baechtel Creek, referred to as No-Name Creek, originates in the hills southwest of the Site and

flows in a northeasterly direction until it intersects a drainage ditch (referred to as the South Drainage Ditch) along the south side of the California Western Railroad (“CWR”) tracks.

No natural surface water bodies currently exist on the Remco Facility. Surface water occurs at the Remco Facility as storm water runoff associated with rainfall events that occur primarily in the fall through spring seasons. However, due to shallow groundwater conditions in the winter and spring, groundwater seeps have been observed to result in water ponding and occasional flowing at the land surface. The raised grade of the CWR railroad tracks located between the Remco Facility and the South Drainage Ditch and the slope of the property prevents the flow of surface water runoff from the Remco Facility to the South Drainage Ditch.

The original storm water transport system at the Facility has been described as an unlined ditch located near the northern property boundary. Between 1970 and 1974 the ditch was lined with concrete and a subsurface storm water culvert with several concrete catch basins was installed replacing the open ditch at the Facility. The results of historical storm water sampling indicated that the storm-drain system was in hydraulic communication with very shallow groundwater adjacent to the sewer line during the high groundwater season. As a result, the storm-drain system was lined in 1995 with high-density polyethylene (“HDPE”) pipe. In addition, concrete grout collars were installed surrounding the entire storm drain pipe to prevent any preferential flow through backfill along the pipe.

While the storm drain liner reduced communication between potentially impacted groundwater and the storm-drain system at the Facility, chemical testing indicated low levels of certain PCOCs in the storm-drain system. After it took possession of the Facility, the Willits Trust performed additional improvements to the storm-drain system, including lining the catch basins with HDPE in 2000. Subsequent sampling indicates that the Willits Trust’s actions were effective in eliminating any significant communication between impacted groundwater and the storm water discharged from the Facility.

Currently the storm-drain system at the Remco Facility consists of seven catch basins and underground piping. The Remco Facility storm water discharges into the City of Willits

storm-drain system and is conveyed through a subsurface conduit eastward discharging to Baechtel Creek.

Site Hydrogeology

Three water-bearing zones have been identified at the Site and are referred to, from shallowest to deepest, as the A-, B- and C-Zones. Although the water-bearing zones are primarily fine-grained deposits, they tend to contain more coarse-grained deposits than surrounding strata. However, these coarse-grained deposits do not generally form continuous layers laterally over the entire Site. In most locations investigated, two zones of predominantly finer-grained deposits, exhibiting low permeability and referred to as the A/B-Aquitard and the B/C-Aquitard, exist between the A-, B- and C-Zones and limit communication of groundwater between the water-bearing zones. Although the A-, B- and C-Zones should not be interpreted as separate water-bearing zones, the characteristics of these zones and the distribution of contaminants supports the definition of five unique stratigraphic horizons for the purposes of Site characterization.

Within the A-Zone, there are areas that contain shallow artificial fill materials. Artificial fill, where saturated, is included as part of the A-Zone for discussion within this report. Fill has been observed in most areas underlying the main building; however, this fill has not been observed to extend off the Facility property. Therefore, the on-Facility fill material does not act as a potential preferential pathway for off-Facility migration of contaminants.

Underground utilities at the Facility were investigated during the RI to determine if they are, or have been, conduits for preferential contaminant migration. Environmental sampling was conducted around many of the utilities. The subsurface utilities encountered on the Facility include: the storm-drain system, sanitary sewer, diesel fuel lines, water lines (domestic and industrial), as well as miscellaneous industrial fluid conveyance lines. The investigation did not find that these utilities are current preferential pathways for contamination migration. However, it is believed that the storm-drain and sanitary systems may have acted as historical pathways for PCOC transport, given the detection of some PCOCs along the routes of these systems.

Groundwater is encountered at relatively shallow depths beneath the Site, ranging from 3 to 15 feet below ground surface (“bgs”). Groundwater levels (and groundwater heads for the B- and C-Zone) typically fluctuate approximately 4 feet annually in all three water-bearing zones in response to seasonal precipitation, with the highest water levels typically occurring in the winter and spring months and the lowest water levels occurring in the summer and fall months. The horizontal direction of groundwater flow in the three water-bearing zones is toward the northeast. Based on the range of estimated hydraulic conductivities, groundwater seepage velocity at the Site is estimated to range from approximately 15 to 145 feet per year (“ft/yr”) in the A-Zone. In the B-Zone, groundwater velocity is estimated to range from 29 to 559 ft/yr. The C-Zone groundwater seepage velocity is estimated to range from approximately 7 to 455 ft/yr.

The observed migration of PCOCs in groundwater is less than the estimated groundwater seepage velocity due to retardation and degradation of PCOCs in the subsurface. In addition, the estimates of groundwater seepage velocity should generally be considered conservatively high, particularly for the A-Zone since they do not take into account the heterogeneity of the Site hydrogeology. The lack of appreciable coarser grained deposits within the A-Zone underlying Franklin Avenue is interpreted to be a major factor in limiting contaminant transport away from the Facility.

NATURE AND EXTENT OF CONTAMINATION

The nature and extent of environmental contamination resulting from past Remco operations have been adequately defined by investigations to date, as required by the Court and in a manner consistent with the National Contingency Plan. As such the Willits Trust has determined that the data are suitable to proceed with the Site Risk Assessment and Feasibility Study. This conclusion is based on sampling and analyses of soil, groundwater, storm water, surface water, sediment, air, and building materials and surfaces as follows:

- Collection and analysis of 415 subsurface soil samples
- Collection and analysis of 42 surface soil samples

- Collection and analysis of 289 grab groundwater samples
- Installation of 74 groundwater monitoring wells and 11 temporary wells and multiple sampling events
- Sampling of 24 private wells in the Site vicinity
- Collection and analysis of storm water samples from 20 locations in the Site vicinity (multiple events), and evaluation of 12 sources of inflow into the storm-drain system (storm water influent)
- Collection and analysis of 23 surface water samples from Baechtel Creek, Broaddus Creek, and the South Drainage Ditch
- Collection and analysis of 36 sediment samples from Baechtel Creek, Broaddus Creek, and the South Drainage Ditch
- Collection and analysis of 21 air samples from both on-Facility and off-Facility locations
- Collection and analysis of eight samples of building materials and 20 wipe samples to evaluate building and paved surfaces

In addition to the environmental samples collected, additional investigations have been performed to evaluate past Facility operations, historical Site uses, location and construction of utilities, potential routes of contaminant migration, and geophysical, lithologic, and hydraulic properties of the subsurface.

Based on past Facility operations and Site data, the Willits Trust has identified the following PCOCs at the Site:

- Metals and other chemicals used in metal finishing and plating
- VOCs (e.g., solvents and paint components)
- Petroleum hydrocarbons (e.g., fuel and oil constituents)
- Polynuclear aromatic hydrocarbons (“PAHs”)
- Polychlorinated biphenyls (“PCBs”)

The principal sources, contaminants, and the environmental media impacted by those sources, at the Remco Facility are:

- Chrome Plating Area - hexavalent chromium and VOCs in soil and A-Zone, B-Zone, and C-Zone groundwater

- Paint Shops and Degreasers - VOCs in shallow soil and groundwater;
- Hazardous Material Storage Areas - Total petroleum hydrocarbons (“TPH”) and VOCs in soil
- Metal Machining - PCBs and TPH in soil and A-Zone groundwater at one location
- Former diesel fuel line and 7,500 gallon diesel UST near the northern Facility boundary -TPH-diesel and PAHs in soil and A-Zone groundwater

To provide a basis for defining the extent of contamination at the Site, preliminary screening criteria were developed. These preliminary screening criteria are media-specific and have been developed for constituents detected in soil, groundwater, surface water, storm water, and sediment based on a consideration of regulatory guidance and Site-specific background concentrations for each constituent detected in each media. The purpose of screening the Site data against the preliminary screening criteria is to determine whether the Site has been fully characterized to the extent necessary to assess the extent to which the release of Hazardous Substances may present an endangerment to the environment or to health, and to support the analysis and design of potential response actions. As indicated in Section 7, the Willits Trust intends to install additional groundwater monitoring wells and will continue to collect and analyze groundwater samples in order to further clarify the extent of contaminants in groundwater. Further, all chemicals detected above background levels will be evaluated in the Risk Assessment and will be considered in identifying ARARs and defining Site cleanup goals. A summary of the findings of the RI, organized by media (soil and groundwater, storm water, surface water, sediment, air, and man-made features) is presented below.

PCOCs in Soil and Groundwater

Volatile Organic Compounds. Tetrachloroethene (“PCE”), trichloroethene (“TCE”), 1,1,1-trichloroethane (“1,1,1-TCA”), 1,1-dichloroethane (“1,1-DCA”), and 1,1-dichloroethene (“1,1-DCE”) were detected in soils on the Remco Facility at concentrations exceeding their respective preliminary screening criteria. The concentrations of these VOCs generally decrease with depth, and were detected in soils in the following areas at the Remco Facility:

- Paint shops (western and south central portions of the Facility)
- Plating operation vicinity (central portion of the Facility)

- Hazardous Materials Storage Area (south central portion of the Facility)
- Along the storm-drain system at the northern Facility boundary

VOCs were also detected in A-Zone groundwater in these same locations. The highest concentrations of VOCs in shallow groundwater, as illustrated by [Figure ES-2](#),² are near the storm-drain system along the northern Remco Facility boundary, around the paint shop in the northwestern portion of the main building, and east of the chrome plating area. Twenty-one VOCs were detected in groundwater at concentrations exceeding the preliminary screening criteria. However, the most consistently detected VOCs are PCE, TCE, 1,1-DCE, 1,2-DCE, 1,1,1-TCA, 1,1-DCA, and 1,4-dioxane. In many cases, higher concentrations of degradation breakdown products (1,1-DCE, 1,2-DCE and 1,1-DCA) are found than the parent compounds (PCE, TCE and 1,1,1-TCA), indicating natural degradation of VOCs is occurring at the Site. However, in the identified source areas, including the paint shops and along the storm-drain system, high concentrations of the parent solvents remain. The high concentrations of PCE detected in A-Zone groundwater within a limited area underlying the storm-drain system suggest the presence of PCE as dense non-aqueous phase liquid (“DNAPL”).

Groundwater in the B- and C-Zones is significantly less impacted by VOCs than the overlying A-Zone, both in magnitude and lateral extent. This distribution is consistent with the estimated low rate of vertical groundwater movement and the presence of the intervening aquitards in most locations. The distribution of VOCs in B-Zone and C-Zone groundwater is depicted on [Figures ES-3](#) and [ES-4](#), respectively. As shown in these figures, VOCs have been detected in the chrome plating area and in the area to the west of the main building. Due to the competency of the A/B-and B/C-Aquitards in the chrome plating area, the downward transport of the VOCs in this area is likely exacerbated by the vertical chrome plating tanks, which are constructed across these aquitards. To the west of the main building, the A/B-Aquitard is less competent and has likely allowed natural migration from the A-Zone into the underlying

² [Figures ES-2](#) through [ES-7](#) also illustrate the estimated area where PCOCs exceed drinking water standards set by the Federal Government and the State of California, also known as Maximum Contaminant Levels (“MCLs”). Although A-Zone groundwater surrounding the Remco Facility is not used for drinking water purposes (all nearby properties are supplied by the City water supply which is located several miles upstream of the Facility), the Willits Trust has used the MCL standards to help illustrate the approximate extent of affected groundwater at the Remco Site.

B-Zone groundwater. In addition, the presence of thicker sands in the B-Zone and C-Zone, as well as the lack of a well defined B/C-Aquitard, may have contributed to deeper migration of VOCs in this area. Downgradient grab groundwater samples collected in the B- and C-Zones show only minor detections of VOCs in the B-Zone and no detection of VOCs in the C-Zone along Franklin Avenue

Metals. Soils have been impacted by hexavalent chromium at the Site. Hexavalent chromium was detected in shallow and deeper soils in and surrounding the former chrome plating area and along the northern Facility boundary at depths up to 67 feet bgs. The highest concentration of hexavalent chromium in soil was found east of the horizontal chrome plating tanks at a depth of 11 feet bgs. The extent of hexavalent chromium in A-Zone groundwater is confined to the area surrounding and immediately downgradient of the former chrome plating area, as illustrated by [Figure ES-5](#). The highest concentrations in groundwater are centered immediately east of the horizontal chrome plating tanks. Hexavalent chromium in B-Zone and C-Zone groundwater is detected only in the immediate vicinity of the vertical chrome plating tanks and appears due to subsurface leaks from the plating tanks, as illustrated by [Figures ES-6](#) and [ES-7](#).

Several metals, other than hexavalent chromium and chromium, were detected in soil samples at concentrations exceeding preliminary screening criteria. These metals include antimony, arsenic, cadmium, copper, and lead. The detections were generally infrequent and were determined either to be sporadic, or located within the hexavalent chromium plume. The sporadic detections did not correlate with specific known Remco operations or locations. Non-chromium metals may also have slightly impacted A-Zone groundwater. However, as with soils, the locations of these potentially elevated metal concentrations are also within the hexavalent chromium plume.

Petroleum Hydrocarbons, Polyaromatic Hydrocarbons, and PCBs. TPH as diesel (“TPH-diesel”) was detected in numerous soil samples at the Site. The following areas contained TPH concentrations in soil above the preliminary screening criteria:

- TPH-diesel near the former location of the 7,500-gallon diesel UST
- TPH-diesel and TPH as motor oil (“TPH-motor oil”) along the northern storm-drain system alignment and along the path of the former underground diesel fuel line along the northern Facility boundary
- TPH-diesel near the location of a cutting oil sump in the south central portion of the Facility
- TPH-gasoline within and immediately north of the chrome plating area
- TPH-diesel at a few other isolated locations: adjacent to former trenches in the western portion of the main building and along the south-central Facility boundary

TPH in A-Zone groundwater has been detected primarily in the same areas that soils were noted to be impacted above the preliminary screening criteria. These areas include the former UST location north of the main building, near the northwest corner of the main building along the former diesel fuel line, and in the south central portion of the main building adjacent to the former cutting oil sump.

PAHs were detected in two soil samples at concentrations exceeding preliminary screening criteria at the Remco Facility at locations where TPH-diesel was also present. PAHs were detected at concentrations exceeding preliminary screening criteria in A-Zone groundwater samples collected in Building 1962 where diesel product was noted during drilling and elevated concentrations of TPH-diesel have been documented. The localized detections of PAHs are consistent with the diesel fuel releases. PAHs were not detected in the B- or C-Zone.

PCBs were detected in soil between 2 and 6 feet bgs in a relatively localized area in the vicinity of a cutting oil sump (central portion of Building 1962). The detected PCBs are co-located with TPH-diesel and TPH-motor oil detections in soil. PCBs have been detected in one grab groundwater sample in the same areas as PCBs detected in soil.

PCOCs in Storm Water

The current Site data indicate that storm water flowing from the Remco Facility is not contaminated. Removal of wastes from the Remco Facility by the Willits Trust has eliminated potential surface sources of chemicals to storm water. Improvements to the storm-drain system

in 1995 and 2000 have also significantly reduced the potential for contaminated groundwater to enter the storm-drain system, provided the integrity of the storm-drain system is maintained.

Soil and groundwater sampling indicate a strong likelihood of historical releases of PCOCs to the storm-drain system. Impacted storm water runoff may have, in turn, been released to off-Facility soil, groundwater and surface water. Historical releases of impacted storm water are believed to be the source of low concentrations of VOCs and hexavalent chromium found in A-Zone groundwater near the bend in the storm-water drain line on the Safeway Shopping Center parking lot (Figures ES-2 and ES-5).

PCOCs in Surface Water

There is no current impact to surface water from historical Facility operations or current Site activities. Removal of wastes from the Remco Facility has eliminated potential surface sources of chemicals to storm water and improvements to the storm-drain system have also prevented contaminated groundwater from entering the storm-drain system, which discharges to Baechtel Creek. Historical detections of VOCs and chromium in storm water may have resulted in historical impacts to surface water.

PCOCs in Stream-Bed Sediment

Low levels of hexavalent chromium were detected in three stream bed sediment samples collected from Baechtel Creek, all at estimated concentrations below laboratory detection limits. These detections were likely related to historical releases from the Facility. However, low levels of other metals, PAHs, TPH, and VOCs detected in sediments have not been directly correlated to sources at the Remco Facility. Although the historical discharges of affected storm water may be responsible for these detections, other possible sources include urban runoff and other sources not related to the Facility. The significance of these detections will be further evaluated in the Risk Assessment.

PCOCs in Air

Hexavalent chromium was not detected in off-Facility air samples. Air sampling within the Remco Facility did not indicate that hexavalent chromium in air is a hazard to Site workers.

However, the presence of hexavalent chromium in dust on building surfaces (as discussed below) represents a possible health threat to unprotected Site workers if the surfaces were sufficiently disturbed.

Low levels of VOCs were detected in both on-Facility and off-Facility air samples. However, due to the existence of other potential sources for the VOCs detected and the relatively low levels detected, the source of these VOCs has not yet been determined. The potential volatilization to air from VOCs in shallow soil and groundwater will be further addressed as part of the Risk Assessment.

PCOCs and Man Made-Features

Building surfaces at the Remco Facility inside the main building are impacted with hexavalent chromium and lead. In addition, floor tiles in the office area contain non-friable asbestos. Wipe samples from asphalt pavement in the front parking lot bordering Main Street did not exhibit detectable concentrations of hexavalent chromium. The affected building surfaces and materials pose no health threat unless these materials are disturbed. Site workers are required to perform activities according to a Site-specific health and safety plan, which outlines the proper precautions for working at the Remco Facility.

CONTAMINANT FATE AND TRANSPORT

VOCs are the most mobile of the Site contaminants, with observed migration rates for the principal VOCs detected ranging from approximately 4.5 to >15 ft/yr in the A-Zone. Metals were observed to migrate at slower rates than VOCs, with the hexavalent chromium migration rate estimated at 3.2 ft/yr. Neither PAHs nor PCBs are expected to have any appreciable mobility in groundwater. The Site data confirms that these PCOCs have been detected only in the immediate vicinity of their petroleum hydrocarbon source areas.

As discussed above, current operational sources of contamination have been eliminated by removal and interim remedial actions of the Willits Trust. However, elevated residual concentrations of VOCs and hexavalent chromium in soil and shallow groundwater represent a

potential continued source to groundwater. Continued groundwater monitoring by the Willits Trust serves to evaluate future potential plume migration.

CONCEPTUAL SITE MODEL

Based on the information collected and evaluated, a conceptual site model (“CSM”) has been developed which provides a summary of the source(s), extent, nature and migration of contaminants at the Site. [Figure ES-8](#) presents the CSM.

The key features of the CSM are summarized as follows:

- The majority of past VOC and chromium releases were at or near the surface within and adjacent to the main building, where they migrated down into the soil and shallow groundwater. Limited quantities of PCE were likely released in separate-phase form to the historical unlined drainage ditch/storm-drain system which allowed them to migrate downward through the shallow groundwater due to their density. The presence of low permeability sediments within and below the AZone have acted to limit downward migration of the contaminants. This explains why the largest contaminant mass and extent of impacted groundwater are found in the shallowest zone at the Site with significantly less impact found in deeper zones.
- A significant additional pathway was transport of impacted shallow water via the former drainage ditch and/or storm drain system. This helps explain the elongated (east-west) geometry of the groundwater plume, and the impacts found east of Highway 101 beneath the Safeway Shopping Center parking lot.
- Another pathway involved releases from the vertical chrome plating tanks, which introduced limited quantities of chromium and VOCs into the groundwater system at depths up to 70 feet. In addition, the limited occurrence of fine-grained sediments at the western end of the Facility, have allowed deeper migration of VOCs in groundwater. These pathways largely explain the presence of lower concentrations of chromium and VOCs at depth.
- Other PCOCs such as TPH, PAH, PCBs and other metals appear to have resulted from Facility activities, but they have been attenuated sharply at shallow depth due to their chemical properties and the relatively small amounts released into the environment.
- Groundwater flow at the Site is generally to the northeast and has shaped the plume geometry accordingly. The fluvial environment at the Site resulted in the deposition of discontinuous water-bearing zones of varying permeability. These sediments vary in physical properties both laterally and vertically over very short distances. These

variations have acted to reduce the rate of groundwater flow and downgradient contaminant transport. They also provide for greater lateral dispersion of contaminants.

- The geochemical environment also impacts the PCOC fate and transport. The near surface soils (A-Zone) appear to be moderately oxidized while the deeper soils (B- and C-Zones) have been observed to exhibit reduced conditions. These conditions result in complex and varied geochemical effects on the observed PCOCs including the natural attenuation of hexavalent chromium via reduction.
- Most VOCs and chromium have migrated a relatively short distance from their sources, compared to what would be expected under the hypothetical conditions of unretarded groundwater transport.
- Interim Remedial Actions performed to date (removal of wastes, storm drain lining, facility surface runoff management, pump-and-treat to prevent groundwater from entering the storm drain) were performed in order to remove contaminant sources and limit routes of migration. The original surface sources of contamination have been cut off by the shutdown of the Facility and the closure of sumps, tanks, pits and trenches within the Facility.

The CSM will be expanded in the Risk Assessment to include potential receptors, and will be updated and refined to ultimately guide the selection of an appropriate remedy for cleanup of the Remco Site.

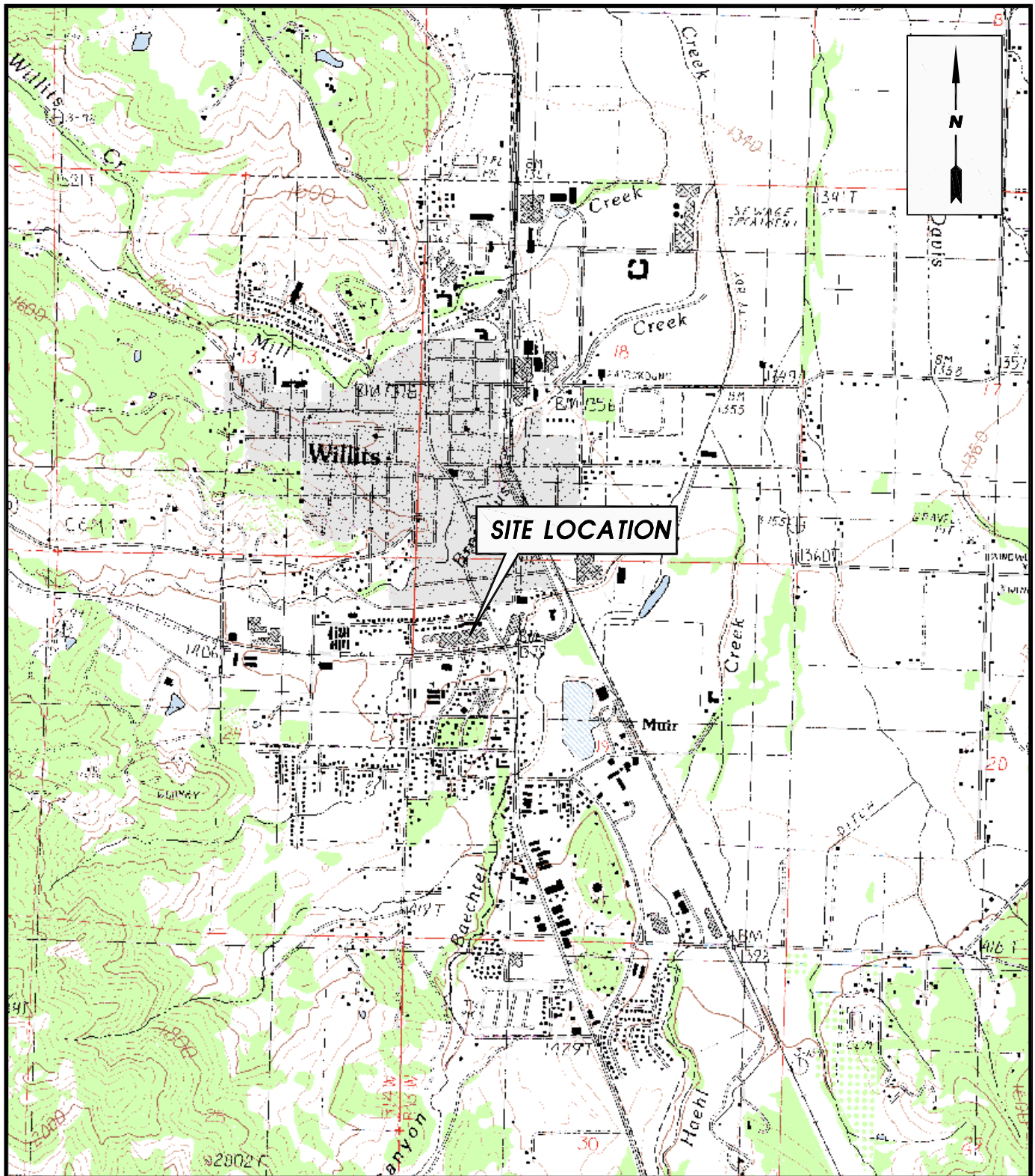
RECOMMENDATIONS

Based on the results of the RI, it is recommended that the Risk Assessment and Feasibility Study commence to fully evaluate the Site risks to human and ecological receptors and to evaluate potential alternatives for Site remediation. In addition, the following recommendations for further action are made:

- Evaluate whether a former stream channel existed in the immediate vicinity of Luna Apartments.
- Abandon five monitoring wells installed prior to the establishment of the Willits Trust that have screens and/or sand packs that cover two water-bearing zones ([Figure ES-9](#)).
- Install three additional A-Zone monitoring wells and four additional B-Zone monitoring wells to improve the groundwater monitoring well network for continued groundwater monitoring ([Figure ES-9](#)).

- Drill two soil borings and collect grab groundwater samples east of Highway 101 to investigate the A/B-Aquitard and B-Zone lithology and to evaluate the vertical extent of contaminants found in the A-Zone.
- Continue to routinely sample and analyze groundwater monitoring wells to monitor the extent and migration of Site-related chemicals at the Remco Site.

Following completion of these additional recommended tasks, the Willits Trust may issue a supplemental report if the results from this additional work materially impact the characterization of the lateral and vertical extent of the PCOCs, as described in this RI Report. Further, as indicated above, the Willits Trust will issue supplements to this RI Report should significant Facility-related impacts be detected in non-contiguous off-Facility locations.



MWH
MONTGOMERY WATSON HARZA

SOURCE: U.S.G.S. 7.5' QUAD SHEET
WILLITS, CALIFORNIA
PHOTOREVISED 1993

SCALE:

0 FEET 2000

SITE LOCATION MAP

CLIENT:

WILLITS ENVIRONMENTAL
REMEDATION TRUST

DATE:

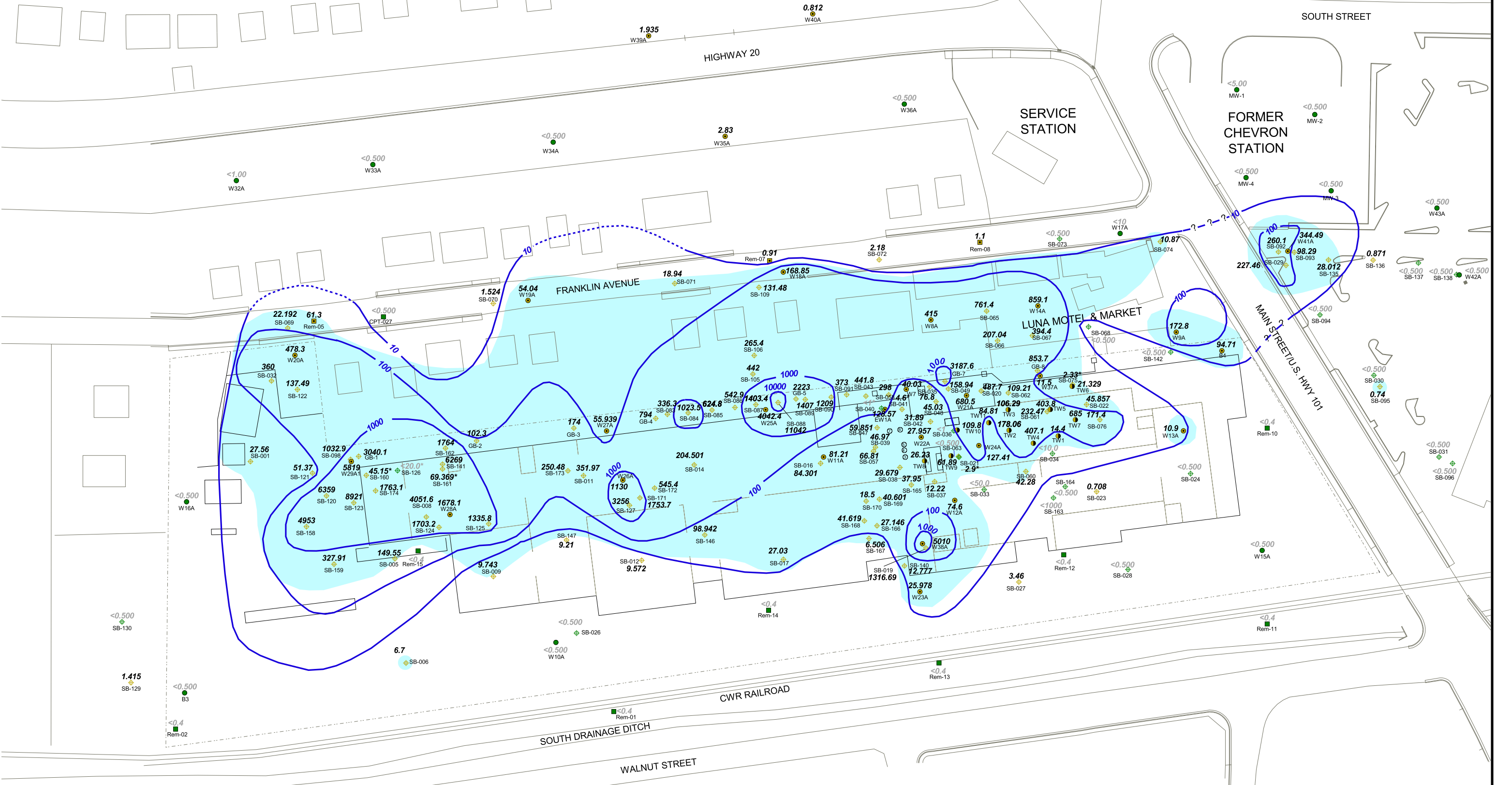
12/14/01

LOCATION:

FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

FIGURE:

ES-1



Legend

Summed Result (ug/L) 10.16
Sample Location CPT-021

Abbreviation
MCL Maximum Contaminant Level

10 Summed result contour (ug/L)
? Where uncertain
Dashed where approximate

Estimated area exceeding California MCLs for one or more of the constituents listed below.

Note: Monitoring well data collected from 2-19-01 through 2-24-01, except for monitoring well W17A (collected 10-24-00) and pilot study monitoring wells (collected 4-30 through 9-15-00).
Latest result used when more than one sampling occurrence.
Note: Refer to Tables 5-3a-1 and 5-3b-1 for data. The following VOC analytes were summed, if detected, for each location shown: Tetrachloroethene, cis-1,2-Dichloroethene, 1,1,1-Trichloroethane, Vinyl chloride, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1,2-Trichloroethane, 1,2-dichloroethane, chloroethane and Trichloroethane.

*Data not used in contouring.

N

0 50 100 150 200 Feet

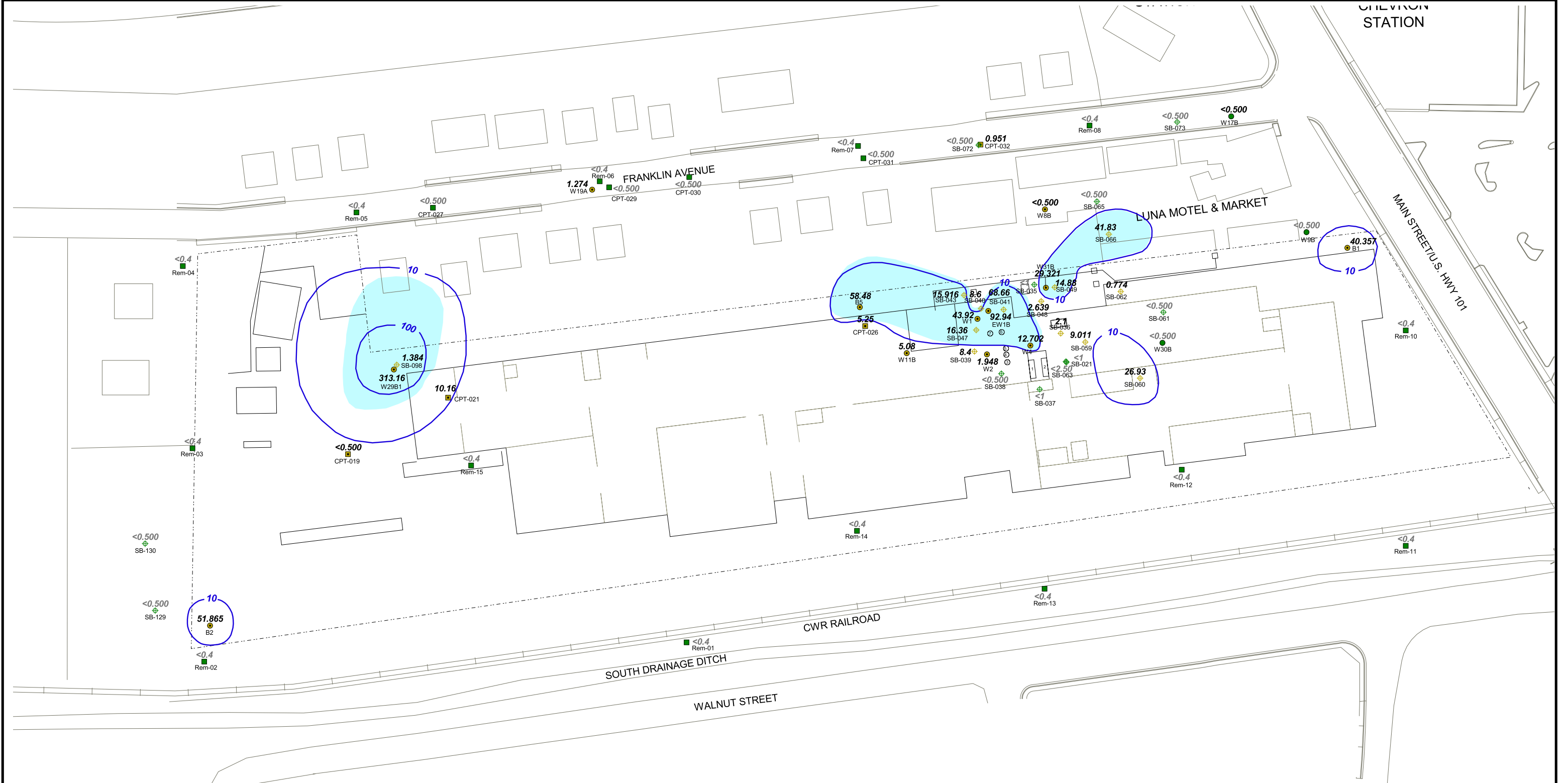
SCALE

MWH
MONTGOMERY WATSON HARZA

**WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC. FACILITY
WILLITS, CALIFORNIA**

**SELECT SUMMED VOC CONCENTRATIONS
IN A-ZONE MONITORING WELLS
AND GRAB SAMPLES**

FIGURE ES-2



Legend

Soil Boring - Detection

Soil Boring - No Detection

Monitoring Well - Detection

Monitoring Well - No Detection

CPT Water Sample - Detection

CPT Water Sample - No Detection

Aboveground Chrome Plating Tank

Underground Chrome Plating Tank

Storm-Drain System Catch Basin

Remco Facility Boundary

Summed Result (ug/L)

Sample Location

Abbreviation

MCL

10.16

CPT-021

Maximum Contaminant Level

Note: Monitoring well data collected from 2-18-01 through 2-24-01, except for monitoring well W17B (collected Oct. 24th, 2000).

Summed result contour (ug/L)

Estimated area exceeding California MCLs

Note: Refer to table 5-3b-1 for data. The following VOC analytes were summed, if detected, for each location shown: Tetrachloroethene, cis-1,2-Dichloroethene, 1,1,1-Trichloroethane, Vinyl chloride, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1,2-Trichloroethane, 1,2-dichloroethane, chloroethane and Trichloroethene.

N

050100150200 Feet

SCALE

MWH

MONTGOMERY WATSON HARZA

WILLITS ENVIRONMENTAL REMEDIATION TRUST

FORMER REMCO HYDRAULICS, INC. FACILITY

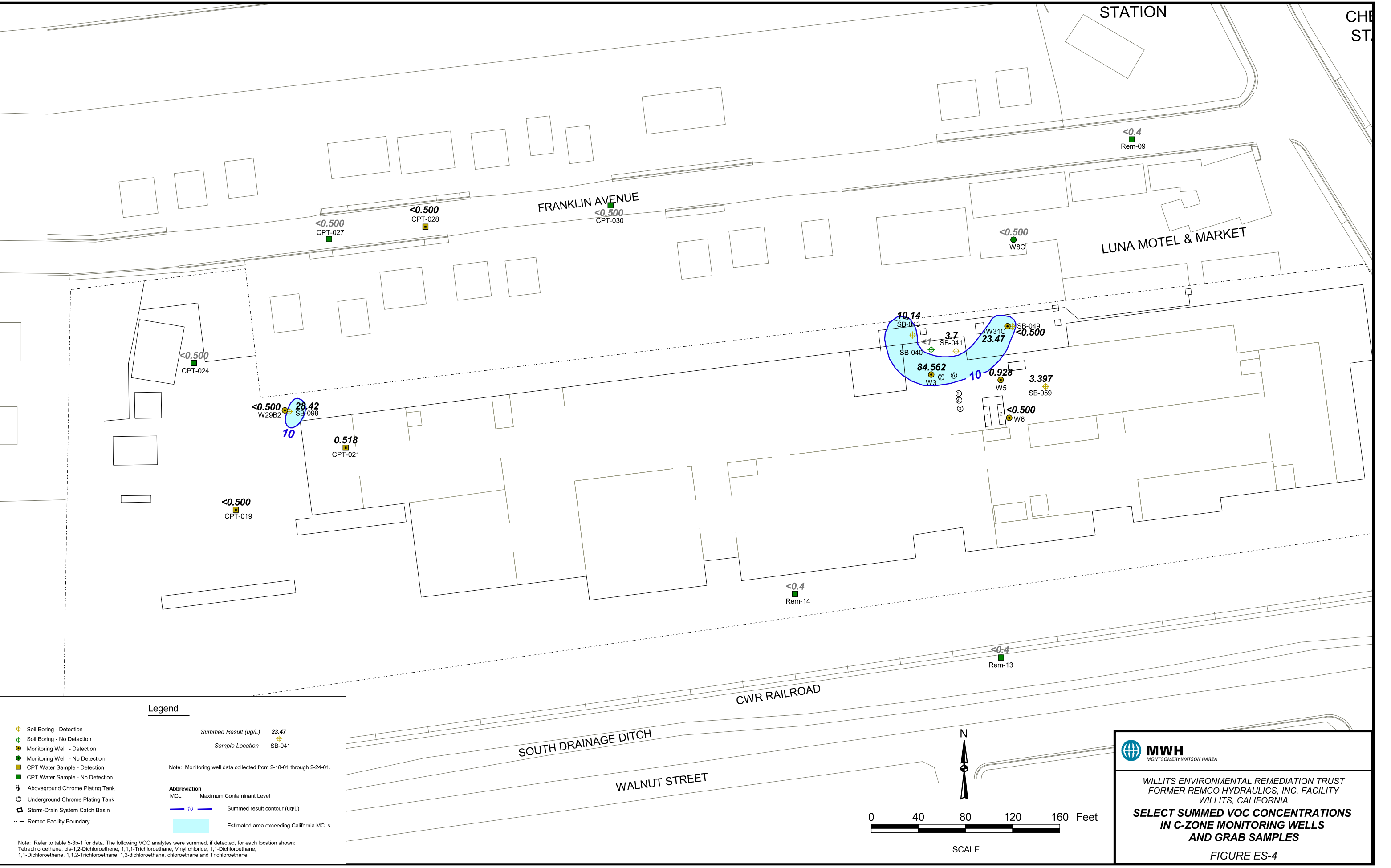
WILLITS, CALIFORNIA

SELECT SUMMED VOC CONCENTRATIONS

IN B-ZONE MONITORING WELLS

AND GRAB SAMPLES

FIGURE ES-3



⊕ Soil Boring - Detection

⊕ Soil Boring - No Detection

● Monitoring Well - Detection

● Monitoring Well - No Detection

■ CPT Water Sample - Detection

■ CPT Water Sample - No Detection

⌚ Aboveground Chrome Plating Tank

ⓐ Underground Chrome Plating Tank

⬜ Storm-Drain System Catch Basin

--- Remco Facility Boundary

Summed Result (ug/L)

Sample Location

Note: Monitoring well data collected from 2-18-01 through 2-24-01.

Abbreviation

MCL Maximum Contaminant Level

10 Summed result contour (ug/L)

Estimated area exceeding California MCLs

23.47

SB-041

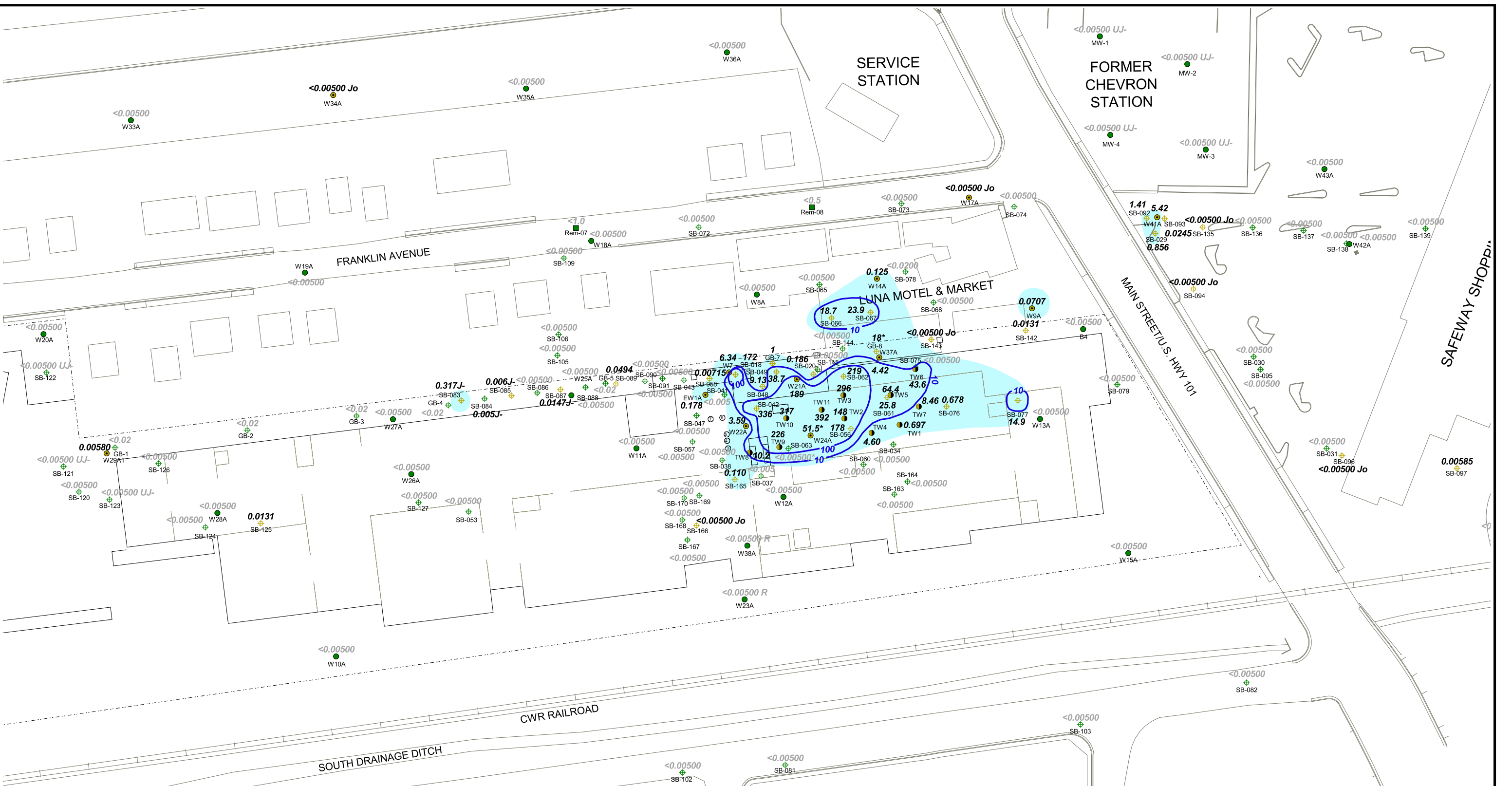
Note: Refer to table 5-3b-1 for data. The following VOC analytes were summed, if detected, for each location shown: Tetrachloroethene, cis-1,2-Dichloroethene, 1,1,1-Trichloroethane, Vinyl chloride, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1,2-Trichloroethane, 1,2-dichloroethane, chloroethane and Trichloroethene.

MWH
MONTGOMERY WATSON HARZA

WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC. FACILITY
WILLITS, CALIFORNIA

**SELECT SUMMED VOC CONCENTRATIONS
IN C-ZONE MONITORING WELLS
AND GRAB SAMPLES**

FIGURE ES-4



Sample Locations

Monitoring Well - Detection

Monitoring Well - No Detection

Temporary Well - Detection

CPT Water Sample - No Detection

Soil Boring - Detection

Soil Boring - No Detection

Aboveground Chrome Plating Tank

Underground Chrome Plating Tank

Storm Drain System Catch Basin

Remco Facility Boundary

Legend

10

45.1

Sample Location

Result (mg/L)

Hexavalent Chromium isoconcentration contours (mg/L)

Estimated area exceeding CA MCL for Dissolved Chromium of 0.050 mg/L (RWQCB, 2000)

Abbreviation

MCL Maximum Contaminant Level

Notes: Refer to Appendix 5-3 for qualifier definitions.

Monitoring well samples collected Feb. 18th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24, 2000.)

Temporary monitoring well samples collected April 2000 through September 15, 2000; latest date used when more than one sampling occurrence.

Data not used in contouring.

MWH

MONTGOMERY WATSON HARZA

WILLITS ENVIRONMENTAL REMEDIATION TRUST

FORMER REMCO HYDRAULICS, INC. FACILITY

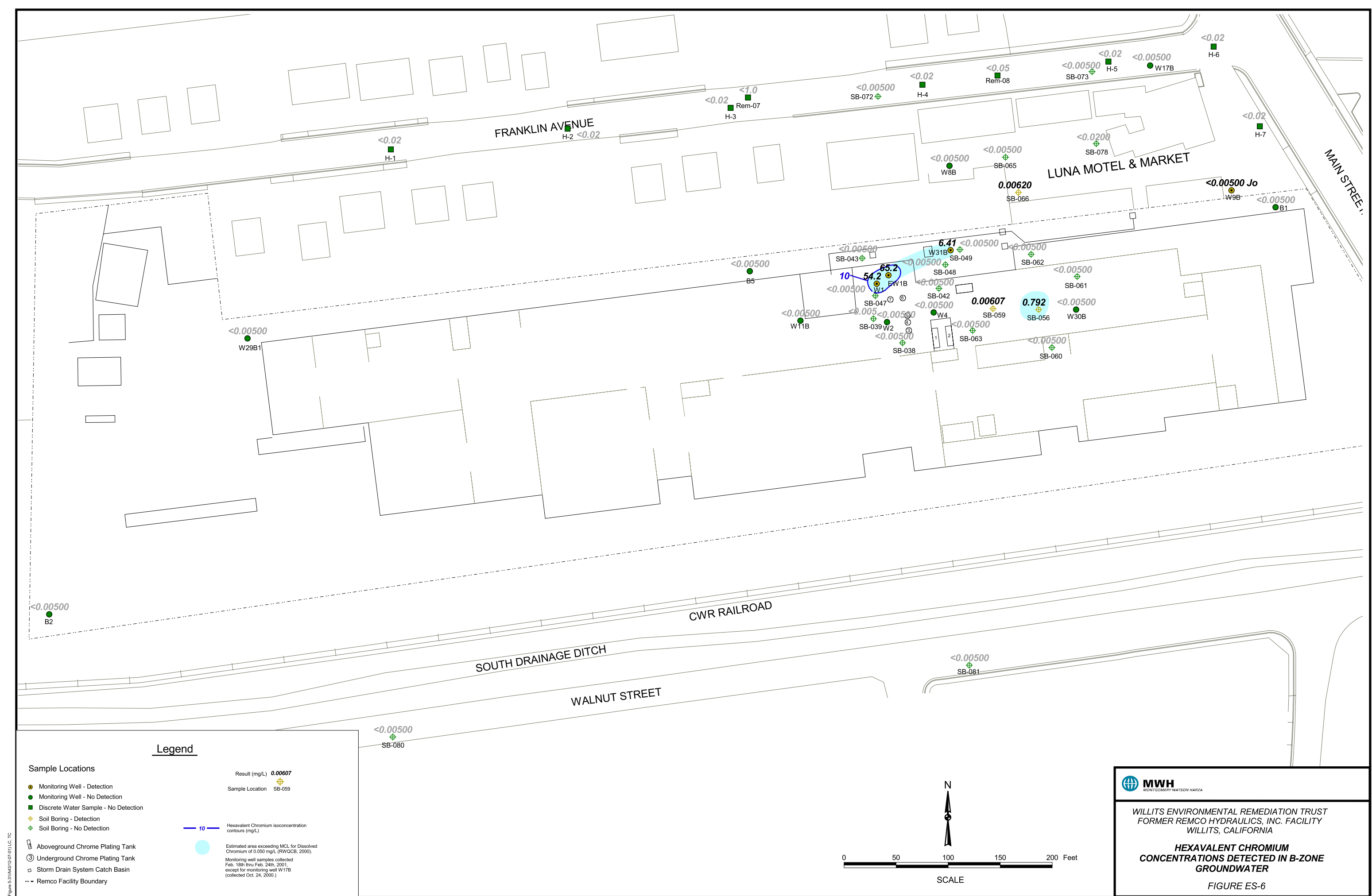
WILLITS, CALIFORNIA

HEXAVALENT CHROMIUM

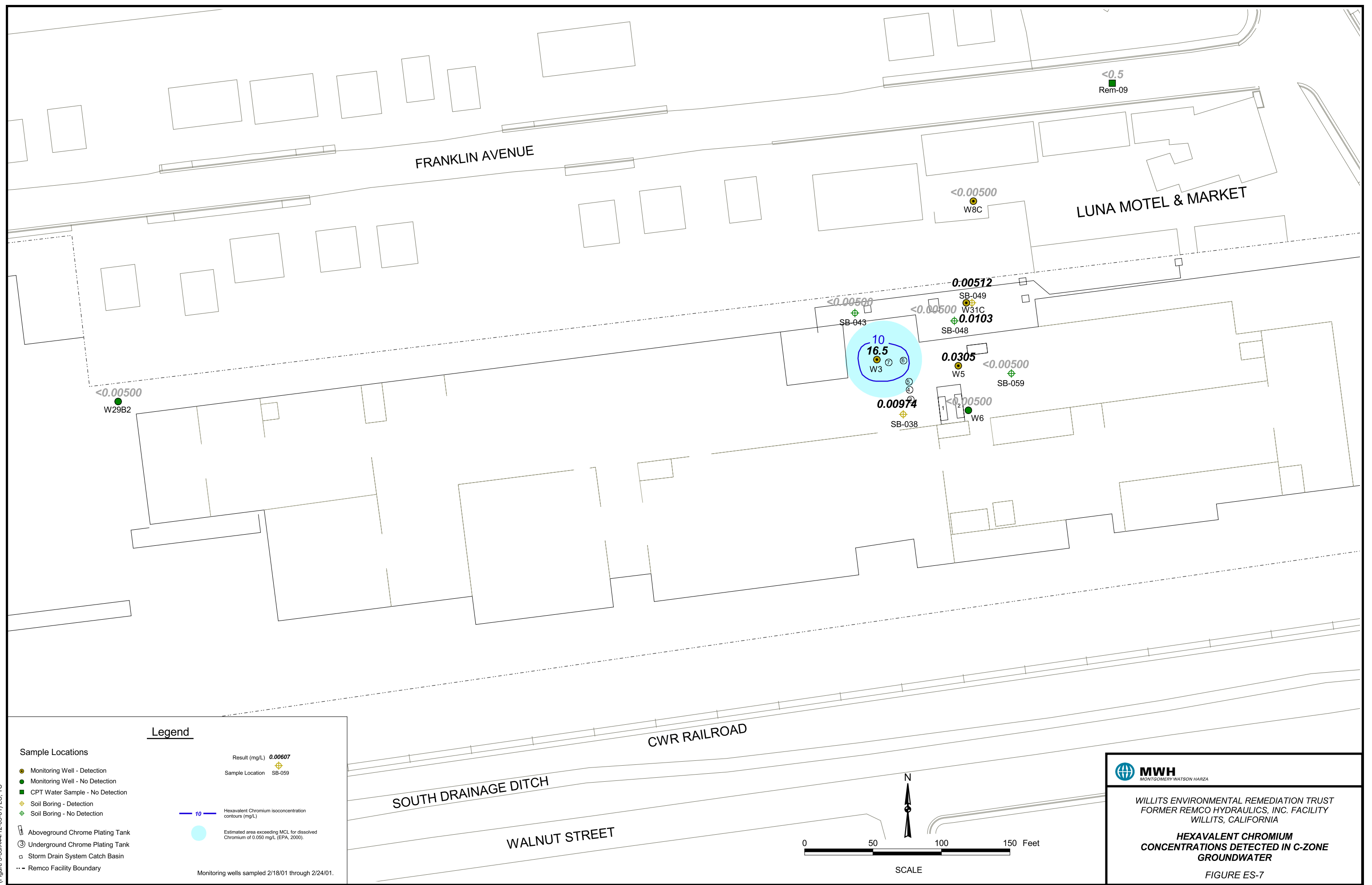
IN A-ZONE GROUNDWATER

FIGURE ES-5

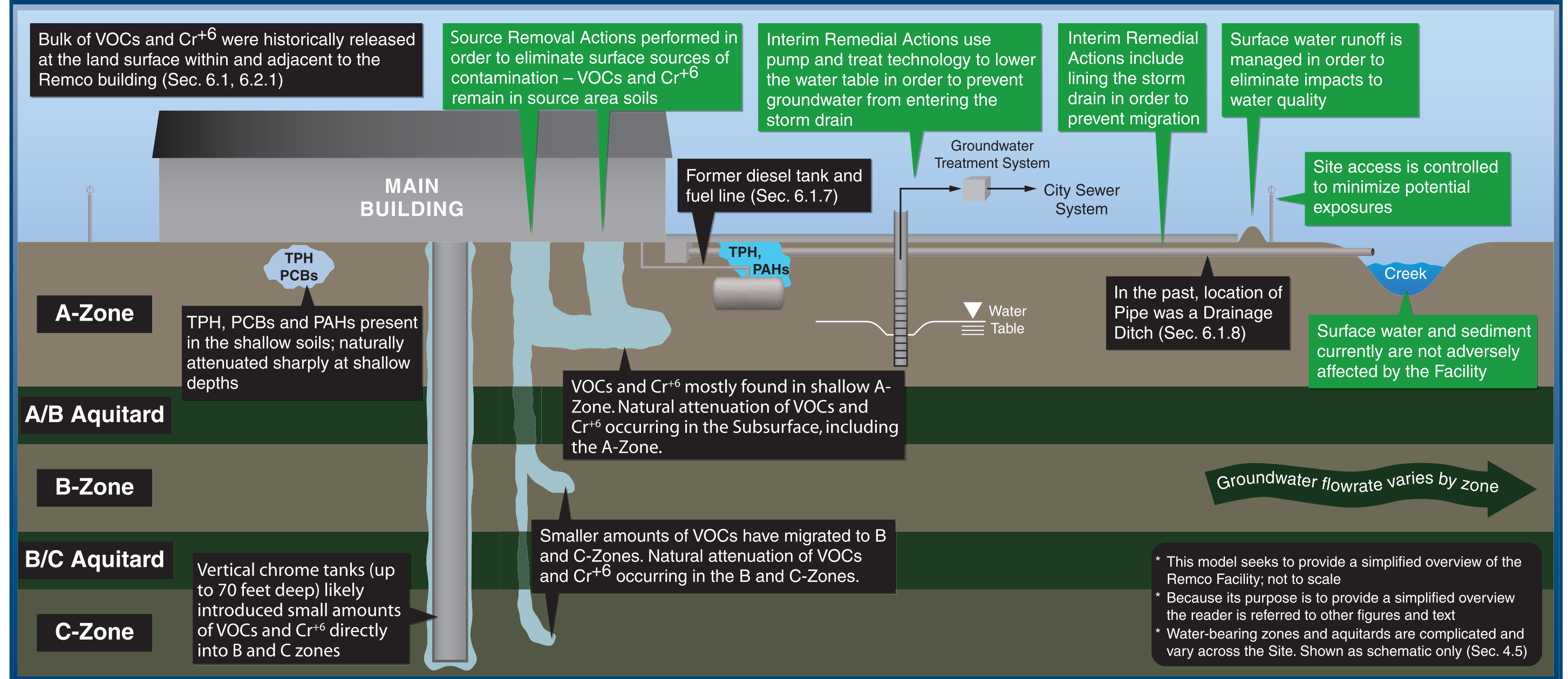
(Figure ES-5:2014/2/10/24/01)



(Figure 5-33/A44/12-05-01) LC, TC



Simplified Schematic of Conceptual Site Model



WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

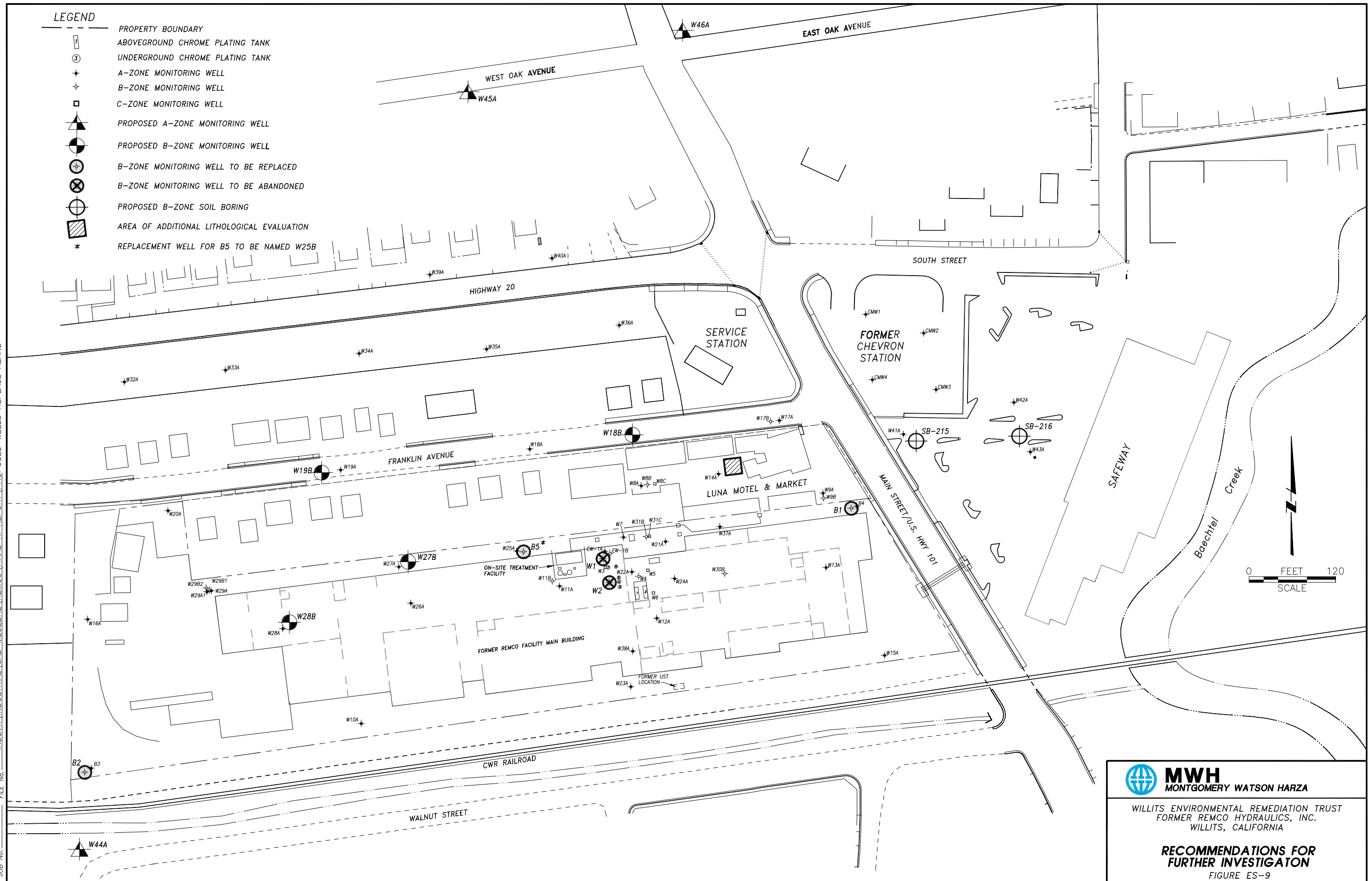
SIMPLIFIED SCHEMATIC OF CONCEPTUAL SITE MODEL

FIGURE ES-8

JOB No. _____ FILE No. _____ INDSVR\INDUSTRIAL\CAD_MLUEBKE\REMCO\FINAL_RI REPORT\PROPOSED WELLS REPLACE ABAND

LEGEND

- PROPERTY BOUNDARY
- ABOVEGROUND CHROME PLATING TANK
- UNDERGROUND CHROME PLATING TANK
- A-ZONE MONITORING WELL
- B-ZONE MONITORING WELL
- C-ZONE MONITORING WELL
- PROPOSED A-ZONE MONITORING WELL
- PROPOSED B-ZONE MONITORING WELL
- B-ZONE MONITORING WELL TO BE REPLACED
- B-ZONE MONITORING WELL TO BE ABANDONED
- PROPOSED B-ZONE SOIL BORING
- AREA OF ADDITIONAL LITHOLOGICAL EVALUATION
- REPLACEMENT WELL FOR B5 TO BE NAMED W25B



MWH
MONTGOMERY WATSON HARZA

WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

**RECOMMENDATIONS FOR
FURTHER INVESTIGATION**

FIGURE ES-9

1.0 INTRODUCTION

On behalf of the Willits Environmental Remediation Trust (“Willits Trust”), MWH has prepared this Final Remedial Investigation Report (“RI Report”) for the former Remco Hydraulics, Inc. Facility (“Remco Facility”) located at 934 South Main Street (U.S. Highway 101) in Willits, California ([Figure 1-1](#)). The purpose of the RI Report is to present the results of the comprehensive investigatory work conducted by the Willits Trust, regulators, and others, so as to fully characterize the nature and horizontal and vertical extent of any Hazardous Substances¹ which might have been released into the environment as a result of past manufacturing operations associated with the former Remco Facility.

A Draft RI Report was issued in December 2001. All interested parties were invited to review and comment on the Draft RI Report for an extended review period from December 21, 2001 to February 12, 2002. The Willits Trust responded in writing to all written comments provided during the review period. The comments received and the responses to these comments are provided in [Appendix 1-1](#).

On August 22, 1997, Judge Fern M. Smith of the Federal District Court for the Northern District of California entered the Final Consent Decree, Final Order and Judgment, Order Establishing the Willits Environmental Remediation Trust; and Order Of Reference To Special Master ("Consent Decree"). The Consent Decree, among other things, established the Willits Trust as an independent instrumentality of the Federal Court, charged with performing the investigatory and

¹ The term "Hazardous Substances" as utilized in this RI Report is consistent with the term Hazardous Substance as defined at Section III.F of the Consent Decree. Specifically, the term "Hazardous Substances" shall have the same meaning as set forth in CERCLA Section 101(14), 42 U.S.C. § 9601(14), including, without limitation, Chromic Acid, 1,1-Dichloroethane, 1,2- Dichloroethane, 1,1-Dichloroethene, Hexavalent Chromium, Tetrachloroethene, 1,1,1-Trichloroethane, Trichloroethene and other hazardous substances or hazardous wastes which are, or may be discovered, at or emanating from the Site which may require investigation or remediation to protect public health."

remedial work set forth in the Consent Decree. The Consent Decree was modified on December 22, 2000 by Judge Susan Ilston.²

Section XII.A of the Consent Decree mandates that the Willits Trust formulate a Work Plan, which requires that:

A Remedial Investigation shall be conducted to fully characterize the nature and the lateral and vertical extent of the Hazardous Substances in, at, around and emanating from the Site, in the soil, the soil vapor, and the groundwater, necessary to assess the extent to which the release of these Hazardous Substances may present an endangerment to the environment or health and to support the analysis and design of potential response actions as specified in the National Oil and Hazardous Substances Pollution Contingency Plan³.

In 1997 and 1998, the Willits Trust compiled a *Remedial Investigation/Feasibility Study Work Plan* (Henshaw Associates ["Henshaw"] 1998d) ("RI/FS Work Plan") as required in the Consent Decree. After completion of the initial draft of the RI/FS Work Plan, the Willits Trust released the RI/FS Work Plan to regulators, the general public and Settling Parties⁴, receiving extensive comments in return. As a result of the comments received, the nature and scope of the RI/FS Work Plan was modified prior to its finalization and implementation. This RI Report has been prepared consistent with the RI/FS Work Plan, NCP regulations, the Consent Decree, and other applicable law.

² In 2000, the Settling Parties determined that the Consent Decree required modification to assure prospective funding, to reduce disputes and otherwise focus efforts on the investigatory and remedial work at the Site. The Federal Court heard public concerns, both written and at an October 2000 public hearing in Willits, California, and entered an Amended Consent Decree on December 22, 2000. The Consent Decree provisions regarding the nature and scope of the Remedial Investigation were not substantively modified in the Amended Consent Decree. However, the provisions were modified slightly in the Amended Consent Decree to provide for *simultaneous* release of the RI Report to the Settling Parties, regulators and the public. Previously, the Consent Decree required that the public would be provided its review and comment period only after an initial review by regulators and the Settling Parties. For purposes of the RI, the term "Consent Decree" refers to the Final Consent Decree *as modified* by the Amended Consent Decree.

³ As set forth at Section III.H of the Consent Decree, the term "National Contingency Plan" or "NCP" shall mean: the National Oil and Hazardous Substances Pollution Contingency Plan promulgated by the United States Environmental Protection Agency and codified at 40 C.F.R., Part 300, in accordance with CERCLA § 105, 42 U.S.C. § 9605, as the same may be amended or repromulgated from time to time. The NCP contains the stringent federal guidelines for so-called "Superfund" cleanups conducted by or under the supervision of the federal government. By Order of the Court and operation of the Consent Decree, *all* actions taken by the Willits Trust with respect to the investigation and cleanup of the Site must be consistent with the NCP.

⁴ Settling parties are defined as the City of Willits, California, Pneumo Abex Corporation, Remco Hydraulics, Inc., M-C Industries, Inc., and Whitman Corporation.

The terms "Remco Facility" or "Facility" as used in this RI Report refers to the former Remco Hydraulics, Inc. property, located at 934 South Main St. in Willits, California (Figure 1-1). The term "Site," as used in this RI Report, refers to the Remco Facility and areas contiguous to the Remco Facility where Hazardous Substances associated with past Remco operations have come to be located. This definition of the Site is narrower than the definition of Site as set forth in the Consent Decree. For example, the Consent Decree definition of Site includes areas in and around Willits, California where hazardous substances associated with the past operations at the Remco Facility have come to be located. However, the investigatory work required to complete a full characterization of these off-Facility locations is ongoing, and will continue indefinitely until such time as the Willits Trust and the Federal Court are satisfied that full characterization has been achieved. Rather than delay this RI Report until such off-Facility characterizations are complete, the Willits Trust has decided to release the RI Report and will release supplemental RI reports, as appropriate, at a future date or dates. Of course, as with the Remco Facility, the public and regulatory agencies will be kept informed as to the progress being made at these off-Facility locations.

1.1 PURPOSE OF RI REPORT

The purpose of this RI Report is to summarize the characterization of the nature and extent of current environmental impact of various media (i.e., soil, groundwater, surface water, sediments, and air) as a result of past operations at the Remco Facility. The data presented in this RI Report includes historical (pre-Willits Trust) data collected by various parties, and the data collected by the Willits Trust and others during the period from September 1997 through August 2001.

In an effort to keep the public and the regulatory community fully informed, the Willits Trust issued an *Interim Remedial Investigation Report* (Montgomery Watson, 2000d) ("Interim RI Report") on July 25, 2000. The Interim RI Report identified data gaps and specified additional investigation activities to be conducted in order to complete the RI. This RI Report provides the

results of all Site investigations and the characterization of the nature and extent of environmental impact at the Site.

1.2 RI REPORT ORGANIZATION

Following this introduction, the RI Report is organized as follows:

Section 2.0 - Describes the Site background, including a description of the Site, Site history, regulatory background, and previous investigations completed by parties other than the Willits Trust.

Section 3.0 - Describes the remedial investigations conducted by the Willits Trust and summarizes field and laboratory methodologies utilized.

Section 4.0 - Describes the physical characteristics of the study area, including surface features, meteorology, surface water hydrology, regional and Site-specific geology and hydrogeology, and ecology.

Section 5.0 - Describes the nature and extent of the environmental impact at the Site. The results of the investigation are evaluated against preliminary screening criteria to develop a list of preliminary chemicals of concern (“PCOCs”) for the Site.

Section 6.0 - Describes the Conceptual Site Model (“CSM”). The CSM identifies the sources of the observed PCOCs and the potential routes of migration. This section also provides a discussion of the fate and transport of the observed PCOCs in the environment.

Section 7.0 - Provides a summary and conclusions of the remedial investigation.

Section 8.0 - Presents the cited references.

2.0 SITE BACKGROUND

This section describes the currently available information regarding operational, regulatory, and Site investigation history for the Remco Facility.⁵

2.1 SITE DESCRIPTION

The Remco Facility is an elongated, fenced parcel of approximately seven acres, located immediately adjacent to and west of U.S. Highway 101 (Main Street) in the southern portion of the City of Willits, California. The Facility is bounded on the south by California Western Railway (“CWR”) rail tracks and a small seasonal drainage ditch running further south of and parallel to the tracks. To the south of the drainage ditch is Walnut Street, residential property, and the Baechtel Grove Middle School. Located west of the Facility are horse pasture and corrals, commercial properties, and residential properties. Residences, apartments, and a market are located to the north of the Facility. To the east of the Facility, across the highway, are a Safeway Shopping Center and Baechtel Creek. In the vicinity of the Facility, Baechtel Creek flows generally from south to north. A Site plan is presented as [Figure 2-1](#).

Currently, a concrete floored metal building of approximately 154,000 square feet occupies more than half of the Remco Facility. On the western portion of the Facility, a smaller building exists that was formerly utilized for storage of raw and spent hazardous materials utilized in the manufacturing processes at the Facility ([Figure 2-1](#)).

The Facility has an asphalt paved, fairly flat surface that slopes generally northeastward from a surface elevation of approximately 1386 feet above mean sea level (“msl”) in the southwest corner to approximately 1376 feet msl in the northeast corner over a horizontal distance of about 1,150 feet. Currently, surface water drains to seven catch basins at the Facility and is conveyed through an underground storm-drain system, which runs along the northern Facility boundary

⁵ In preparing the RI Report, the Willits Trust reviewed certain deposition transcripts for former Remco employees and conducted interviews with former employees.

and extends eastward beneath the Safeway parking lot, eventually emptying into Baechtel Creek. The storm-drain system and surface water flow directions at the Facility are illustrated on [Figure 2-2](#). A more detailed discussion regarding the storm-drain system is provided in [Section 2.5.1](#).

2.2 FACILITY HISTORY

In approximately 1945, the Harrah Brothers Machine Works, a machine shop that fabricated and repaired sawmill equipment, was built on the property and commenced operations. A growing industrial machining and manufacturing business was operated under various owners at the Facility from approximately 1945 until 1995. Over the years, there were a total of eleven building additions and the construction of one new outbuilding (Building 1985). [Figure 2-3](#) illustrates the estimated history of building expansion and a general description of historical building usage. In this report, portions of the main Remco building will be referred in this RI Report by reference to the currently estimated year of construction (i.e. "Building 1962").

2.2.1 Facility Ownership

From 1945 to 1955 the Facility was owned by the Harrah brothers and was operated as the Harrah Brothers Machine Works. In 1955, Harrah Brothers Machine Works changed its name to Remco. In 1961, Remco Manufacturing Company incorporated in the State of California as Remco Hydraulics, Inc.

In August 1968, Stanray Corporation acquired the stock of Remco Hydraulics, Inc. and Remco Hydraulics, Inc. became a wholly owned subsidiary of Stanray Corporation. In August 1971, Remco Hydraulics, Inc. merged into Stanray Corporation, a Delaware corporation, as an operating division of Stanray Corporation. Six years later, in 1977, IC Products Company, Inc. acquired Stanray Corporation by stock acquisition. Later that year, Abex Corporation acquired virtually all of the operating units of IC Products Company, including Remco Hydraulics, Inc. The Facility operated as Remco Hydraulics, Inc. until its sale in November 1988 to M-C Industries, Inc. Remco Hydraulics, Inc. operated the Facility, as a wholly owned subsidiary of

M-C Industries, until both M-C Industries and Remco Hydraulics, Inc. declared bankruptcy in 1995 and closed the Facility.

2.2.2 Facility Operations

The Remco Facility began in 1945 as a metal machining and repair facility, which supported the lumber industry (primarily sawmills). Initially, operations were conducted in a Quonset hut formerly located near the southeast corner of the Facility (See [Appendix 3-1](#), March 15, 1956 aerial photograph). Operations included manufacturing of sawmill machinery.

Based on statements of former employees, the manufacturing of hydraulic cylinders began at the Facility in the early 1960s. Chrome plating of hydraulic cylinders began at the Remco Facility in approximately 1963. Plating operations continued until the Remco Facility operations ceased in 1995. Plating with other metals (zinc, cadmium, and manganese) also occurred at the Facility.

Based on statements of former Remco employees, [Figures 2-3](#) and [2-4](#) illustrate the approximate location of operations conducted at the Facility. Potential sources of contamination identified include: chrome (and other metal) plating operations, underground storage tanks (“USTs”), above-ground storage tanks (“ASTs”), fuel lines, solvent usage areas, paint shops, hazardous materials storage areas, storm water systems, metal shavings storage bins, dust control operations, machining operations such as milling and lathing operations, oil testing laboratory and related sump area, and containment trenches. Reported spills, releases, accidents, and historical waste disposal practices constitute additional potential sources of contamination. With the exception of the metal shavings storage bins, these potential operational source areas are illustrated on [Figures 2-3](#) and [2-5](#). The metal shavings storage bins were used in various locations at the Facility and as such, were considered potential sources of metal contamination on a Facility-wide basis.

2.2.3 Chemicals Used at the Former Remco Facility

A variety of chemicals were used during the historical operation of the Remco Facility, including coolants and lubricants for the milling and lathing machines, solvents for cleaning machines and manufactured parts, petroleum hydrocarbons for fuel, metals and acids for plating operations, and paints for finishing of manufactured parts.

Available material safety data sheets (“MSDS”) dating from the early 1980s through the mid-1990s were obtained from the Facility. A summary of these MSDSs has been prepared and is presented as [Table 2-1](#). This summary indicates product names of materials utilized at the Remco Facility during the early 1980s through the mid-1990s and the major ingredients contained within the product. This summary is provided as an example of the types of chemicals used at the Facility only and is not intended as a complete listing of chemicals that may have been used at the Remco Facility. Chemicals presented in this summary include adhesives, solvents, metals, lubricants, paints, acids, and sealants. The Willits Trust has sampled for all classes of chemicals represented in the MSDSs reviewed. In addition, tentatively identified compound (“TIC”) searches were conducted on monitoring well groundwater samples collected in areas exhibiting impact to ensure that all potential Facility-related VOCs were being identified. The results of these TIC searches, including a discussion of the results, are presented in [Appendix 5-3](#).

2.2.3.1 Coolants

The coolants reported to have been used in the machines include Chemstar, Trimsol, and Dromus B (Shell product)⁶ (Wisdom Deposition). The coolants within the machines reportedly were replaced every three to four months and the waste coolants were stored in drums. Between 1983 and 1987, a 5000-gallon waste coolant tank located at the west end of the Remco Facility was installed to store waste coolants.

⁶ In testimony provided by J. Wisdom, the chemical was referred to as Chromus B. Upon further review of the chemical being discussed, it was determined that the chemical name was actually Dromus B and that it was either misspelled or misstated by the employee in his testimony.

2.2.3.2 Solvents

Solvents, including VOCs, were used for cleaning both equipment and manufactured parts at the Remco Facility. The manufacturing equipment was cleaned in place with the solvents brought to each machine in small (one- to five-gallon) containers. The machines reportedly were cleaned in place by brushing, wiping, or spraying the solvent on the equipment (Wake, Bailey, Madden, and Budish Depositions). Excess solvent reportedly was cleaned up using absorbent material. All the machines were thoroughly cleaned at least once per year.

Small parts were cleaned in degreasers. In 1996, one degreaser, constructed as a three to four foot square tub on wheels, was located in Building 1965 for the cleaning of paint gun parts. One former employee stated that for a period of time, a separate solvent degreaser (mister) was located in the southwest corner of Building 1945 (Wisdom, 2001). In addition, another degreaser was reportedly located along the north wall of Building 1962 and two degreasers were located in Building 1979 for cleaning in case a part became dirty during assembly. The two degreasers in Building 1979 were located in the north and south sides of the central portion of the building (east of the paint shop) (Wisdom, 2001).

During different periods of operation, different solvents reportedly were used for cleaning the machines, including: kerosene (approximately 1946–1960, Garliepp Deposition); lacquer diluent (until approximately 1976 or 1977, Wisdom Deposition); methyl ethyl ketone (“MEK”) [for a period of less than a year in 1976 or 1977 between the use of lacquer diluent and 1,1,1-trichloroethane (“1,1,1-TCA”), Crothers Deposition]; 1,1,1-TCA (from approximately 1976 or 1977 until 1992, Crothers Deposition); a citrus-based degreaser, and to a lesser extent MEK, from approximately 1992 (Bailey, Almida, Hipes, and Wisdom Depositions).

Prior to shipping, Cosmoline (a petroleum solvent used as rust inhibitor) was sprayed on the finished metal parts within the shipping department.⁷ Cosmoline reportedly was thinned with 1,1,1-TCA and applied with spray bottles (Douglas Deposition). Acetone was used from 1979 to

⁷ From at least 1974 to 1978, the Shipping Department was located in Building 1967. From 1978 to approximately 1983, the Shipping Department was located in the northern part of the Assembly portion of Building 1979. In 1983 or 1984, the Shipping Department moved to the southern end of Building 1975 (Douglas Deposition). [Figure 2-3](#) illustrates these buildings and areas.

1996 to clean the paint guns (Hipes Deposition). MEK was also used in the paint department as a paint thinner in the 1980s and 1990s (Hipes Deposition).

2.2.3.3 Petroleum Hydrocarbons

Diesel and gasoline were stored at the Remco Facility and were used as fuel for cars and trucks at the Facility. Diesel was also used to fire two low pressure boilers. The storage of diesel and gasoline is discussed in [Section 2.4](#). In addition, motor oils presumably were used as a lubricant in vehicles. Petroleum-based products were also used as lubricants for machines.

2.2.3.4 Plating Metals and Acids

Chromium, cadmium, zinc, and manganese were all plating metals used at the Facility. The chromium was delivered as dry flakes and mixed with water and sulfuric acid to form the chromic acid used in the plating operations. The sulfuric acid was delivered in “carboys”, which consisted of a container within a container (Quever Deposition). These carboys had a capacity of approximately 55 gallons (Wisdom, 2001). According to one former employee, these carboys were stored northeast of the horizontal chrome plating tanks within Building 1964 (Vincent Deposition). The same former employee reported that muriatic acid was also used to strip chrome off the slip tubes in the phosphate line (Vincent Deposition).

Remco used a 3.6 percent solution of zinc phosphate (Granodraw Number 6) and a 10 percent solution of manganese phosphate for zinc and manganese plating operations. Cyanide and acids were used in the cadmium plating processes. The cyanide was stored as a powder in a cardboard barrel adjacent to the cadmium plating area (Wisdom, 2001). [Section 2.3.2](#) discusses other metal plating and coating operations.

2.2.3.5 Paints

Numerous paints, including coatings and primers, were used and stored at the Facility. The paints used at the Facility included enamels and acrylics containing volatile organic compounds such as MEK, toluene, ethylbenzene, and various coloring agents. [Table 2-1](#) provides an example of paints used at the Facility and some of the major ingredients. Based on historical drawings and the presence of paint on walls and/or floors, painting at the Facility was believed to

have been conducted in at least the following four separate areas at various time during the operation of the Remco Facility (as shown on [Figures 2-3 and 2-5](#)):

- 1) Northeast corner of Building 1962
- 2) Southern end of Building 1967
- 3) Southern end of Building 1968
- 4) Western end of Building 1979

2.3 DESCRIPTION OF FACILITY OPERATIONS AND CHEMICALS KNOWN TO HAVE BEEN USED AT THE FACILITY

2.3.1 Chrome Plating

Chrome plating operations began at the Remco Facility in the early 1960s and continued through plant closure in 1996. The tanks and structures used in the chrome plating operations are summarized below based on location within the Facility. Following the description of the chrome plating equipment is a description of chrome plating operations within the Facility based on information obtained from former Remco employees.

2.3.1.1 Chrome Plating Equipment

2.3.1.1.1 Building 1945

Small scale chrome plating activities initially were conducted in an area within the southwest corner of Building 1945 (Garliepp, Budish, and Figg-Hoblyn Depositions) (see [Figure 2-4](#)). The chrome plating was conducted within a small above-ground tank that was approximately 4 to 5 feet (ft) wide by 5 to 12 ft long and 4 ½ ft high. The tank rested on top of a wooden structure, such that the tank was off the ground. In addition to the chrome-plating tank, a rectifier tank was located to the north of the chrome plating tank. The initial chrome tank reportedly had a scrubber over it to control emissions (Figg-Hoblyn Deposition).

2.3.1.1.2 Building 1964

After 1963, the original chrome-plating tank was removed and two larger above-ground horizontal plating tanks (Nos. 1 and 2) were constructed in Building 1964. The two horizontal plating tanks were located in a six-inch thick concrete containment pit (Budish Deposition). One tank was 14 ft long by 5 ft wide by 7 ft deep with an estimated capacity of 3,500 gallons. The other tank was 12 ft long by 5.5 ft wide by 6.8 ft deep with an estimated capacity of 3,200 gallons ([Appendix 2-2](#), Photos 5 and 6). To the northeast of the horizontal tanks, within the concrete containment pit, there was also an anode tank and a caustic tank used in the chrome plating operations (Vincent Deposition). The anode tank was used to store anodes when not in use and the caustic tank was used for neutralizing the hydraulic cylinders after chrome plating (with chromic acid).

In 1976, the two horizontal chrome plating tanks were removed from the concrete containment pit, the concrete and some surrounding soils were removed, the concrete containment pit was deepened and reconstructed. The two original above-ground tanks were reinstalled with rubber liners (Regional Water Quality Control Board [“RWQCB”] Field Notes and Wake and Brown Depositions). At approximately this same time, as reported by one former employee, the area surrounding the tanks was asphalt and was replaced with concrete (Wake Deposition).

In approximately 1988, a stainless steel liner was installed in the concrete containment pit underlying the above-ground plating tanks and a 500-gallon catch pan was placed under the tanks (Brown, Wake, and Kaser Depositions).

2.3.1.1.3 Building 1973

According to former employees, in approximately 1968, the first vertical chrome plating tank (Tank No. 3) was installed immediately to the west of Building 1964. By 1973, two additional vertical tanks were installed, Tank Nos. 4 and 5. Concrete was poured to approximately 30 feet around the tanks (Garliepp and Hannum Depositions). The remainder of the area to the west of the tanks remained unpaved for a period of time. All three tanks were constructed of steel and had karoseal or rubber liners within the steel casing (Wake and Wisdom Depositions). These

three tanks initially were operated outside, before the Remco building was expanded to include them in approximately 1973 (Wisdom, 1997). Prior to construction of Building 1973, these tanks were covered with plywood or plastic sheeting when it rained (Wisdom, 1997).

After the Building 1973 addition had been completed, Tank Nos. 6 and 7 were constructed within the building. These two tanks reportedly were originally steel with fiberglass liners (Wisdom and Wake Depositions).⁸ [Table 2-2](#) summarizes chrome plating tank construction specifications of these and other tanks utilized at the Remco Facility.

The vertical tanks were used to chrome plate hydraulic cylinders and other metal parts at the Remco Facility. Two additional vertical tanks are located proximal to the vertical chrome plating tanks. One of these tanks was utilized for the storage of alkaline wash solution while the other tank was used for an anode tank. The locations of these tanks and other chrome plating operation features are shown on [Figure 2-4](#).

The vertical chrome plating tanks reportedly were constructed in 36-inch to 48-inch-diameter boreholes. Each borehole was lined with a 3/8-inch-thick steel containment casing. The available information varies as to whether the tanks were open at the base, or had concrete or steel bases (Wake, Budish Depositions). A steel “sluff-off” casing was placed (apparently driven) outside of the borehole to a depth of approximately 10 to 12 feet below ground surface (“bgs”). An annular backfill of concrete between the “sluff-off” casing and the “containment cylinder” extends from the ground surface to a depth of approximately 36 to 48-inches bgs. The steel tank, with an approximately 1/4-inch fiberglass or rubber liner insert, was placed inside the containment casing.

In the mid- to late-1980s, a secondary containment system was placed in the vertical chrome tanks (Wisdom, Budish, McCartney, and Almida Deposition). Following removal of fluids from each tank, the fiberglass or rubber liner was removed. Next, a steel tank was placed inside the

⁸ Former employees testified that Tank No.7 was not used for chrome plating, but instead was used to assemble and test hydraulic cylinders (Budish and Vincent depositions, 1996).

original steel tank, leaving approximately six inches of annular space between the tanks to allow for leak detection. Either fiberglass or rubber liners were placed in the inside tanks (Wisdom, 1997). [Figure 2-6](#) shows a schematic diagram of the vertical chrome plating tanks. After installation of the secondary containment system, the tanks were inspected daily for leaks by checking the annulus between the fiberglass insert and the steel tank for the accumulation of fluid. In approximately 1991 or 1992, an electronic leak detection system was installed in the annulus surrounding the inner tanks (Madden Deposition).

The five vertical tanks were interconnected with 4-inch polyvinyl chloride (“PVC”) pipe, which would equilibrate the fluid levels in the tanks and prevent the overflowing of any one tank (Wisdom, 1997). Originally, these PVC pipes were above-ground, however in the 1980s, some of the pipes were placed in trenches below ground (Wake, Wisdom, Figg-Hoblyn and McCartney Depositions). Each tank was equipped with a separate manifold to control the temperature of the tank.

2.3.1.1.4 Chrome Sumps

There were four sumps in the vertical chrome plating tank area, as shown on [Figure 2-4](#). The purpose of these sumps was to collect waste fluids or overflow associated with the chrome plating operations. The primary sump to the west of Tank Nos. 3, 4, and 5 was 18 to 24-inches deep and was originally connected by PVC piping (via gravity feed) to the pit under the horizontal plating tanks (Budish and Wake Depositions). By the early 1980s, as reported by one former employee, the base of the concrete sump was not competent (Wake Deposition). The sump was then lined with a PVC insert and the piping connection to the pit under the ASTs was removed. A pump was installed in the sump to transfer the waste liquids to the concrete containment pit underlying the ASTs (Wake and Wisdom Depositions). The sump to the west of Tank No. 7 received rinse water from Tank Nos. 6 and 7. The northwestern sump was an overflow sump and was connected to the sump located in the outside containment area (“outside sump”), constructed prior to 1973 (Wisdom Deposition). The last sump, north of vertical plating Tank No. 6, collected wastewater from washing off the floor in the chrome plating area (Wisdom Deposition).

2.3.1.1.5 Area to North of Building 1964

The area to the north of Building 1964 contained the following additional equipment associated with the chrome plating operations: a containment sump, a boiler blowdown sump, and cooling tower, as shown on [Figure 2-3](#). The outside containment sump was connected via underground pipes to the concrete containment pit under horizontal Tank Nos. 1 and 2 and to the overflow sump (described above) at the east end of Building 1973. In 1973, the outside containment sump consisted of a concrete lined pit, approximately 6 feet wide, 8 to 10 feet long, and 8 feet deep. The outside sump was disconnected from the horizontal chrome plating tanks and interior sumps and taken out of use in the late 1970s. After it was disconnected from the plating tanks, a steel tank with dimensions of approximately 4 ft by 4 ft by 8 ft deep was inserted into the concrete sump and used as a pH testing point for cooling water (Wisdom, 1998). When the steel tank was installed, the annular space between the original concrete sump and the steel tank was filled with gravel and capped with concrete.

In the area to the north of Building 1964, a boiler blowdown sump was constructed in approximately 1974 to contain the boiler blowdown water prior to discharge to the sanitary sewer. The original air-cooled cooling tower was installed prior to 1973 immediately outside of Building 1964 directly north of the horizontal plating tanks. The cooling tower was installed to cool the water associated with the chrome plating operations. The piping associated with the original cooling tower experienced pin hole leaks, allowing the release of water containing chromium to Baechtel Creek (see [Table 2-3](#), 12/20/73 entry). The original cooling tower was replaced with a closed loop system in the early 1980s. The closed loop system provided double containment for the chromium cooling water, and no further releases were reported.

A concrete berm was installed in the late 1970s around the area to the north of Building 1964 to prevent surface releases from being discharged to the storm-drain system. A roof was constructed over the outside bermed area in January 1976 (Dunbar Deposition). Originally, any releases to this area or from the chrome sump would have discharged to the drainage ditch located to the immediate north of this area. The boiler blow down sump would capture any run off contained within this bermed area. These structures are illustrated on [Figure 2-4](#).

2.3.1.2 General Chrome Plating Operations

Metal plating operations consisted of a three-step process: 1) surface preparation; 2) surface treatment; and 3) post-treatment. The first step in the process, surface preparation, consisted of cleaning the part to prepare it for the surface treatment. At the Remco Facility, the metal parts were cleaned with solvents. Two degreasers, used to clean small parts before applying the chrome, reportedly were located immediately east of the chrome plating area. The first was located along the north wall of Building 1962 and the second in the southwest corner of Building 1945, as shown on [Figure 2-5](#). The degreaser reportedly located along the north wall of Building 1962 was removed in the mid-1970s (Wisdom, 1997). Large parts were cleaned in place by applying solvents with brushes or sprayers and then wiping parts down or blowing off excess materials with compressed air.

Surface treatment consisted primarily of chrome plating, although other metal plating was also conducted, as discussed below. Chrome plating was conducted by electroplating where the metal part was placed into the plating tank that contained a solution of chromic acid and an electric current was applied through the part, causing chromium to precipitate onto the metal part. In this process, the metal object serves as the cathode attracting the chromium ions from the solution. The amount of chromium plated was controlled by the temperature and residence time in the tanks.

Chromic acid was delivered to the Facility in 20-gallon cans of dry flakes. Water was added to the chromium flakes to create a chromium solution. Sulfuric acid was added to balance the pH mixture in the dipping tanks. Cadmium for metal plating was delivered to the Facility as metal spheres (approximately four-inches in diameter). In general, materials were stored at or near the area of usage.

The third step in the process was the cleaning of the parts after plating. The parts were sprayed with water over the tanks as the parts were removed (Wake, McCartney, Choquette, Wisdom, and Wickline Depositions). Rinse water that did not fall into the tanks was collected within the sumps in the vertical chrome plating area and within the concrete containment pit under the horizontal plating tanks. For the longer parts plated in the vertical tanks, after an initial rinse

over the tank, the part was placed on a V-cart and rolled toward a ramp to the west of the vertical tanks. City water was then used to conduct a final rinse of the part, with the rinse water contained within sumps in the vertical chrome plating area.

On one occasion, in 1971, a cylinder was too large for the existing vertical chrome plating tanks. The cylinder was plated to the south of the Remco Facility's main building at the approximate location shown on [Figure 2-4](#). One former employee reported that runoff from these operations flowed into the storm-water system (Brown Deposition).

There was also a portable chrome-plating tank that was used to flash chrome plate over pinholes. This portable tank was moved to various locations within the Facility. There are no reported releases of chromium from the use of this portable tank.

Two low-pressure boilers were located approximately 40 feet east of Tank Nos. 1 and 2. These boilers supplied steam to two or three overhead space heaters and supplied heat to manifolds at each chrome tank to maintain a minimum temperature of 120 to 125 degrees Fahrenheit ("°F"). A second steel manifold inserted into each tank cooled the chrome plating solution. This second manifold led to a cooling tower, which was located to the north of Building 1964. The original air-cooled cooling tower was installed prior to 1973 immediately outside of Building 1964 directly north of the horizontal plating tanks. The original cooling tower was an open system, which occasionally discharged to the northern drainage ditch at the property. In the early 1980s, this open system was replaced with a closed loop system.

2.3.1.3 Waste Management

2.3.1.3.1 Chrome Wastewater

Waste liquids from the chrome plating operations were removed and transported via a local waste transport and disposal service, operated by Mr. Page, until approximately 1973. Chrome wastewater was also reportedly discharged to the storm water ditch in the late 1960s and 1970s (Brown, Figg-Hoblyn, Crothers, Strait, Quevers, and Hipes Depositions). After 1973, the waste

liquids were transported and disposed of at a permitted hazardous waste landfill until approximately 1986.

In approximately 1986 or 1987, an evaporator unit was built in the northern bermed area and used for a short time (approximately six months). This system consisted of a square tank between 5 and 8 feet wide, and 1 1/2 feet to 2 feet deep. Steam was run through the lines to evaporate water from the chrome wastewater. The steam was then reportedly vented into the atmosphere (Hipes and Budish Depositions).

In an effort to reduce chrome wastes, a batch plant was constructed in approximately 1987 in the southeast corner of Building 1973 to remove the liquid chromic acid wastes from spent chrome liquids (Budish Deposition). Sodium metabisulfite, aluminum sulfate, and ferrous sulfite were added to the wastewater (Wisdom Deposition). A filter cake was created which was drummed and shipped offsite (Quever Deposition). The treated wastewater was tested before it was discharged to the sanitary sewer (Wisdom Deposition). The batch plant was removed in approximately 1993 or 1994 (Wisdom Deposition) and replaced with a closed-loop evaporative unit (Madden, Wisdom, and Kaser Depositions).

2.3.1.3.2 Solvents

Solvents typically were dispensed from drums located in a storage area (see below) in relatively small quantities (less than five gallons) and taken to the point of usage. Large parts or equipment typically were cleaned in place. One former employee reported that during the period from 1966 to 1970, some waste 1,1,1-TCA (approximately four gallons/day) reportedly was poured on asphalt and then hosed to a drain located near the 1,1,1-TCA drum storage area to the north of Building 1964 (Gouber Deposition).

2.3.1.3.3 Boiler Blowdown Water

Until approximately October 1974, the boiler blowdown reportedly was discharged to the storm drain on the northern property boundary. Sodium lignum sulphate and sodium phosphate were reportedly used as additives in the boiler water. In approximately 1974, a floor drain behind the

boilers was connected to an underground sump (boiler blowdown sump) within the bermed area to the north of the chrome plating area (Wisdom Deposition). After September 1974, the water collected in the boiler blowdown sump was discharged to the sanitary sewer, as discussed below. The area is currently surrounded by a concrete berm approximately 18-inches high.

2.3.1.3.4 Chromic Acid Air Emissions

There was, reportedly, a scrubber on the original tank in Building 1945 (Figg-Hoblyn Deposition). In 1971, the scrubber was reportedly located immediately west of the horizontal plating tanks area in Building 1964. It has been reported that holes sometimes developed in the scrubber and released chromic acid solution in the immediate area of the scrubber (Wake Deposition). This 1970s era scrubber vented on the south side of Building 1964. In the 1970s, chromium residue was observed on the roof in the vicinity of the scrubber (Wake Deposition).

Prior to the construction of Building 1973, there was reportedly no scrubbers installed on the outside vertical tanks (Tank Nos. 3, 4 and 5). After Building 1973 was constructed, a single scrubber system was installed for all of the tanks (Wisdom, 2002). In approximately 1976, this system was replaced by a new scrubber system (Wake Deposition) which vented on the south side of Building 1973, towards Building 1967. After installation of this new scrubber, discolored runoff from the roof continued to be observed (Wake Deposition). In the late 1970s, a sprinkler system was installed on the roof to keep the building cool in the summer. Use of this sprinkler system was observed by a former employee to reportedly cause chromium to run off the roof (Chiantelli Deposition).

In the mid- to late-1980s, a new scrubber system (“mist eliminator”, Wake, 1996; Wisdom, 1997; Kaser, 1996) was installed in the southeast corner of Building 1973 (Kaser, 1996). A RWQCB memo dated May 27, 1988 indicated the vapor hoods took care of most, but not all, of the vapors (RWQCB, 1988). This new scrubber also vented on the south side of Building 1973, towards Building 1967. This system resulted in reduced emissions to the roof. Continued improvements to this new system resulted in no chromium detected in roof runoff water in the 1990s (Wake, Madden, and Wisdom Depositions).

2.3.1.4 Releases from Chrome Plating Tanks and Sumps

The Willits Trust has been able to locate few construction, repair, or maintenance records with respect to the chrome plating tanks.⁹ Vertical chrome plating tank damage, including repairs and replacements, has been reported at various times during the existence of the tanks. In 1982, it was reported that a large steel part was accidentally dropped into Tank No. 6, causing a puncture in the inside liner of the tank, although the structural integrity of the main tank was reportedly maintained. The tank was drained and the liner was replaced. However, some quantity of chrome solution apparently was released into the ground. It is unclear how or exactly where the chrome solution was released.

Deposition testimony also indicates that the area around the vertical tanks was stained yellow and that the concrete continued to deteriorate over time. In addition, in early 1971, a puddle of yellow water in the dirt to the west of the tanks (prior to the building construction) was reported by a RWQCB representative (Hannum Deposition). The concrete around the tanks was also observed to be stained and pitted. In the early 1990s, the floor was reportedly sealed with epoxy (Wisdom, Hipes, and Vincent Depositions).

2.3.1.5 Chrome Plating Tanks Closure

The above-ground horizontal chrome plating tanks were de-commissioned in 1995 after the Facility closed. In 1998, the horizontal tanks were dismantled, cleaned and removed from the Facility by the Willits Trust, as described in [Appendix 2-1](#). The vertical chrome tanks were cleaned and decommissioned in 1996. The chromic acid solution and lead anodes in each chrome-plating tank were removed in August 1996 and the tanks were cleaned by Rust Environmental. Steel plates were then welded to the top of each vertical tank for security (Wickwire & Gavin, 1996).

⁹ Most operational documents were last in the possession of the Remco Facility's last owner, which is now bankrupt. The Willits Trust has recently been made aware of some additional records and is currently making efforts to obtain and review these records.

2.3.2 Other Metal Plating/Coating

In addition to chromium plating, it has been reported that much smaller cadmium, manganese and zinc plating operations, as well as aluminum and phosphate coating operations, were conducted at the Facility (Wake Deposition). Cadmium and zinc plating were conducted using an electroplating method similar to the chrome plating operations. Cadmium, phosphate, manganese and zinc plating/coating were all conducted in small tanks (approximately 4 ft wide by 6 ft long by 5 ft high) located inside Building 1964 (Figure 2-4). Cyanide was utilized in the cadmium plating process. Sludge from these operations reportedly was disposed of at an off-site facility as hazardous waste (Wake Deposition). Aluminum coatings were applied to metal surfaces in the southern portion of building 1968 (Wisdom, 2001).

Phosphate coating was applied to gun barrels to prevent rusting of the barrels. A former employee stated that the gun barrels were first placed in muriatic acid, followed by a water bath and phosphate plating, with a final soap rinse (Vincent Deposition). The phosphate plating was conducted within five tanks to the north of the horizontal chrome plating tanks. All five tanks were contained within a concrete pit. The tanks and pit were removed in approximately 1991 or 1992. At that time, the concrete was observed to be cracked and groundwater had entered into the concrete pit (Kaser Deposition).

Manganese plating was conducted in a 600-gallon tank with a 3.6 percent solution of manganese phosphate (Granodraw Number 6). Zinc plating was conducted in a 600-gallon tank with a 10 percent solution of zinc phosphate (Clarke Deposition).

2.3.3 Machining

Many operations at the Remco Facility involved machining of metal parts. These operations included the use of milling machines, grinders, hones, and lathes. These machines required coolants and lubricants. Due to the extensive machining operations at the Remco Facility, many of the areas within the Facility had concrete-lined trenches and sumps. The primary purpose of

these trenches and sumps was for utility conveyance lines and containment, respectively. However, they also served as secondary containment for leaks and/or releases from equipment. A known exception was the sump located north of Building 1979 (Location 9 on [Figure 2-8](#)) which drained two trenches (Locations 6 and 7 on [Figure 2-8](#)). However, the precise history of the nature and duration of use of each trench and sump is not clear. Visual inspection of the inside of the Remco building in 1997 revealed that metal chips and oily residue were present at several location within the trenches and sumps. These trenches and sumps, as well as their contents, were subject to comprehensive closure and removal actions by the Willits Trust in 1998.¹⁰ Additional information can be found in [Appendix 2-1](#). [Figure 2-8](#) illustrates the locations of former sumps, pits, trenches and tanks. This topic is further discussed in [Section 2.8.1](#) of this report.

Metal chips were created from the milling and lathing machines. The metal chips, with coolants, were contained within trays beneath the machines. These chips were shoveled into bins. These bins were open until the mid-1980s and were stored outside, both north and west of the Remco Facility (Wake, Baily, Choquette, and Hipes Depositions). Some of the bins reportedly had holes in them such that fluids would run out of the bottom (Wake Deposition).

2.3.4 Painting

Based on visual observations (paint on the floors and walls) and past employee interviews (Wisdom, 1997, 2001), four former paint shops have been identified at the Remco Facility and were reportedly located in:

- The northeast corner of Building 1962 (from 1962 to approximately 1972)
- The south central portion of Building 1967 (from pre-1973 to approximately 1980)
- The southern portion of Building 1968 (from approximately 1970 through 1995)

¹⁰ As described in the Sump Pit Trench and Tank Closure Report (Henshaw, 1998f), the contents of the sumps, pits, trenches, and tanks were characterized primarily for waste disposal purposes, rather than to attempt to determine potential subsurface impacts. Further, not all of the sump, pit, trench, and tank contents were individually sampled and analyzed.

- The northwest portion of the Building 1979 (from approximately 1980 to July 1996)

These areas are indicated on [Figures 2-3](#) and [2-5](#). Paints and paint thinners were stored in and around these areas (Wisdom, 1997). These former paint shops could represent a possible source area for organic chemicals and paint wastes (with contents possibly including lead and other metals). Some painting of long cylinders was also reported conducted along the south side of Building 1975 (Douglas Deposition).

Prior to applying the paints, the parts reportedly were cleaned using solvents. During the period from approximately 1973 through 1980, a parts degreaser unit used to clean parts before applying paint was reportedly located in the south central portion of Building 1967 in the former paint shop area, as shown on [Figure 2-5](#). According to a former employee, parts were wiped down (usually with MEK) in the paint booth in Building 1979 prior to painting. Cleaning of large parts reportedly occurred to the west of the paint area on a concrete pad immediately adjacent to the main building (Wake Deposition).

In the early 1980s, the paint guns were cleaned by spraying solvents through them in the paint booth, which was equipped with a filter. According to a former employee, acetone and/or MEK ran through the guns to complete the cleaning (Hipes Deposition). MEK was also used as a paint thinner for a period of time (Wisdom, Dunbar, and Hipes Depositions).

2.3.5 Dust Control Activities

The Facility is currently paved with asphalt or concrete, with the exception of a small area along the northern property boundary of the Facility adjacent to the Luna Apartments and a small area at the location of the former gasoline UST along the southern boundary (see [Figure 2-5](#)). The timing and extent of paving operations outside the Remco buildings during the various stages of construction is undocumented, although some information can be determined through review of aerial photographs. It appears that the parking area adjacent to Main Street was the first area paved ([Appendix 3-1](#), 1963 photograph). Later photos indicate that the paved area (with parking

stripes painted on it) was subsequently extended around the southwestern portion of the Remco building ([Appendix 3-1](#), 1972 photograph). By the date of the next aerial photo reviewed (1983) the remainder of the Facility appears to be paved with asphalt ([Appendix 3-1](#), 1983 photograph). [Figure 2-3](#) shows the chronological succession of estimated building construction at the Remco Facility. For a period of time before the Facility was paved, dust control occasionally was conducted in unpaved areas. Although there is no written documentation, a former employee stated that fluids for dust control may have included machine oil, machine coolant, and oil from company trucks (Wisdom, 1997). Certain deposition testimony indicates that coolants, compressor water, and potentially other unknown liquids were used for dust control (Strait and Nunnemaker Depositions).

2.4 CHEMICAL STORAGE AND WASTE MANAGEMENT

2.4.1 Underground Fuel Storage Tanks

Before the mid-1970s, two USTs were utilized to store gasoline and diesel at the Facility. One 7,500-gallon diesel tank was located just north of the chrome plating area. One 550-gallon gasoline tank was located south of Building 1962, adjacent to the Remco Facility's southern boundary. The approximate location of these former tanks is shown on [Figure 2-5](#). The diesel UST was excavated and relocated in the mid- to late-1970s, and the gasoline UST was excavated and relocated in approximately 1984 (Wisdom, 1998). The tanks were excavated and moved to above-ground locations because the USTs reportedly tended to float to the surface during periods of high groundwater. These tanks, which were in good condition, continued to be utilized after being relocated above-ground to the northwest portion of the Remco Facility.

2.4.2 Above-Ground Fuel Storage Tanks

In 1995, six ASTs were located in a concrete-bermed area in the northwest portion of the Remco Facility ([Figure 2-5](#)). These tanks were: a 550-gallon gasoline tank (relocated UST discussed above), a 550-gallon kerosene tank, a 5,000-gallon waste oil tank, a 5,000-gallon waste coolant tank, a 7,500-gallon diesel tank (relocated UST discussed above) and a 10,000-gallon diesel

tank. The two diesel tanks were installed in the mid- to late-1970s, the kerosene tank was installed in the late 1970s, the waste oil and waste coolant tanks were installed in approximately 1981, and the gasoline tank was installed in approximately 1984. The types of coolants stored in the waste coolant tank reportedly included animal oil-based machine coolants (Wisdom, 1998). The four former fuel tanks were sold at auction in August 1996. The waste oil and waste coolant tanks were decontaminated and disposed of in 1998 by the Willits Trust as described in the *Sump, Pit, Trench, and Tank Closure Plan* in accordance with applicable law (Henshaw, 1998f).

2.4.3 Fuel Lines

An above-ground diesel fuel line was located formerly along the northern property boundary of the Remco Facility. The line connected the diesel tank in the northwest corner of the Facility to the boiler in the chrome plating area. This fuel line was originally below ground. However, 750 feet of the 850 feet of underground fuel line was replaced with an above-ground line in approximately 1981, after fuel was detected leaking from the fuel line. Approximately 100 feet of the fuel line from the AST at the western end of the Facility was not replaced with above-ground piping. An approximate location for the suspected leak is shown on [Figure 2-5](#), based on communications with Jim Wisdom (Henshaw, 1998d).

2.4.4 Waste Storage

During most of the 50-year period of operations at Remco, wastes were stored at the Facility at a number of different locations. These hazardous materials storage areas are shown on [Figure 2-5](#). Reports indicate that waste oil drums generally were stored at the western end of the Remco Facility. Former employees reported that 1,1,1-TCA was stored in 55-gallon drums at the following locations: south of the saw shop (Building 1967), within the bermed area north of Building 1964, to the west of the weld shop (Building 1968), and in the sandblasting booth (grit blast room, Building 1968) (Choquette and Wake Depositions).

In 1985, a metal outbuilding surrounded by a concrete berm was constructed in the northwestern corner of the Facility (Building 1985, Hazardous Materials Storage Building). This building was used to store 55-gallon drums of oils, hydraulic fluids, and other materials, including “floor sweep” (dry substance used to clean the floor to absorb spilled or leaking oil), trash from the chrome department consisting of paper, plastic, and wood which had been in contact with chromium, and honing mud (a mixture of kerosene, “tulkut” [from Eel River Fuel], steel, and chrome cuttings). In addition, small quantities (one- to five-gallon containers) of hazardous materials (chrome flakes) were stored in this building. These hazardous materials storage areas are shown on [Figure 2-5](#). Before 1985, drums were stored in the general vicinity of Building 1985 or inside the main building; these drums reportedly contained oils used throughout the Facility and potentially waste oils prior to installation of the waste oil tank (Wisdom, 1998).

Starting in approximately 1987, Remco used the property to the west of the current Facility boundary (103B Franklin Avenue) for the storage of raw materials based on review of aerial photos. The first use of the 103B Franklin Avenue property for storage coincided with the cessation of storage at the 266 Shell Lane property (Peters, 2002). Based on the 1991 aerial photo, the 103B Franklin Avenue property was used for the storage of 55-gallon drums in addition to other raw materials. The contents of the 55-gallon drums are unknown. Based on available information, Remco stopped using this property around 1993.

2.4.5 Past Waste Management Practices and Documented Releases

Historical waste management practices and spills of waste materials are potential sources of contamination. The following section describes management practices, spills, and releases that reportedly occurred at the Facility. [Table 2-3](#) provides a summary of chemical spills and releases, as well as other potential releases as documented in available records and summarized below.

2.4.5.1 Diesel Releases

Documented accidental releases of diesel occurred during 1974, 1977, and 1981. The reported releases in 1974 and 1977 may be related to the diesel tank located north of Building 1964

whereas the 1981 release is related to the subsurface diesel fuel line located along the Remco Facility's northern boundary.

The 1970s releases were discovered due to observations of diesel in the storm drainage ditch. The April 1981 diesel released was discovered when installing a jib crane footing in the assembly area (Building 1979). Underground piping to the north of the building was found to be leaking and was replaced with an above-ground line (Wickline, Wake, Strait, and Chiantelli Depositions).

2.4.5.2 Coolant Releases

Former employees reported the potential discharge of machine coolants into the old domestic well at the Remco Facility during the late 1970s to the early 1980s (see [Section 3.2.2](#)) (Wake, Brown, Hipes, Nunnemaker, and McCartney Depositions). This well was formerly associated with a former residence on the northern portion of the Facility, as seen in the 1963 aerial photograph included in [Appendix 3-1](#). The location of this well is illustrated on [Figure 2-7](#) (identified as WU) and is located southwest of the On-Site Groundwater Treatment System. Analytical testing of this well by the Willits Trust, as discussed in [Section 3.2.3](#), does not support the discharge of coolants into the old domestic well.

2.4.5.3 Releases of Chromic Acid

Available records document multiple accidental releases of chromic acid in the 1970s and 1980s (1970 through 1981, [Table 2-3](#)). Several of the documented chromic acid releases were related to overflow of the outside containment sump or the cooling tower, located adjacent to the chrome plating area. As indicated above, this outside sump was intended to contain excess rinse water from plating operations. If the sump overflowed, the rinse water would travel into the adjacent storm-drain system. Releases from the cooling water system could also discharge to the storm-drain system. Many of the documented releases resulted in discharges of chromium to the storm drain and Baechtel Creek.

According to deposition testimony (Budish and Chiantelli Depositions), at least two undocumented releases also occurred at the Remco Facility in the early 1980s. One such alleged

release occurred in the 1980s when a small leak in the Tank No. 7 liner caused corrosion and buckling of the vertical chrome plating tank.¹¹ A second alleged release occurred in early 1982 from Tank No. 6. On this occasion a rod was dropped in the tank reportedly tearing a hole in both the liner and the steel tank (Figg-Hoblyn, Vincent, and Almida Depositions).

Some additional probable and inferred releases, without specific documented dates, are included in the RWQCB files, which date back to 1970. The files contain anecdotal evidence that releases may have occurred from the Remco Facility prior to 1970, but no specific details or dates associated with any of these events were available in these records (Henshaw, 1998d). In addition, deposition testimony indicates that there may have been additional discharges of chrome wastewater from the sumps into the storm water drainage ditch prior to 1977 (Figg-Hoblyn, Crothers, Wake and Strait Depositions).

Accidental releases of wastewater containing chromium also occurred from the cooling tower. According to a former employee, in the mid-1970s, the cold water pipe developed a leak, which allowed chromic solution to enter the cooling towers and caused the cooling tower to overflow to the northern drainage ditch (Wisdom Deposition). A second release occurred in August of 1981 when a small hole developed in the cooling coil and caused an overflow into the ditch (Dunbar and Chiantelli Depositions). After this release, a new closed-loop cooling tower system was installed and a concrete containment berm was constructed north of Building 1964 around the cooling tower (Wickline Deposition).

There were also reported releases of chrome wastewaters from the sump located to the north of Building 1964 to the storm-water system in the 1970s, due to the overflow of the sump during rainfall events. In January 1976, this area was covered to prevent overflows from occurring due to rainfall events.

An additional accidental release of chrome wastewater reportedly occurred in June of 1982. At this time, chromic wastewater was observed rising from the ground and entering into the storm

¹¹ Other former employees have testified that Tank No. 7 was not used for chrome plating.

drain system near the outside sump in the northern bermed area. The area was excavated and the PVC pipe connecting the inner sumps to the outside chrome sump was found to be leaking. The outside sump and piping to the inside sumps were abandoned at this time (Wisdom Deposition).

2.4.5.4 Releases of Solvents

A number of different solvents have been used at the Remco Facility. Available records report a number of releases of 1,1,1-TCA in the 1970s and early 1980s, summarized as follows:

- Beginning in 1976, unused 1,1,1-TCA reportedly was spilled on approximately 10 occasions to the west of Building 1975 during the moving of drums. Each loss was estimated at two gallons (Douglas Deposition).
- Waste 1,1,1-TCA was reported to have been released to soils to the west of Building 1979 (Choquette Deposition) in the late 1970s and early 1980s.
- Unused 1,1,1-TCA was released within the Saw Shop Area (Building 1967) in the early 1980s and was cleaned up with Supersorb, an absorbent material (Choquette Deposition).
- Small quantities of waste 1,1,1-TCA were reportedly disposed of in the dumpsters and into sinks in the 1980s (Choquette Deposition).
- Small quantities of unused 1,1,1-TCA were reportedly discharged to the ground south of the shipping area in the early 1980s (Choquette Deposition).

2.5 UTILITIES

The subsurface utilities investigated at the Site are illustrated on [Figure 2-9](#) and discussed below.

The subsurface utilities encountered on the Facility include:

- Storm-drain system
- Sanitary sewer
- Diesel fuel line
- Water lines (domestic and industrial)
- Miscellaneous industrial fluid conveyance lines

These utilities were investigated, in part, to determine if they are, or have been, a conduit for preferential contaminant migration. Environmental sampling was conducted around many of the utilities discussed below. The analytical results of these investigations are presented in [Section 5.0](#).

2.5.1 Storm-Drain System

The original storm-drain system at the Facility was an unlined drainage ditch running along the northern property line. The ditch exited the property at the northeast corner and continued east to Baechtel Creek, as shown on [Figure 2-5](#). Based on a review of the aerial photographs, the storm drain line running west to east under Highway 101 appears to have always been in the same location. In 1974, a ditch was dug along the northern property line and the storm-drain system was constructed below grade with corrugated metal pipe (Dunbar Deposition).

Currently, the storm-drain system at the Remco Facility consists of seven catch basins attached to underground piping as shown on [Figure 2-2](#). In 1994, under the oversight of the RWQCB, the majority of the underground piping at the Remco Facility was lined with an impervious high-density polyethylene (“HDPE”) liner to further reduce interaction between the storm water and groundwater. The diameter of the HDPE lining is 18-inches between SWD-1 and SWD-2 and 30-inches between SWD-2 and SWD-7. Only a small portion of the underground piping, between SWD-6 and SWD-7 in the northeastern portion of the Facility and under the building, is not lined. Three of the catch basins at the Site (SWD-3, -4 and -5) were fitted with HDPE catch-basin liners and were fused to the HDPE liner in the summer of 2000. An example of the construction of these HDPE catch-basin liners is provided in [Appendix 2-2](#), Photos 13 through 15.

The depth of the top of the storm-water pipe at SWD-1 is approximately 1 foot bgs. The depth of the line gradually increases until SWD-7 where it occurs at approximately 4 feet bgs. The line continues to get deeper as it travels off the Remco Facility and reaches a depth of approximately 10 feet bgs at the junction with Baechtel Creek. In the City-owned off-Facility portion of the

storm-drain system, the storm drain is constructed of 24- to 36-inch diameter concrete pipe. No permeable backfill has been encountered around the storm-drain system either on- or off-Facility.

During 1973, the storm-drain system received water from the following sources at the Remco Facility (1973 NPDES Permit Application):

- Rainfall runoff
- Non-contact cooling water
- Boiler blowdown
- Water from a french drain in Building 1973

The non-contact cooling water was discharged to the storm-drain system from two sources. One source was in the northwest corner of Building 1965 and was derived from rectifier cooling, chrome tank cooling coils, and an air compressor. In 1973, discharges to the storm-drain system from this source were estimated to range from 41,392 to 90,926 gallons per day. The second source of non-contact cooling water was from non-contact compressor cooling water located in the southwest corner of Building 1973, with an estimated discharge from this compressor of 16,000 gallons per day.

In 1973, water from the boiler was discharged twice daily to the storm-drain system, with an average estimated 120 gallons per discharge. The water from the boiler blowdown contained calcium carbonate at 350 to 800 parts per million (“ppm”), chloride at an estimated 170 ppm, phosphate at 60 ppm, and sulphite at 40 ppm. These compounds were reportedly present due to the addition of sodium lignin sulphate and sodium phosphate to the boiler water.

An unknown amount of water was discharged from the french drain. The french drain was reportedly constructed in October 1973 to keep the area under Building 1973 dewatered during the rainy season from November through May (1973 NPDES Permit Application). This French drain was tied into the old domestic well (WU). When the Willits Trust excavated and abandoned the former domestic well in February 2000, portions of the old french drain system

were exposed. The french drain is a gravel-filled trench between 2 to 4 feet bgs and approximately 1 foot wide. The gravel is approximately two inches in diameter and the trench appears to trend in a southwest direction from the former domestic well. This french drain was sealed off with cement grout by the Willits Trust during the domestic well abandonment activities.

In response to Remco's 1973 request for a NPDES permit, the RWQCB required that Remco eliminate all discharges to the storm-drain system from the cooling waters, boiler blowdown, and the french drain (RWQCB, 1974). In response to these requirements, Remco took the following actions:

- Collected boiler blowdown in a tank, which was then discharged to the sanitary sewer system (completed October 2, 1974);¹²
- Installed a closed-loop cooling tower (early 1980s);
- Rerouted the french drain discharge to the sanitary sewer system (completed October 2, 1974, see footnote 12); and,
- Installed a concrete berm around the outside cooling tower and boiler blowdown sump (early 1980s).

2.5.2 Sanitary Sewer

According to Regional Water Quality Control Board records (See Historical Doc., Tab 11, SWRB 02507), in 1975 there were two different portions of the sanitary sewer system. One portion of the sanitary sewer system serviced the two bathrooms in the southeast corner of the Remco building. The two sewer lines from these bathrooms joined near the southeast corner of the Facility property and exited in an easterly direction toward Main Street and the City sewer. The second portion of the sewer system serviced the bathrooms in the north central portion of the Remco building (within Buildings 1968, 1973, and 1979) and exited the property in a northerly direction, between the properties at 37 and 43 Franklin Street and discharged into the City sewer

¹² Connected to sanitary sewer system, which exits the Facility to the north.

system on Franklin Avenue. This second portion of the sewer system was the subject of a focused subsurface investigation and is discussed in [Section 3.0](#) of this report.

The wastes discharged to the northerly sanitary line in 1974 were from the bathroom in the manufacturing area, water collected from the french drain (after October 1974), the boiler blowdown, and the compressor cooling water. The southeastern sanitary sewer line continued to receive domestic waste from the front offices.

During the abandonment of the former domestic well, discussed above, a six-inch diameter vitrified clay pipe was exposed. The clay pipe is thought to have been part of the sanitary sewer for one of the former residences on the property (see [Appendix 3-1](#)). This pipe was encountered approximately 36-inches bgs trending in a northwesterly direction. The pipe was investigated utilizing electronic and video methods and was determined to terminate approximately 30 feet on either side of the former domestic well. This line was subsequently closed via pressure grouting.

2.5.3 Other Subsurface Utilities

Miscellaneous subsurface lines existing at the Facility have been investigated and are illustrated on [Figure 2-9](#). If the historical usage of the line could be determined, that purpose is indicated on [Figure 2-9](#). Domestic (City) water and fire lines, electrical lines, and liquid conveyance lines (including diesel lines) were also identified on the Remco Facility as illustrated on [Figure 2-9](#). The purpose of some of the lines investigated is not known at this time.

The subsurface diesel line between the location of the diesel AST in the western portion of the Facility to the northwest corner of the Remco building was pressure grouted during the summer 2001. The above-ground diesel line existing along the northern property boundary has been disconnected and removed. An unused subsurface diesel line remains in the bermed area just north of Building 1964.

2.6 REGULATORY BACKGROUND

2.6.1 RWQCB Involvement

The North Coast RWQCB involvement at the Remco Facility commenced in the 1970s, when a surface water discharge permit was first obtained by Remco. Subsequently, in response to reported diesel fuel in shallow groundwater and chromium-containing effluent release to nearby Baechtel Creek, the RWQCB issued Order No. 79-102 in November 1979. This Order required a review of plant operations, prohibited any future discharges of chromium, and required monthly sampling of specific discharges from the property. After Order No. 79-102, the RWQCB issued the following additional orders:

Order 90-10	Established groundwater and storm water runoff monitoring requirements (issued March 12, 1990 and revised September 18, 1991, June 12, 1997 and March 19, 1999).
Order 93-104	Required the definition of the extent of chromium and VOCs in groundwater. Required the cleanup and abatement of potential discharges from the Facility (issued October 20, 1993).
Order 95-94	Required decommissioning of plating tanks and submittal of a contingency plan (issued October 20, 1995).
Order 98-59	Required additional monitoring, reporting, and investigatory measures. Required implementation of interim remedial measures at the Site. Required a maintenance, inspection and discharge contingency plan (issued May, 1998 and revised March 19, 1999).
Order 99-55	Provides a revised schedule for RI/FS, interim remedial measures, and other investigatory measures at the Site (issued August 13, 1999).
Order RI-2001-54	Provides requirements for monitoring and reporting associated with the In-Situ Pilot Study.

Consistent with these RWQCB orders, a series of environmental investigations have been, and are being, conducted to evaluate soil and groundwater contamination at the Site. The Willits Trust continues to closely coordinate its activities with the RWQCB.

2.6.2 Federal Judicial Oversight

In January 1996, the City of Willits, in its own capacity, and as a representative of the People of the State of California, filed suit against Remco Hydraulics, Inc. and other defendants pursuant to the provisions of the Solid Waste Disposal Act, as amended by Resource Conservation and Recovery Act ("RCRA") in the People of the State of California and the City of Willits v. Remco Hydraulics, Inc. et al. (United States District Court for the Northern District of California, Case Number C-96-0283-SI). On August 22, 1997, the Court entered the Consent Decree,¹³ which established the Willits Trust as an independent instrumentality of the Federal Court. Amongst other responsibilities, the Willits Trust was charged with the development and implementation of the RI/FS Work Plan, formulation and implementation of any necessary interim remedial or removal actions at the Site, the formulation of a final remedy proposal to the Court, implementation of that remedy, and all other work required by the Consent Decree to occur at the Site.¹⁴

The Consent Decree provides for oversight of the work conducted by the Willits Trust. The Court assigned the City of Willits' Department of Public Works the role of Lead Public Agency, as defined in the Consent Decree. The Lead Public Agency is granted technical oversight and monitoring responsibilities for the Site, in addition to other responsibilities, as set forth in the Consent Decree and the NCP.

2.7 PREVIOUS INVESTIGATIONS

Prior to the formation of the Willits Trust, numerous investigations of the Remco Facility and the Site were conducted. In addition, representatives of regulatory agencies, including the RWQCB, California Department of Health Services ("DHS"), Department of Toxic Substances Control

¹³ The Settling Parties, as set forth in the Final Consent Decree, are the People of the State of California, City of Willits, Pneumo Abex Corporation, Remco Hydraulics, Inc., M-C Industries, Inc., and Whitman Corporation.

¹⁴ The National Remediation Trust Management Company, LLC ("NRTMC") was appointed as the sole trustee of the Willits Trust. In August 1998, the Court replaced NRTMC with Barry Lawson Williams, Esq. as Lead Trustee, and Pacific Oversight and Management Corporation as Trustee with delegated authority. On April 4, 2000, Anne Farr, Ph.D., was appointed sole Trustee of the Willits Trust by order of Judge Susan Illston.

(“DTSC”), Mendocino County Environmental Health, and United States Environmental Protection Agency (“USEPA”), have visited the Site to conduct sampling activities, to confirm the progress of compliance efforts, and to respond to the concerns of neighbors. The analytical results for these investigations are presented in [Section 5.0](#). [Table 2-4](#) summarizes investigations conducted by parties other than the Willits Trust, as summarized in [Section 2.7](#).

2.7.1 Investigations Conducted by Alvin L. Franks

During an excavation (for the construction of a concrete footing for a piece of machinery) in the northwest portion of the Remco Facility in April 1981, diesel was observed in the soils and groundwater. This diesel was attributed to a leaky diesel line that ran underground along the northern property boundary ([Figure 2-5](#)). In addition, contaminated cooling water, containing measurable amounts of chromium, was also accidentally discharged into Baechtel Creek on August 10, 1981 (Franks, 1982a). These two events prompted the RWQCB to modify waste discharge requirements so as to prohibit certain discharges from the Remco Facility to surface waters or groundwater. Further, Remco was required to prepare a technical report which would, among other things, characterize the hydrogeology of the Site, assess any groundwater contamination beneath the Site, address abatement of any discharges to groundwater, and specify a program to monitor groundwater quality (RWQCB letter dated November 16, 1981). In response to this request, Remco retained the services of Alvin L. Franks, Ph.D., who conducted the earliest documented Site investigations and produced four reports, as summarized below.

2.7.1.1 Investigation of Petroleum Products in Groundwater, January 1982

Dr. Franks evaluated the extent of diesel in the shallow water-bearing zone (“A-Zone”) associated with the April 1981 observed diesel in soils and groundwater in the northwestern portion of the Remco Facility. The approximate location of the diesel release, discovered in April 1981, was centered around the underground diesel line in the northwestern portion of the Facility, as shown on [Figure 2-5](#). Diesel was also observed in a shallow domestic well located on Franklin Avenue, immediately adjacent to and north of the Remco Facility. The location of the former domestic well (identified as OW-19) is shown on [Figure 2-7](#).

The extent of diesel in the A-Zone was investigated by hand-auguring several borings, located approximately 100 feet north of the suspected release area. These borings reportedly were installed in front of the lots to the north of the Remco property (south side of Franklin Avenue) and extended below the water table (approximately 4 feet bgs). The exact locations of these borings were not documented by Dr. Franks (Franks, 1982a). The soil and groundwater taken from these borings reportedly did not exhibit a petroleum odor, and the surface of the groundwater that was visible in the open borings did not exhibit any sheen. Based on these observations, Dr. Franks did not perform any further investigation of the extent of diesel in the A-Zone (Franks, 1982a). Neither groundwater nor soil samples were collected for laboratory analyses.

A diesel recovery well (CW) was installed in the A-Zone in the vicinity of the release ([Figure 2-7](#)). The well was approximately 4 feet in diameter and approximately 8 feet deep. When the storm drain exhibited concentrations of diesel, the recovery well was pumped to extract the diesel fuels (Franks, 1982a). After the release was discovered, most of the below ground pipeline was replaced with an above-ground line to minimize the risk of subsurface leakage in the future. The remedial strategy for the mitigation of diesel in the soil and groundwater also included passive *in-situ* bioremediation and monitoring of the groundwater quality in the adjacent storm drain.

In 1989, Remco converted the boilers to propane, ending the use of diesel at the Facility. Recovery well CW was sampled (sample identification DRW) in 1999 by the Willits Trust. Based on the results of this sampling (relatively minor impact), and the fact that additional monitoring wells were being installed in the immediate vicinity, recovery well CW was abandoned by the Willits Trust under the supervision of the Mendocino County Environmental Health Division in March 2000.

2.7.1.2 Installation of Monitoring Wells, February 24, 1982

During February 1982, four groundwater monitoring wells (B-1 through B-4) were installed on the Remco Facility. Monitoring well locations are shown on [Figure 2-7](#). A report by Dr. Franks entitled Monitoring Wells, Abex Corporation, Remco Hydraulics, Willits California (Franks,

1982b), describes the drilling operations and installation of monitoring wells as well as the lithology and hydrogeologic units encountered.

During this investigation, Dr. Franks identified two water-bearing zones, defined as the A- and B-Zones. These two water-bearing zones are discussed further in [Section 4.5.2.1](#). Two monitoring wells (B-3 and B-4) were installed in the A-Zone and two monitoring wells (B-1 and B-2) were installed in the B-Zone ([Figure 2-7](#)). No laboratory analyses were conducted on soils or groundwater extracted during well construction and development.

2.7.1.3 Geohydrology, Groundwater Quality Monitoring, and Structural Integrity, April 1982

An April 1982 report entitled Geohydrology, Groundwater Quality Monitoring, and Structural Integrity (Franks, 1982c) describes a water level recovery test on the B-Zone groundwater wells B-1 and B-2, and the results of groundwater sampling for wells B-1, B-2, B-3, and B-4. Dr. Franks calculated the transmissivity of the B-Zone to be 83 gallons per day per square foot (“gal/day/ft²”) at well B-1 and 27.5 gal/day/ft² at well B-2.

Groundwater samples for laboratory analyses were obtained from all four monitoring wells and analyzed for dissolved metals, including chromium, hexavalent chromium (“Cr⁺⁶”), zinc and cadmium. In addition, the samples were analyzed for polychlorinated biphenols (“PCBs”) and pesticide compounds. All samples tested met California drinking waters standards except for dissolved cadmium, which was detected at 7.1 micrograms per liter (“μg/L”) in A-Zone well B-3 [the State of California Maximum Contaminant Level (“MCL”) for drinking water for total cadmium is five μg/L]. PCBs and pesticides were not detected in any of the groundwater samples above their respective detection limits.

2.7.1.4 Supplemental Hydrogeological Investigation, November 1982

A supplemental hydrogeologic investigation was conducted in response to the RWQCB comments on the April 1982 report, as documented in the report entitled Technical Report, Geohydrology Supplement, November, 1982 (Franks, 1982d). The RWQCB requested expansion and/or clarification on three aspects of the April 1982 investigation: 1) a more positive

identification of the piezometric surface in the lower water-bearing zone, 2) the addition of at least one more data point for water quality in the water-bearing zones, and 3) clarification of the relationship between the unnamed drainage ditch to the south of the Facility and the upper water-bearing zone.

In response to the RWQCB's request, an additional well (B-5) was installed in the B-Zone (Figure 2-7) and groundwater samples were collected from all five monitoring wells. The groundwater samples from wells B-1, B-2, B-3, B-4, and B-5 were analyzed for total chromium. Total chromium was not found to be present above the detection limit of 50 µg/L in any of the wells. The addition of well B-5 allowed for a better understanding of the B-Zone piezometric surface. The calculated flow direction was indicated to be north by northeast for the lower water-bearing zone. This is consistent with the current understanding of the groundwater flow direction in the B-Zone.

2.7.2 Investigations Conducted by ERM-West, Inc.

The following sections discuss the activities completed by ERM-West, beginning in March 1990 and continuing through 1992. The analyses referred to in the following sections (e.g., dissolved total chromium) are consistent with terminology utilized in the referenced source documents.

2.7.2.1 Monitoring Well Installation

In March 1990, after the sale of the Facility to M-C Industries, Remco retained ERM-West to evaluate groundwater conditions at the Site in response to RWQCB Waste Discharge Requirements (WDR) Order 90-10. The results of the investigation are presented in the document entitled Monitoring Well Installation Report, dated March 28, 1991, by ERM-West (ERM-West, 1991a).

During the investigation, seven borings were drilled in the vicinity of the plating area and a third, deeper water-bearing zone, now known as the C-Zone, was identified. These seven borings were converted to A-, B-, and C-Zone groundwater monitoring wells W-1 through W-7 (Figure 2-7). Soil samples for laboratory analyses were obtained from the borings at approximately 5- to

10-foot intervals. The shallowest samples from each boring were analyzed for PCBs and total petroleum hydrocarbons (“TPH”). The remaining samples were analyzed for hexavalent chromium and total chromium.

Groundwater from wells W-1 through W-7 was initially sampled during September and October 1990. Groundwater from these seven wells was subsequently sampled in February 1991. All groundwater samples were analyzed for dissolved total chromium and dissolved hexavalent chromium. Dissolved total chromium and hexavalent chromium were detected in A-Zone well W-7, B-Zone wells W-1 and W-2, and C-Zone wells W-3 and W-5.

2.7.2.2 Off-Facility Sampling

In 1991, after the receipt of ERM-West’s March 1991 report, the RWQCB requested additional investigation to:

- 1) Further characterize the lateral extent of chromium in groundwater northeast (downgradient) of the Remco Facility
- 2) Determine whether any private wells existed downgradient from the Remco Facility
- 3) Assess the possibility that a former stream channel existed on the northern side of the Facility

The results of this additional investigation are documented in the Off-Site Sampling and Status Report, July 1991 (ERM-West, 1991b).

To characterize the downgradient extent of chromium, ERM-West sampled groundwater using the HydroPunch™ sampling method at seven locations (H-1 through H-7) along Franklin Avenue and near the Luna Motel and Market in May 1991 (Figure 2-7). Samples were collected at depths of 10 and 25 feet bgs from each boring. Groundwater samples were analyzed for dissolved hexavalent chromium and dissolved total chromium. Soil sampling for chemical analyses or lithologic characterization was not performed. Chromium was not found above the detection limit in any of these seven groundwater samples along Franklin Avenue.

An off-Facility well survey was also performed to determine the location of any existing downgradient wells suitable for groundwater sampling. One private off-Facility well (OW-17, [Figure 2-7](#)), to the north of the Remco property at 37 Franklin Avenue, was identified and sampled by ERM-West. This well was 12 feet deep, indicating it is completed in the AZone. This well was selected because it was both downgradient of the Remco Facility and closer to the Facility than the HydroPunch™/borehole sampling locations at which no chromium was detected. The sample was analyzed for both soluble total chromium and for soluble¹⁵ hexavalent chromium. Neither element was detected in the samples above their respective detection limits of 0.01 and 0.02 milligrams per liter (“mg/L”).

ERM-West reported that several potential sources were checked for information pertaining to the historical stream channel location¹⁶. These included Sanborn Fire Insurance maps, historical maps and aerial photographs, and interviews with residents who live along Franklin Street and Highway 20 (Fort Bragg Road). Historical maps were obtained from Willits City Hall and historical aerial photographs were obtained from Pacific Aerial Survey in Oakland and Willits City Hall. The earliest aerial photograph obtained was dated 1957, 12 years after the operations began at the Remco Facility. No Sanborn Fire Insurance Maps were available for the area, and the earliest historical map obtained for the area was from 1963. None of these sources of information showed any indication that a stream channel was located on the Remco property. Further, no physical evidence exists to suggest the existence of a recent stream channel beneath the Remco Facility.

The RWQCB expressed a concern that any former stream channel, had it existed, could be acting as a conduit for preferential groundwater flow to Baechtel Creek. In April 1991, the RWQCB took both upstream and downstream samples from Baechtel Creek in the vicinity of the point at which the two residents alleged that the former stream channel would have entered into Baechtel

¹⁵ ERM-West described their analyses as soluble total chromium and soluble hexavalent chromium, which has been interpreted to be equivalent to dissolved chromium and hexavalent chromium analyses, respectively.

¹⁶ Although an extensive search of records and aerial photographs has not identified any evidence to support their claims, two unidentified residents of Franklin Avenue reportedly indicated to regulators that there might be a former stream channel in the vicinity of the Remco Site. According to these two residents, the alleged stream channel ran along the north side of the Facility, and was reportedly filled in during either the 1940s or 1950s. This topic is further discussed in [Section 3.1.1](#).

Creek. The upstream sample was collected beneath the California Railroad trestle, and the downstream sample was collected beneath the Northwestern Pacific Railroad trestle.

Samples analyzed for total chromium did not reveal any detectable concentrations above the 10 µg/L detection limit at either sample point (ERM-West, 1991b). The RWQCB also sampled wells at 94 Franklin Avenue and 62 Fort Bragg Road and analyzed groundwater samples for total chromium. Chromium was not detected (detection limit of 10 µg/L) in either of these samples (ERM-West, 1991b). A not-to-scale drawing in the ERM-West report shows the approximate sample locations. The domestic well locations are shown on [Figure 2-7](#). The allegations of historic stream channels are addressed in [Section 3.1.1](#).

2.7.2.3 Soil Vapor Survey

VOCs were detected in two groundwater sampling events at the Remco Facility (ERM-West) in June 1991 and August 1991 (ERM-West 1991c). In order to address the RWQCB's concerns about these results, a soil vapor survey was performed. This survey was conducted to help determine source(s) and extent of VOCs in the soil and groundwater. The document entitled *Soil Vapor Survey*, March 19, 1992 by ERM-West (ERM-West, 1992) presents the procedures and results of this survey conducted in early 1992. It is noted that seasonally high groundwater levels are typically encountered in the first few months of the year. A large number of soil vapor samples were collected from 53 sampling locations at depths ranging from 5 to 10 feet bgs. Soil vapor sample locations are included on [Figure 2-7](#).

During the field soil vapor survey, three groundwater samples were taken from a depth of 6 feet bgs (HS-1, HS-2, and HS-3) at locations shown on [Figure 2-7](#). At these sample locations, groundwater samples were collected instead of soil vapor by filling a 40-milliliter ("ml") vial approximately 3/4 full with groundwater. Headspace vapor samples from the vials were collected and analyzed for VOCs. Due to quantitative uncertainties inherent in headspace analysis, analyte concentrations were not quantified. Analytes detected included 1,1-dichloroethane ("1,1-DCA"), cis-1,2-dichloroethylene ("cis-1,2,-DCE"), 1,1,1-TCA, trichloroethylene ("TCE"), and tetrachloroethylene ("PCE").

2.7.3 Monitoring by Remco Employees

Beginning in 1991 and continuing through 1995, Remco employees conducted groundwater quality and water level monitoring at the Facility on a quarterly basis. The wells monitored during this program included B4 and W7 in the A-Zone and B1 and W1 in the B-Zone. Each well was purged of three well volumes prior to sampling. Samples were collected using disposable bailers. Samples were analyzed by an independent laboratory for VOCs, total hexavalent chromium, and dissolved chromium.

Remco staff also collected storm water samples during the period from 1991 through 1994 and sent the samples to an independent laboratory for analysis. The location of the storm sewer sampling point, which was sampled by Remco staff, is not well documented. Based on available information, these samples were most likely collected from the catch basin located near the northeast corner of the Remco building, which is referred to in this report as SWD-7.

2.7.4 Investigations Conducted by GeoSyntec Consultants

In CAO Number 93-104, the RWQCB ordered Remco and certain past Facility owners to formulate plans to: 1) determine the vertical and horizontal extent of chlorinated solvents in groundwater, 2) abate the storm-water runoff discharge containing hexavalent chromium and VOCs, 3) determine the sources of VOC contamination, and 4) clean up the contaminated groundwater (RWQCB, 1993). Pneumo Abex Corporation retained GeoSyntec Consultants (“GeoSyntec”) to address the requirements of this order.

2.7.4.1 Investigations of Storm Water Runoff and Storm Sewer Systems

GeoSyntec conducted an investigation to evaluate the presence of hexavalent chromium and VOCs in storm water runoff at the Site. This work is documented in the *Report on Investigations of Storm Water Runoff*, dated November 4, 1994 by GeoSyntec (GeoSyntec, 1994). This report also presents a storm-drain pipeline improvement plan.

GeoSyntec collected storm water samples from catch basins and other locations in April of 1994 (see [Section 2.5.1](#)).¹⁷ No description of sampling and analysis was included in the GeoSyntec report, nor were laboratory analytical reports included.

Chromium was detected from sampling locations immediately downgradient of the chrome plating area. In addition, VOCs were detected in sampling locations along the Remco Facility's northern boundary. The results of the storm water sampling indicated that the storm sewer was likely in hydraulic communication with shallow groundwater adjacent to the sewer line.

Eight soil borings (GB-1 through GB-8) ([Figure 2-7](#)) were drilled adjacent to the storm drain pipeline to collect shallow soil and A-Zone groundwater samples. The grab groundwater samples were collected with single-use bailers after the boreholes were drilled. Groundwater samples from the borings were analyzed for total hexavalent chromium and VOCs. Shallow soil samples from borings GB-1 through GB-8 were analyzed for hexavalent chromium.

GeoSyntec subsequently conducted a video survey of the storm-drain pipeline interior. The video survey revealed 10 locations where disjointed, deformed pipes, or laterals existed. A comprehensive storm sewer lining project was commenced in 1995, pursuant to the RWQCB CAO 93-104. This process involved lining the storm sewer with HDPE pipe (GeoSyntec, 1996b). The extent of lining included the entire length of storm water pipe along the northern property line and the lateral storm water line extending under the building to the south. In addition, grout collars were installed surrounding the entire storm-drain system to prevent any preferential flow along the backfill.

¹⁷ Remco developed the original naming scheme for the catch basins, naming the northeast corner catch basin number 7. GeoSyntec re-numbered this catch basin as sample collection location number 4. In this report and other reports by the Willits Trust, the original naming scheme developed by Remco has been adopted. The storm-water sampling locations used by GeoSyntec have been renamed consistent with this original naming conventions. In other words, GeoSyntec references to SWD-4 have been renamed to SWD-7, consistent with both earlier historic sample location names and the Willits Trust sample location names. Therefore, the catch basin on the northeast corner of the Facility is referred to as Storm Water Drain [SWD]-7 illustrated on [Figure 2-2](#).

2.7.4.2 Investigation of Chromium in Groundwater

As required by the RWQCB, GeoSyntec also conducted an investigation to characterize the horizontal and vertical extent of chromium in the groundwater, as documented in the *Report on Investigations of Chromium in Ground Water* dated February 8, 1995 (GeoSyntec, 1995). During this investigation, five groundwater monitoring wells, W8A, W8B, W8C, W9A, and W9B were installed at locations downgradient of the Remco Facility. Monitoring well locations are shown on [Figure 2-7](#). At the W8 location, three wells were installed to monitor the A-Zone (W8A), B-Zone (W8B), and C-Zone (W8C). Two wells at the W9 location monitor the A-Zone (W9A) and B-Zone (W9B).

In September 1994, groundwater samples were obtained from these five wells and analyzed for hexavalent chromium, dissolved chromium, VOCs, general minerals (calcium, copper, iron, magnesium, manganese, sodium, and zinc), and water quality parameters. Results of the Geosyntec investigation indicated that no chromium was detected in wells W8A and W8B. The only detected chromium from well W8C was 0.26 mg/L of total chromium (includes digestion and analysis of suspended solids in sample). Concentrations of total chromium and hexavalent chromium above the MCL of 0.05 mg/L were reported in samples from well W9A at concentrations of 0.15 and 0.14 mg/L, respectively. In well W9B, only total chromium was reported above detection limits, but below the MCL, at a concentration of 0.04 mg/L. VOCs were reported above California MCLs only in wells W8A and W9A. However, VOCs were reported above detection limits in wells W8A, W9A, and W9B.

2.7.4.3 Investigation of VOCs in Groundwater

GeoSyntec conducted an additional investigation to characterize the horizontal and vertical extent of VOCs in the groundwater, as documented in their *Report on Investigations of Volatile Organic Compounds in Groundwater*, dated January 1996 (GeoSyntec, 1996a).

Groundwater samples were obtained from 17 monitoring wells ([Figure 2-7](#)) and analyzed for dissolved chromium, total hexavalent chromium and VOCs. Cone penetrometer tests (“CPT”) were also conducted at 15 locations along Franklin Avenue and adjacent to the Remco Facility’s western, southern, and eastern property boundaries. Grab groundwater samples were collected

adjacent to the CPT locations using HydroPunch™ technology. Groundwater samples collected in this manner were designated with the prefix REM by the investigators in their report and on the figures in this report. Samples were collected at depths ranging from 11 to 23 feet bgs. Five groundwater samples from the CPT locations were also analyzed for hexavalent chromium and filtered total chromium.

The A-Zone groundwater sample collected at REM5-S (Figure 2-7) reported concentrations of 1,1-DCE and cis-1,2-DCE in excess of California MCLs. However, no other A-Zone groundwater samples reported VOCs above the California MCLs. No VOCs were reported above detection limits in B-Zone or C-Zone groundwater samples. It is also noted that chromium was not detected in the A-Zone and B-Zone groundwater samples.

2.7.4.4 April 1996 Groundwater Monitoring

The GeoSyntec report, *April 1996 Results of Groundwater Monitoring* (Geosyntec, 1996c), presents groundwater monitoring results for the second quarter of 1996. Seventeen wells were sampled, including former domestic well WU, shown on Figure 2-7. In the 1996 report, WU is described as a former domestic well, approximately 40 feet deep.

Samples from former domestic well WU were analyzed for copper, cadmium, nickel, lead, zinc, and chromium (dissolved and hexavalent). None of these metals were reported above detection limits. Of the VOCs analyzed, only 1,1-DCA (18 µg/L) and 1,1,1-TCA (16 µg/L) were reported above detection limits.

2.7.5 Investigations Conducted by Versar, Inc.

The following section details investigations conducted by Versar Inc., on behalf of the City of Willits, and presents a general summary of results.

2.7.5.1 Preliminary Removal Site Evaluation Report, January 1998

Versar performed a Site evaluation in late 1997, for the City of Willits, Department of Public Works as summarized in the *Preliminary Removal Site Evaluation Report*, (Versar, Inc., 1998a).

The stated purpose of this investigation was to gather information to evaluate the potential of imminent hazard to public and environmental health associated with chemical releases from the Site and the potential necessity of interim removal actions. Versar identified chromium, acidic compounds, chlorinated VOCs, and diesel fuel as chemicals of potential concern. The scope of work included the following:

- Review of background data
- Site inspection
- Domestic well survey and sampling of 17 domestic wells
- Collection of four surface water, one storm water influent, and two storm water samples
- Collection of one surface soil and ten sediment samples
- Collection of four wipe samples
- Selective analyses of soil, wipe, and water samples for pH
- Chemical analysis for total chromium, hexavalent chromium, and VOCs
- Data analysis and assessment of potential risks to public health and the environment

Versar reported the detection of hexavalent chromium in a single sediment sample collected in the South Drainage Ditch. Versar also reported the detection of VOCs in the storm water outfall from the Remco Facility into Baechtel Creek and in seven private wells cross and downgradient of the Remco Facility (-OW-05, -07, -11, -17, -21, -24 and -29)). The results of the above sampling are presented in [Section 5.0](#) of this RI Report.

2.7.5.2 Remco Facility Inspection and Groundwater/Storm Water Sampling Oversight Report, March 1998

Versar conducted an inspection of the Remco Facility and performed field oversight of the Willits Trust's February 1998 groundwater and storm water sampling activities at the Site (Versar, Inc., 1998b). Versar conducted a comprehensive Facility inspection with former Remco Facility employee Jim Wisdom to identify areas of potential concern. Versar identified over 50 potential source areas based on past operations and visual observations. The findings presented in this report also indicate that the procedures followed during the groundwater and storm water sampling event were consistent with quality objectives.

2.7.6 Investigations and Interim Remedial Measures Conducted by Henshaw Associates

The following sections describe the monitoring and remedial activities performed by Henshaw for Whitman Corporation from 1996 through the inception of the Willits Trust in August 1997. Since August 1997, Henshaw has continued to perform environmental consulting services for the Willits Trust.

2.7.6.1 Groundwater Monitoring

Henshaw performed quarterly groundwater monitoring for Whitman Corporation during the second quarter of 1997 (Henshaw, 1997c). Groundwater monitoring during this period was conducted in accordance with CAO No. 95-94 issued by the RWQCB in October 1995 and Groundwater and Surface Water Monitoring Program No. 90-10 (amended and approved by the RWQCB in a June 12, 1997 letter).

2.7.6.2 Interim Remedial Measures Workplan

In August 1996, in accordance with CAO 93-104 and CAO 90-10, Henshaw prepared an *Interim Remedial Measures Workplan* (Henshaw, 1996). The activities proposed in the workplan were intended to support construction of a groundwater pump-and-treat system and included: installation of two recovery wells, collection and analysis of vadose zone soil samples, collection and analysis of ground water samples, aquifer testing A- and B-Zones, screening and evaluation of remedial alternatives, selection of remedial alternative(s), detailed design of the selected remediation system, preparation of treatment system construction and bid specifications, implementation of the treatment system, and preparation of a final report.

2.7.6.3 Interim Remedial Measures, Technical Memorandum

The March 26, 1997 *Interim Remedial Measures, Technical Memorandum* (Henshaw, 1997a) presents the results of the investigatory phase of the Interim Remedial Measures Workplan (Henshaw, 1996). The investigatory activities included installation, sampling, and hydraulic testing of proposed extraction wells EW-1A and EW-1B (Figure 2-7). Groundwater extraction tests were conducted on each well to evaluate groundwater pumping as a potential interim remedial measure at the Facility. Aquifer testing was abandoned at well EW-1A due to the low

yield of this well. In fact, the low extraction rates at well EW-1A placed into doubt the viability of pump and treat systems at the Site.

Soil samples were collected for physical and chemical analyses from soil borings for wells EW-1A and EW-1B. Two soil samples, SB2A-S1 and EW1B-S2, were collected for chemical analyses from the A/B-Aquitard from borings SB-2A (pilot boring for well EW-1A located north of the vertical chrome plating tanks within the bermed area) and EW-1B, respectively. The two samples were analyzed for total cation exchange capacity, ferrous iron, total organic carbon (“TOC”), priority pollutant metals, hexavalent chromium, and VOCs. Neither VOCs nor hexavalent chromium were detected above laboratory detection limits.

Five soil samples, SB2A-S1, EW1A-S1, EW1B-S2, EW1B-S3, and EW1B-S4 were collected for physical analyses from borings SB2A and EW-1B. The five soil samples represent aquitard and water-bearing materials from the A-Zone, A/B-Aquitard, and B-Zone. The samples were analyzed for bulk density, moisture content, porosity, sieve analysis, and vertical permeability.

2.7.6.4 Results of Treatability Studies and Evaluation of Recommendation of Proposed Interim Remedial Systems, September 1997

Henshaw conducted groundwater treatability studies to evaluate techniques for removing hexavalent chromium from impacted groundwater, as summarized in the *Results of Treatability Studies and Evaluation and Recommendation of Proposed Interim Remedial Systems* (Henshaw, 1997b). Four potential equipment suppliers, EPOC, Great Lakes Environmental (“Great Lakes”), Kinetico, and R&S Technology (“R&S”), were selected to conduct individual treatability studies of technologies including chemical reduction, chemical precipitation, traditional filtration, micro-filtration, sludge dewatering, and ion exchange. Three bench-scale and one pilot-scale treatability studies were conducted. The on-Facility pilot-scale test was performed by R&S with an ion exchange system using a proprietary resin for the removal of hexavalent chromium. Based on the work conducted, Henshaw recommended the use of the Kinetico treatment system for treatment of hexavalent chromium impacted groundwater.

2.8 NON RI-RELATED SITE ACTIVITIES

In addition to RI-related investigations, the Willits Trust has conducted IRA activities at the Facility, as summarized in [Table 2-5](#).

2.8.1 Interim Remedial Actions

In September 1998, Henshaw completed the *Interim Remedial Action* (“IRA”) *Work Plan* to present proposed interim remedial actions intended to improve environmental conditions at the Facility consistent with a regulatory order issued by the RWQCB (Henshaw, 1998e). The proposed IRAs included three components: a groundwater pump-and-treat system for the A- and B-Zones; a storm-drain backfill pump-and-treat system; and closure of sumps and trenches at the Facility. The potential construction of a groundwater pump-and-treat system has been deferred during pilot testing of innovative technologies and completion of the RI/FS. The two other IRAs have been completed, as summarized in [Sections 2.8.1.1](#) and [2.8.1.2](#). In addition, the Willits Trust has conducted additional surface water control and storm water improvement IRAs, as summarized in [Sections 2.8.2](#) and [2.8.3](#).

Currently, the storm-drain backfill pump-and-treat system and closure of sumps and trenches at the Facility have been completed. An *Interim Remedial Action Design Plan* (Henshaw, 1998g), an *Operation and Maintenance Manual Interim Remedial Action Carbon Adsorption System and Shallow Groundwater Extraction System* (Henshaw, 1999b), and a *Monitoring Plan for the Interim Remedial Action Groundwater Extraction and Treatment System* (Farr Associates and Henshaw, 1999) were also prepared to further describe the construction, operation and maintenance, and monitoring of the IRA.

Consistent with the RWQCB CAO 98-59 and CAO 99-55, Henshaw prepares monthly summaries of IRA system operation for the Willits Trust. These summaries are transmitted to the RWQCB and the document depository (Willits Public Library).

2.8.1.1 Removal of Wastes and Closure of Sumps, Pits, Trenches, and Tanks

Numerous sumps, pits, trenches, and tanks (containment structures) were utilized inside the Remco Building prior to closure of Remco operations at the Facility for various industrial activities. Many of these structures were observed to contain liquid and solid materials when the Willits Trust took ownership of the Facility in 1997. Henshaw conducted sump, pit, trench, and tank closure activities at the former Remco Facility from April through November 1998 in several phases. These structures and their contents were characterized and disposed of in a manner consistent with the procedures outlined in the RI/FS Work Plan and the IDR Waste Management Plan ([Appendix 2-1](#), Henshaw, 1998d), the Sump, Pit, Trench, and Tank Closure Plan (Henshaw, 1998f), and the NCP.

On April 24, 1998, Henshaw performed characterization activities during which materials observed within sumps, pits, trenches, and tanks were sampled for laboratory analysis. On July 23, following characterization of sump, pit, trench, and tank contents, Henshaw began the first phase of the removal and cleaning activities. During these activities, additional sumps, pits, and trenches were discovered. During the week of October 12, 1998, the Willits Trust commissioned T.M. Herman & Associates to survey the location and form of the sumps, pits, trenches, and tanks. The results of this survey are depicted on [Figure 2-8](#).

During November 2 through 12, 1998, the second phase of the sump, pit, trench and tank closure activities were conducted. Materials existing within the containment structures were sampled and analyzed for waste characterization purposes, or were characterized according to sump usage and professional judgment. Based on these procedures, the materials were classified as:

- 1) Nonhazardous waste,
- 2) Non-RCRA hazardous waste¹⁸
- 3) RCRA hazardous waste

¹⁸ Includes waste characterized as hazardous under California laws and regulations, but not classified under federal RCRA laws and regulations.

After sampling and characterization activities, the materials were removed from the containment structures and properly containerized for off-Site disposal at a licensed and approved waste disposal facility outside of the Willits, California area. The structures were pressure washed and then backfilled with gravel and sealed to grade with concrete. Wastewater was characterized and properly disposed of in accordance with applicable law. Above-ground tanks were cleaned and removed from the Facility. All phases of closure activities were documented in the *Summary Report of Facility Characterization Sampling* report (Henshaw, 1998c), and the *Summary Report, Interim Remedial Action, Sump, Pit, Trench and Tank Closure Activities Report* ([Appendix 2-1](#); Henshaw, 1999a).

2.8.1.2 Storm-Drain Backfill Pump-and-Treat System

During routine inspections conducted over the exceptional rainwater events during the 1997 through 1998 El Nino wet season, groundwater was observed discharging to the ground surface at a location immediately north of the former vertical chrome plating area and wash down sump. In response, Henshaw constructed a surface discharge control sump (ES-1, [Figure 3-17](#)) designed to extract shallow groundwater so as to prevent it from discharging to the ground surface (“Control Sump”). The Control Sump is designed to begin pumping when groundwater rises to approximately four inches bgs and cease when groundwater drops to approximately 13 inches bgs. The installation of the Control Sump on the north side of the former Remco Facility was completed on April 17, 1998. No groundwater discharges to the surface have been observed since completion of the Control Sump. Details regarding Control Sump construction were presented in Summary Report, Surface Discharge Control Sump Installation (Henshaw, 1998b).

In 1999, under the IRA Work Plan, two additional on-site shallow extraction sumps (ES-2 and ES-3), a bermed area dewatering sump (Former Boiler Blowdown Sump), and an off-site dewatering sump connected to a sub-building french drain system located within the adjacent Luna Market and Motel property (Luna Market Sump) were installed. Analytical results for samples collected from ES-1 through ES-3 are presented in [Table 2-6](#). The two additional shallow extraction sumps are designed to prevent contaminated shallow groundwater from entering the storm-drain system along the segment of the storm-drain system just north and

northeast of the former chrome plating area. The bermed area dewatering sump is designed to dewater the bermed area, if required (Henshaw, 1999b).

The five sumps are connected to the IRA treatment system, a carbon adsorption treatment system. The carbon adsorption units are designed to remove hexavalent chromium, chromium, and VOCs from contaminated influent using a system of two granular activated carbon vessels connected by a system of pipes and valves. The IRA treatment system is contained within a secondary containment berm. Treated water is discharged to the City of Willits sanitary sewer system under a discharge permit (Henshaw, 1999b).

2.8.2 Storm Water Control Measures

Additional IRAs have been undertaken by the Willits Trust to control surface water at the Facility. A 10-inch asphalt berm was constructed on the northern edge of the Facility to prevent storm water from migrating off the Site to neighboring properties to the north. A four-inch berm was also constructed in an area along the southern edge of the Facility building to prevent storm water from entering the Remco Facility building (Henshaw, 2000).

2.8.3 Storm-Drain System Improvement Measures

As discussed in [Section 2.5.1](#), the majority of the underground piping at the Remco Facility was lined in 1994 with an impervious HDPE liner to further reduce interaction between the storm water and groundwater. Based on visual observations of groundwater entering the storm-drain system at the junction of the HDPE liner and the catch basins located at SWD-3, SWD-4, and SWD-5, the Willits Trust performed further improvements to the storm-drain system. Catch basins (SWD-3, -4, and -5) were retrofitted during the summer of 2000 with watertight HDPE risers welded onto the lining of the storm-drain system.

3.0 STUDY AREA INVESTIGATION

This section describes the remedial investigation activities conducted at the Remco Site. The data collected during the investigations discussed in this section are presented in [Sections 4.0](#) and [5.0](#) of this report. The investigations and activities performed include the following:

- Site background investigations
- Utility investigations
- Characterization of surface features
- Geophysical investigations
- Contaminant source investigations
- Evaluation of the lateral and vertical extent of contamination in groundwater
- Storm water, surface water, sediment, and soil investigations
- Air sampling
- Aquifer testing
- Ecological survey
- Periodic monitoring

Each of these activities is described below. The sampling locations representing the data which was considered in this report are illustrated on [Figure 3-1](#) (soil, groundwater, storm water, sediment and surface water samples) and [Figure 3-5](#) (building surface and air samples). [Figures 3-2](#) through [3-4](#) represent sub-sets of [Figure 3-1](#) and illustrate the locations of groundwater wells, grab groundwater and soil (including sediment) samples respectively, collected as part of the RI. A summary of the type and number of samples collected including analytical test performed is presented on [Table 3-1](#).

3.1 SITE BACKGROUND INVESTIGATIONS

Site background investigations were conducted to evaluate conditions at the Site prior to the Remco Facility operations, to establish the locations of Site features and environmental sampling

locations, and to evaluate current background environmental conditions at and around the Site. The background investigations included the following specific investigations and activities:

- Aerial photo review
- Climatological investigation
- Baseline Site survey
- Characterization of background chemical concentrations in soil and groundwater

3.1.1 Aerial Photo Survey

An aerial photo survey was completed as outlined in the RI/FS Work Plan (Henshaw, 1998d). A total of 18 historical photos were reviewed. A representative photograph from each decade beginning in the 1940s through the 1990s along with a complete description of each photograph reviewed is included in [Appendix 3-1](#).

The aerial photographs reviewed were obtained from the following sources: City of Ukiah Assessors Office, United States Department of Agriculture; the Mendocino County Historical Museum; Radman Aerial Surveys; and Cartwright Aerial Surveys. The photographic quality and resolution generally decreases with the age of the photograph but in most cases was sufficient to determine land uses, operational practices, and any major associated potential environmental issues.

Aerial photographs taken before industrial operations (before 1945) commenced at the Site were reviewed to determine the occurrence and location of natural drainages and land use in the general area. Aerial photographs reviewed after industrial operations began at the Site were reviewed to determine the extent and specific use of Remco operations during that specific time period and the historical usage of surrounding areas as they relate to the Site. Specific attention was given to historical usage, both on the Remco Facility and in the surrounding areas that may have had an adverse impact on the environment.

The historical usages of environmental concern, which might be evident in aerial photographs include:

- Handling and storage of waste products
- Equipment and material storage
- Laydown areas
- Surface water drainages
- Other industrial operations

In addition, the occurrence and relative locations of residential and retail or commercial properties in the surrounding areas is noted. Additional information pertaining to the aerial photographs is presented in [Section 4.2.1](#).

3.1.2 Climatological Investigation

Existing climatological data were collected to evaluate Site conditions that may affect the distribution of contaminants in the environment. Specifically, the predominant wind direction and magnitude at the Site was determined in order to evaluate the potential distribution of contaminants due to potential airborne releases from operations at the Remco Facility prior to 1996.

The County of Mendocino Air Quality Management District operates a meteorological monitoring station allowing weather data collection approximately 200 feet east of the Site on the roof of the Safeway Shopping Center. The data from this monitoring station includes wind speed and direction. Data reviewed for purposes of the RI were collected between 1995 (date the station was established) and 2000. This data is presented as wind rose diagrams ([Section 4.3](#) and [Figure 4-1](#)). Wind roses display a radial histogram indicating the direction from which the wind originated. In other words, a northwesterly wind indicated on the wind rose indicates a wind blowing from the northwest to the southeast.

Precipitation and temperature records for the City of Willits and the surrounding areas were collected and summarized to determine seasonal averages. Precipitation and temperature records were obtained from the Western Regional Climate Center (wrcc@dri.edu, 2001) between February 1, 1960 and December 31, 2000. The location of the monitoring station is given as Willits 1 NE, which is located one mile northeast of downtown Willits. The data collected are discussed in [Section 4.3](#) of this report.

3.1.3 Baseline Site Survey

A baseline Site survey was conducted to allow for the accurate presentation of data on figures and maps. TM Herman and Associates, a certified land surveyor, performed the baseline Site survey to accurately identify the locations and elevations, Site features, underground utilities (utilities), topography and sampling locations. The surveyor established a baseline that provides the basis for a grid coordinate system at the Site. A survey and mapping coordinate system was developed, including the establishment of a permanent benchmark on the Site. The surveyor also prepared a Site base map.

Each sampling location was given a unique alphanumeric identification label and plotted to scale on the official project base map. At sampling locations, the elevations of ground surface and monitoring well casings were surveyed to an accuracy of ± 0.01 -foot elevation as compared to msl. Sampling locations were also identified in the horizontal plane using XY-coordinates in the state-plane coordinate system. All sampling locations were surveyed in the horizontal plane to an accuracy of ± 0.05 feet. [Appendix 3-4](#) provides Site survey information.

3.1.4 Evaluation of Background Chemical Concentrations

Soil, groundwater, surface water, sediment and air samples were collected in areas unlikely to have been impacted by Facility operations to evaluate the background or ambient conditions in the Site vicinity. The samples collected at background sampling locations will be used to evaluate the presence of anthropogenic organic constituents (e.g., refined petroleum products, VOCs) from off-Site sources that have the potential to impact the Site. In addition, since

chromium and other chemicals occur naturally in soils, samples collected at background sampling locations were analyzed for priority pollutant metals (including hexavalent chromium) to determine the naturally-occurring background metals concentrations. These background metals concentrations will be used as a reference for comparison to samples collected on the Site.

The sampling locations for background conditions were determined based on the following criteria:

- Proximity to the Site. Samples needed to be collected from locations relatively close to the Site in order to be representative of conditions existing at the Site prior to any potential impact by Remco Facility operations.
- Lateral and vertical distribution. Sample locations needed to be relatively widely distributed and collected at multiple depths to compensate for the heterogeneity of Site soils.

The background soil, surface water, and groundwater samples were analyzed for metals (including hexavalent chromium) and TPH as diesel (“TPH-diesel”). Background air samples were analyzed for VOCs and chromium (total and hexavalent). Background sediment samples were analyzed for metals, VOCs, TPH-diesel and polynuclear aromatic hydrocarbons (“PAHs”). The background samples were analyzed for metals to determine concentrations of these naturally occurring constituents. Soil and groundwater samples collected in areas potentially impacted by former Remco operations will be compared to these background levels to determine the effects of those operations.

The RI/FS Work Plan (Henshaw, 1998d) proposed the collection of soil and groundwater samples for background metals characterization from three locations along Walnut Street (south and upgradient of the Remco Facility). Soil borings SB-80, -81, and -82 were completed during March 2000 with a total of eight grab groundwater samples collected from 8 to 24 feet bgs, and eight soil samples collected from 5 to 27 feet bgs. In October 2000, three additional soil borings SB-101, -102, and -103 were completed on Walnut Street to augment the original three borings and develop a larger and more representative set of data. A total of five grab groundwater samples were collected from depths of 12 to 23 feet bgs and a total of six soil samples were collected from depths of 2.5 to 13 feet bgs during the October 2000 sampling event.

In March 2001, two additional borings were drilled along Highway 20. These borings were completed as monitoring wells W39A and W40A. The groundwater in these two wells exhibits slight VOC impact below the MCL (as discussed in [Section 5.3](#)). No metals impact was observed. Based on this, the soils and groundwater samples collected and analyzed for metals from these locations were included in the background data set. Soil samples were collected at 5 feet bgs from each boring and grab groundwater samples were collected from 15 and 16 feetbgs from each boring, respectively. In addition, groundwater samples from the two monitoring wells were also included in the background data set. The background data set used in this report for each of the environmental media investigated is described below.

3.1.4.1 Background Soil Samples

As discussed above, MWH collected 16 background soil samples for metals analyses at six locations upgradient and two locations downgradient of the Site (see [Figure 3-6](#)). Soil samples were collected between 2.5 and 27 feet bgs from different soil types (e.g., clays, silts, sands and gravels) to ensure that the soil types utilized to determine background conditions are the same as conditions encountered on the Site. It is noted that the same soil types encountered in the background borings were detected in Site borings, with no significant differences noted based on depth below grade. An extensive review of the lithologies encountered is provided in [Section 4.0](#). This review further validates the similarity in soil types between background and Site locations. Soil samples were analyzed for priority pollutant metals, including hexavalent chromium, and TPH-diesel. The results of the background chemical evaluation are presented in [Section 5.0](#).

A statistical evaluation of the metals concentrations for the soil samples collected for the background data set was completed and is presented, along with a tabulation of the data used, in [Appendix 3-2](#). This appendix also includes the methodologies and procedures utilized in calculating representative background concentrations. These background concentrations are utilized as reference concentrations to evaluate the effect the Remco Facility operations may have had on metals concentrations in soils located at the Site.

3.1.4.2 Background Groundwater Samples

MWH collected groundwater samples during the RI at six locations upgradient and two locations downgradient of the Site (see [Figure 3-6](#)). Groundwater samples were collected from multiple depths including water-bearing zones and aquitards identified as the A-Zone, A/B-Aquitard, and B-Zone as follows:

- Ten A-Zone grab groundwater samples
- Two A/B-Aquitard grab groundwater samples
- One B-Zone grab groundwater samples
- Two A-Zone monitoring well groundwater samples

These samples were analyzed for priority pollutant dissolved metals, including hexavalent chromium. The analytical results of the background chemical evaluation are presented in [Section 5.0](#).

A statistical evaluation of the reported dissolved metals concentrations for the groundwater samples collected for the background data set was completed and is presented, along with a tabulation of the data set used, in [Appendix 3.2](#). These background concentrations are utilized to evaluate the effect, if any, the Remco Facility operations may have had on metal concentrations detected in groundwater at the Site.

3.1.4.3 Background Surface Water and Sediment Samples

Surface water and sediment samples have been collected at locations determined to represent background or ambient conditions based on the criteria presented above. Specifically these locations include upstream portions of the South Drainage Ditch, Baechtel Creek, and Broaddus Creek as follows:

- Surface water samples SW-04 (Baechtel Creek), SW-05 (South Drainage Ditch), SWBr-1 and SWBr-2 (Broaddus Creek)
- Sediment samples BC-5 (Baechtel Creek), S-05 (South Drainage Ditch), SWBr-1 and SWBr-2 (Broaddus Creek)

These background samples, along with the resulting analytical data, are discussed more fully in [Section 5.0](#) of this document.

3.1.4.4 Background Air Samples

Two background air samples were collected in areas determined to be representative of background or ambient conditions. The location of the background air sample AS-09A was the corner of South Van Lane and South Humboldt Street and the location of background air sample AS-10A was the corner of Poplar and Holly Streets ([Figure 3-5](#)). The background air samples were analyzed for VOCs. These background air sample locations and analyses are discussed more fully in [Sections 3.8](#) and [5.7](#).

3.2 UTILITY INVESTIGATIONS

The utilities investigated at the Site include: storm-drain system conveyance lines, sanitary sewers, former private well, water lines (domestic and industrial), industrial fluid conveyance lines (e.g., diesel fuel line), electrical lines, and utilities with unknown historical uses. These utilities have been investigated using a variety of methods. The historical usage of utilities was determined by reviewing historical records (including plans and drawings) and interviewing past employees with institutional knowledge of Remco Facility operations. Cruz Brothers Locating and California Utility Surveys were also contracted to locate and trace sub-surface utilities at the Site. These utilities include storm and sanitary sewer lines, domestic water and fire water lines, electrical utilities and fuel lines. In addition, utilities including conduits used to convey industrial liquids such as tank overflow and boiler blowdown water were investigated. These utilities were traced using subsurface detection methods such as magnetometers, electrical induction, and radio transmitters conveyed through the utility.

3.2.1 Storm-Drain System

The storm-drain system at the Facility originally consisted of an open drainage ditch along the northern Facility boundary. The storm water was then conveyed under Highway 101 through a 30-inch diameter storm-drain line, which has remained at its current location. East of Highway

101, the open drainage ditch historically continued due eastward to Baechtel Creek. The storm-drain system off the Facility was realigned to the south and converted to a subsurface system in the late 1960s. The storm-drain system on the Facility was converted to a subsurface system of 30-inch reinforced concrete pipe in approximately 1974. The on-Facility system was constructed of corrugated metal pipes from 18 to 30-inches in diameter at depths ranging from approximately 1 foot bgs (SWD-1) to approximately 4 feet bgs (SWD-7). No information on the nature of the backfill material was available. Based on subsurface investigations conducted adjacent to the storm-drain system, it appears that re-worked native soils were utilized for backfilling operations around the storm-drain system. Seven catch basins were installed at the Remco Facility, one on the south side of the Facility, five along the northern property boundary, and one in the eastern front parking lot. The location of the current and historical storm-drain system is shown on [Figure 2-2](#).

Based on storm water monitoring conducted in the early 1990s ([Table 5-3-1](#)), it was speculated that under seasonally high groundwater conditions, impacted groundwater may have entered the storm-drain system. An HDPE impervious liner was installed in 1995 to isolate the storm-drain system from the groundwater. The liner was welded in place to provide a watertight seal.

The investigation of the impact of potential releases from the off-Facility storm-drain line to the environment, as proposed in the RI/FS Work Plan, focused on the collection of soil and groundwater samples adjacent to the existing storm water sewer lines under the Safeway Shopping Center parking lot. The sampling locations were refined based on a review of City of Willits construction records, a utility survey conducted of the alignment and the depth of the storm water system using transmitting (radio frequency) sonds. Additional soil and groundwater samples were also collected along the trajectory of the historical drainage ditch at the Safeway Shopping Center.

Based initially on the results of routine analytical monitoring of storm water along with additional focused sampling and visual observations, it was determined that small amounts of impacted groundwater were seeping into catch-basins SWD-3, SWD-4, and SWD-5. Specifically, groundwater was seen to be seeping into the storm-drain system at the junction of

the catch basin and the HDPE pipe lining during periods of high groundwater. A sample of the seepage entering SWD-3 (March 15, 2000) was collected and analyzed and found to contain VOCs already identified in the surrounding impacted groundwater. Based on these findings, closed circuit television (“CCTV”) was utilized to investigate the integrity of the storm-drain system along the entire system. Video surveys were completed from SWD-1 located in the south-central area of the Facility along the entire alignment to the northeast corner of the Facility at SWD-7. The storm-drain system alignment was also evaluated under the Safeway Shopping Center parking lot from Main Street to the outfall at Baechtel Creek. The results of the CCTV investigation are presented on [Figure 2-2](#).

The visual observations made during the CCTV survey indicated that the storm-drain system at the Remco Facility was in excellent condition. Additionally, observations of the City owned storm-water system under the Safeway parking lot indicated the utility was in good condition with no apparent sags, offsets or open cracks. However, visual observations in March 2000 of the junctions between the HDPE liner and the concrete catch basins at the Remco Facility indicated that the seal was not intact. As discussed above, groundwater was observed to be entering the storm-drain system at the junction of the HDPE liner and the catch basins located at SWD-3, SWD-4, and SWD-5. In order to prevent impacted groundwater from entering storm-drain catch basins SWD-3, SWD-4, and SWD-5 were retrofitted during the summer of 2000 with watertight HDPE risers welded onto the lining of the storm-drain system. [Appendix 2-2](#) contains photographs of this storm drain improvement activity. Storm water analysis conducted after this retrofit indicates that these improvements were effective in eliminating groundwater infiltration into the storm-drain system at these locations.

3.2.2 Sanitary Sewer Line

There are three sanitary sewer lines exiting from the Remco Facility ([Figure 2-9](#)). One sanitary sewer line, which serviced a bathroom in the southeast corner of Building 1962, exits the Facility to the south from this bathroom. This line, which is located just below grade in the Facility, then travels in an easterly direction for approximately 100 feet and terminates (at a depth of 51-inches

bgs) adjacent to a sanitary sewer manhole located near the southeast corner of the Facility. The bathroom that was serviced by this sewer is no longer in use.

A second sanitary sewer (which services the bathroom near the front offices) exits Building 1965 to the east and then turns south and joins the sanitary sewer line near the southeast corner of the Facility. The groundwater analytical results collected from monitoring well W15A, located less than 10 feet downgradient of this sanitary sewer line, indicates no groundwater impact in relation to this line.

A third line, which exits the Facility to the north, services a bathroom located in the central portion of the Remco building. This sanitary sewer line consists of a six-inch diameter transit pipe located from approximately 1 to 2 feet from grade to the top of the pipe. No coarse-grained backfill material was observed around this sewer line during the completion of adjacent soil borings (SB-104, -105, -106, or -109). The sanitary sewer line extends from the manhole on the northern boundary of the Facility (adjacent to SWD-3) in a northerly direction to Franklin Avenue, traversing the area between 37 and 43 Franklin Avenue.

The sanitary sewer line from the manhole on the northern boundary of the Facility (adjacent to SWD-3) traversing the area between 37 and 43 Franklin Avenue and extending to Franklin Avenue was cleaned and a video survey was completed using CCTV. The sanitary sewer line is a clay pipe, approximately 6 inches in diameter. The bottom of the pipe is approximately 1 foot bgs at the manhole on the Facility and 2 feet bgs in the vault at Franklin Avenue. The pipe was observed to be in good condition with no cracks, sags or off-sets noted. Sampling locations were chosen based on this survey and are indicated on [Figure 3-9](#) including SB-104, -105, -106, and -109. Soil samples were collected from all four soil borings at depths ranging from 3 to 7 feet bgs. Groundwater samples were collected from SB-105, -106, and -109 at 7 feet bgs. All samples were analyzed for TPH-diesel, chromium, and VOCs. The results of these analyses are further discussed in [Sections 5.2](#) and [5.3](#).

3.2.3 Former Private Well

A former private well was located in the eastern portion of Building 1973 ([Figure 3-2](#)). This well was originally utilized to service the former residence on the property ([Appendix 3-1](#), 1963 aerial photograph). The private well was approximately 4 feet in diameter and approximately 40 feet deep. Sometime between 1964 and 1972, the residence was removed (Wisdom Deposition). During 1973, the Remco Facility constructed a building addition (Building 1973, [Figure 2-3](#)) encompassing the former private well location (“WU”). During the early 1990s, ERM-West Inc., converted this private well into a monitoring well by installing approximately 30 feet of two-inch diameter well screen and casing into the well annulus and backfilling around the screen with filter pack. These well construction details are based on field observations made during the well abandonment activities discussed below.

This former private well was the subject of a subsurface investigation conducted by the DTSC and the RWQCB in January 2000. The DTSC indicated that they had received information alleging that industrial waste was disposed of in this well. The RWQCB collected discrete groundwater samples from multiple horizons within the water column. In addition, samples were collected of filter pack materials. Based on the outcome of this investigation (personal communication, Jan Goebel 2000), the RWQCB could identify no evidence of this well ever being used for the disposal of industrial waste. In addition, groundwater samples collected from this well by MWH (October 26, 1999, sample identified as WU) indicated only minor VOC impact consistent with detections in adjacent Remco Facility monitoring wells. An A- and B-Zone pair of monitoring wells was installed adjacent to this location (W11A and W11B) to monitor the groundwater in this area.

The former private well was abandoned under permit with the Mendocino County Environmental Health Department in January 2000. The top 4 feet of the well was excavated and well construction materials were removed. The well was pressure grouted and the excavation was backfilled with concrete to match existing grade. Additional details of the excavation and abandonment of this well are provided in [Section 3.2.6](#) below.

3.2.4 Water Lines (Domestic and Industrial)

Domestic (City) water lines enter the Facility property from two locations along Main Street. One former water line enters the Remco building near the front office entrance. This line is disconnected at Main Street and is no longer in use. The city water line which currently services the Remco Facility enters the property near the southeast corner of the Facility.

Currently, the Willits Trust obtains water for remedial uses from the domestic water supply at the Facility. A fire water line, consisting of both above-grade and below-grade piping and valves (including hydrants), is located along the southern Facility boundary. A three-inch PVC domestic water line runs adjacent to the fire line along the southern property boundary. Both the fire line and the domestic water line enter the Remco building every 100 to 200 feet along the length of the building. The locations of these structures are indicated on [Figure 2-9](#).

3.2.5 Industrial Fluid Conveyance Lines

Historical utilities investigated at the Site include existing and/or former piping used to convey fuel products, chromic acid solutions, process rinse water, and boiler blowdown. Subsurface structures investigated include various sumps, trenches, vaults, and USTs involved with manufacturing operations. Historical usage of these utilities has been gathered by reviewing available historical drawings and building plans, through review of deposition transcripts, and by interviewing former Remco employees with institutional knowledge of historical operations. The Willits Trust investigated many of these structures, disposed of all waste material remaining in them, and cleaned and closed those subsurface structures and utilities in 1998 through 2000. Observations of the historical usage and the construction of these structures are provided on Tables 1 and 2 of [Appendix 2-1](#). The location and a description of these structures are provided on [Figure 2-8](#) of this report and Figures 2 and 3 of [Appendix 2-1](#).

Originally, diesel was stored in a UST located along the northern-central property boundary. As described in [Section 2.4](#), the diesel UST was removed in the mid- to late-1970s. After verifying its integrity, it was relocated to the western property boundary and reused as an AST for diesel.

At this same time, underground piping was installed to connect the diesel AST to the boiler. Due to leakage in the underground piping, (see [Table 2-3](#)) the majority of the piping was excavated and replaced with an aboveground line (see [Section 2.7.1](#)) in 1981. In July 2000, MWH removed the above grade diesel line and abandoned in place (pressure grouted under permit with the Mendocino County Department of Environmental Health) the remaining below grade piping existing from the northwest corner of the Remco Building to the location of the former ASTs.

3.2.6 Miscellaneous and Unknown Utilities

During abandonment of the former private well ([Section 3.2.3](#)), the following utilities were discovered:

- 1) A gravel-filled trench, approximately 1-foot wide and 2 feet below grade was identified within 2 feet of the former private well. This trench extended to the southwest as shown in [Figure 2-9](#). There was no perforated pipe observed to exist within the trench. This trench is believed to be the “french drain” referred to in Facility documents.
- 2) A two-inch pipe (thought to be an overflow drain line associated with dewatering the former private well during events of high groundwater) was observed to exit the well casing at approximately 2 feet bgs and trend in a northerly direction.
- 3) A six-inch diameter transite pipe (thought to be a former sanitary line servicing the former residence in this area, based on Facility blue prints) was identified to run adjacent to the northeast corner of the excavation, trending in a southeast to the northwest direction.

Both of the existing pipelines (the two-inch and the six-inch pipes) were cleared using Roto-Rooter jet cleaning methods before conducting a CCTV survey and utility locating. Both line locating and CCTV surveys indicated that the lines ended approximately 25 feet from the private well ([Figure 2-2](#)). Both lines were abandoned in place by pressure grouting. The french drain was sealed off with a concrete plug at the location where it entered the excavation. The former private well was abandoned by pressure grouting under permit from the Mendocino County Environmental Health Department in January 2000. The excavation was backfilled with concrete to match existing grade.

Several subsurface lines were also found to exist in and around the former plating department (Building 1964). The exact historical usage of these lines is unknown. These lines include electrical conduits, steel and terra-cotta pipes within the boiler blowdown sump and steel lines entering and exiting the former chromium sump (see [Section 2.3.1](#)). No closure activities have been performed to date in association with these lines. However, they do not appear to pose any immediate risks and will be addressed during final Site remediation.

3.3 CHARACTERIZATION OF SURFACE FEATURES

The following sections discuss the characterization of surface features at the Remco Facility. Surface features include man made structures such as buildings and parking lots, as well as natural features, such as exposed surface soils at the Facility.

3.3.1 Remco Facility Building Characterization

One building occupies the majority of the Facility boundary (see [Section 2.1](#)). The building investigation included the collection and analysis of the following representative samples from this building:

- Building surfaces
- Paint chips
- Floor and ceiling tiles

The following sections discuss the building sampling completed.

3.3.1.1 Building Surface Wipe Samples

Ten surface wipe samples (BW-01 through BW-04 and BW-06 through BW-11) were collected from the floors and walls of the various building additions located within the Remco Facility, as shown on [Figure 3-5](#). These samples were collected to assess whether chromium or lead was present on the Remco building walls and floors. Sample collection and handling were performed in accordance with the RI/FS Work Plan. Three additional wipe samples were collected from framed photographs and a Remco sign (WS-Sign Number 1, WS-Sign Number 2, and

WS-Picture), which were stored in the front office areas of the Remco building. The wipe samples were submitted to California certified labs and analyzed for lead and/or chromium (total and hexavalent) and are summarized in [Section 5.8.1](#).

3.3.1.2 Paint Chip Samples

During maintenance activities in 1998, paint chips peeling from the ceiling of building 1945 were collected and drummed. A sample collected from the paint material was analyzed and found to contain chromium at a concentration of 116 mg/kg and total lead at a concentration of 3,180 mg/kg. The drummed paint material was classified as a RCRA hazardous waste and managed in conformance with the Willits Trust investigated derived residual plan (RI/FS Work Plan, Henshaw, 1998d) and in compliance with state and federal hazardous waste laws.

3.3.1.3 Floor and Ceiling Tile Samples

On August 13, 1999, Henshaw sampled building materials potentially containing asbestos at the Remco Facility. A total of eight samples were collected and sent to Forensic Analytical for asbestos analysis. The first four samples (ASB-1 through ASB-4) were collected from four different types of ceiling tiles found within the offices in the northeastern corner of the Remco Facility. Two more samples were collected of floor tiles found within these same northeastern offices. ASB-5 was collected from the 12-inch-square beige tiles found in the hallway running north-south and in the offices along the eastern side of the building. The second type of floor tile collected, ASB-6, was from nine-inch-square tan tiles found in the hallway running east-west and in the offices along the northern side of the building. The last two samples were collected from insulation found on the wall (ASB-7) and fallen on the floor (ASB-8) within Building 1973. The locations of the samples for asbestos are included on [Figure 3-5](#). The analytical results from this sampling are discussed in [Section 5.8.2](#).

3.3.2 Evaluation of Outside Facility Surfaces

3.3.2.1 Paved Areas

Seven wipe samples were collected from the asphalt surfaces at the Remco Facility (WS-1, WS-2, WS-3, WS-4, BW-13, BW-14, and BW-15). The sample locations are shown on

[Figure 3-5](#). These samples were submitted to a California certified laboratory and analyzed for total and hexavalent chromium. The analytical results from this sampling are discussed in [Section 5.8.1](#).

3.3.2.2 Unpaved Areas

As part of the RI, a reconnaissance of the Remco Facility was conducted to identify the location of paved and unpaved areas at the Facility. This reconnaissance included an identification of degraded paving at the Facility ([Figure 2-2](#)). The only unpaved areas at the Facility are located along the northern boundary, ([Figure 2-2](#)) and a small area along the southern driveway. Areas of degraded asphalt are located in the front parking area (adjacent to Main Street), in the southwest corner of the Facility and along the southern Facility boundary adjacent to Building 1967.

3.3.2.3 Evaluation of Surface Soils

A total of six surface soil samples were collected from areas where surface soils were exposed within the Facility boundary in July 2000. Three surface soil samples were collected from areas of degraded pavement (SS-31, -32, and -36), and three surface soil samples were collected from unpaved areas (SS-33, -34 and -35). These on-Facility surface soil samples (SS-31 through SS-36) were analyzed for TPH-diesel and total metals (priority pollutant metals), including hexavalent chromium.

The unpaved area where surface soil samples were collected is located just north of the common boundary between the Remco Facility and Luna Apartments. To fully characterize any potential impact on this unpaved area, additional sub-surface soil samples were collected at three locations at depths of 6, 11, and 18 inches bgs. These samples (SB-144, SB-143, and SB-142) are co-located with previously collected surface soil samples (SS-33, SS-34, and SS-35, respectively). Soil samples were analyzed for total priority pollutant metals including hexavalent chromium.

3.3.3 Baechtel Grove Middle School Investigation

On February 23, 2000, the Willits Trust collected four shallow soil sample (SS-27, SS-28, SS-29, and SS-30), two wipe samples (BW-16 and BW-17), and two ambient air samples (AS-07 and AS-08) from the Baechtel Grove Middle School. The soil samples collected from the school property were analyzed for hexavalent chromium and total chromium by a California certified laboratory. The wipe samples collected from the walls of the school gymnasium and the school cafeteria were analyzed for hexavalent chromium by a California certified laboratory. The air samples were collected from within the gymnasium and school cafeteria and were analyzed for VOCs and hexavalent chromium by California certified laboratories. The analytical results of the soil, wipe and air sampling activities are further discussed in [Sections 5.2, 5.8, and 5.7](#) of this report, respectively.

3.4 GEOPHYSICAL INVESTIGATIONS

The RWQCB informed the Willits Trust that they had received allegations that Remco had previously buried drums in an area immediately west of the Facility at 103B Franklin Avenue (Jan Goebel, personal communication 2000). Remco formerly utilized this area for material storage, as indicated by both aerial photographs and by a former Remco employee (Wisdom, 2001). MWH had already completed two borings on this property (SB-129 and -130) with no indication of any excavation or burial activities noted during the sub-surface investigation activities. Analysis of soil and groundwater samples collected from these locations did not support the allegations of buried drums. Only low levels of acetone and 2-butanone and metals concentrations consistent with background levels were detected ([Sections 5.2 and 5.3](#)).

Nevertheless, a geophysical investigation was conducted at the alleged drum burial location adjacent to the western Facility boundary. The investigation found no evidence of buried drums or tanks. A report was prepared summarizing the field activities in addition to the results and is included as [Appendix 3-6](#).

3.5 SOURCE INVESTIGATIONS

As a part of the original RI/FS Work Plan, potential chemical release scenarios were developed based on accounts of historical operations ([Section 2.2](#)) and past hazardous waste management practices. These potential contaminant sources were arranged into nine categories in the RI/FS Work Plan (Henshaw, 1998d), as presented below.

- Category 1: Chromium Source Area
- Category 2: Chromium and VOCs in Storm Water System
- Category 3: VOCs Due to Surface Releases
- Category 4: Petroleum Hydrocarbons in the AST Area
- Category 5: Diesel Fuel Line and Boiler Area
- Category 6: Former UST Areas
- Category 7: Petroleum Hydrocarbons, Metals, PAHs and PCBs in Dust Suppression Areas
- Category 8: Lubricating Oils and Coolants within the Facility Building
- Category 9: Former Hazardous Materials Storage Areas

3.5.1 Category 1: Chromium Source Area

Category 1 samples were collected to define the extent of chromium associated with the chrome plating operations at the Facility. Soil and groundwater samples were collected from the A-Zone, A/B-Aquitard, B-Zone, B/C-Aquitard, and the C-Zone.

During December 1998, Henshaw completed seven (SB-21, SB-35, SB-36, SB-37, SB-39, SB-40, and SB-41) of the initial 13 Category 1 borings proposed in the RI/FS Work Plan (Henshaw, 1998d). Soil and groundwater samples were collected from three identified water bearing zones and analyzed for total chromium, hexavalent chromium, dissolved chromium, VOCs, semivolatile organic compounds (“SVOCs”), TPH, and PCBs. The locations of these borings are presented on [Figure 3-7](#).

During October 1999, MWH completed the Category 1 soil-boring program (SB-34, SB-38, SB-42, SB-43, SB-47, and SB-48) proposed in the RI/FS Work Plan. Borings SB-34, SB-42, SB-47, and SB-48 were completed using direct push technology (“DPT”) while SB-38 and SB-43 were completed using a hollow stem auger (“HSA”) rig. To supplement the 13 original borings, three A-Zone borings were completed and subsequently converted into two-inch monitoring wells (W21A, W22A, and W24A). During this mobilization, soil and groundwater samples were collected from the A-, B-, and C-Zones. All Category 1 samples collected were analyzed for total chromium, hexavalent chromium, dissolved chromium, VOCs, and TPH. Selected samples were also analyzed for physical and organic parameters as follows: total organic carbon (“TOC”), bulk density, pH, oxidation-reduction potential (“ORP”), dissolved oxygen, dissolved carbon dioxide, and ferrous iron.

Based on results of the 16 initial borings, additional characterization borings were completed in Phase II of the RI (SB-49 through SB-53, SB-56 through SB-63, SB-65 through SB-68, and SB-74 through SB-79). The additional borings were located primarily north and east of the source area as illustrated on [Figure 3-7](#). The Phase II soil and groundwater samples were analyzed for chromium, VOCs, TPH, and PAHs.

Based on a review of historical information, including interviews with former employees with institutional knowledge of Remco operations, it was determined that additional plating and metal coating operations were conducted at the Facility. Specifically, cadmium, zinc, and manganese plating and aluminum phosphate coating were reportedly conducted at the Facility (Wake Deposition). Other constituents associated with cadmium plating include cyanide and pH adjustment, which are utilized as part of the plating process. These additional metal plating and coating activities were reportedly completed in the chrome plating area (see [Figure 2-4](#)). Additional soil and groundwater sampling was conducted to determine the effect, if any, these other metal finishing operations may have had on the environmental media at the Site.

Soil samples were collected from the surrounding the area reportedly utilized for these additional metal-finishing operations (SB-131 through SB-134 and SB-148 through SB-153). These samples were analyzed for priority pollutant metals (including cadmium and zinc) as well as

magnesium, phosphate, and pH. Groundwater samples were collected from existing monitoring wells in the area and analyzed for metals, pH, and cyanide. The results of this investigation are presented in [Section 5.3](#).

3.5.2 Category 2: Chromium and VOCs in Storm-Drain System

Category 2 borings were designed to determine the impact from potential releases of chromium, VOCs, and TPH from the storm-drain system to the adjacent soil and groundwater. In March 2000, three DPT borings (SB-29, SB-30, and SB-31, [Figure 3-8](#)) were completed along the storm-drain system alignment located in the Safeway Shopping Center parking lot east of the Remco Facility. Soil and groundwater samples were collected from temporary wells installed within the borings and analyzed for chromium, VOCs, and TPH-diesel. Based on the results of the analyses (hexavalent chromium and VOCs were detected at SB-29, see [Sections 5.2](#) and [5.3](#)), additional subsurface investigations were conducted.

A retail petroleum station (Chevron) was formerly located on the southeast corner of Main Street and Highway 20, approximately 50 feet north of the storm-drain system alignment in the area of the observed impact. In September 2000, groundwater samples were collected from these wells (MW-1 through MW-4), with permission from Chevron. The samples were analyzed for hexavalent chromium, dissolved chromium, VOCs, and TPH-diesel.

A video survey of the current storm-drain system was conducted in July 2000 to determine the integrity of the storm-drain line and determine sampling locations with the highest probability of potential impact. Based on this assessment, two “step-out borings” were completed around SB-029 (SB-092 and SB-093). Five additional borings were completed along the storm-drain system alignment between Main Street and Baechtel Creek to provide relatively uniform sampling along the storm drain line.(SB-094 through SB-097 and SB-113).

An additional three soil borings were completed adjacent to Baechtel Creek downgradient of the storm drain outfall (SB-110 through SB-112). Soil and groundwater samples were collected

from all of these borings and analyzed for hexavalent chromium and/or dissolved chromium, VOCs, and TPH-diesel.

In December 2000, sediment, soil and groundwater samples were collected from sampling locations within Baechtel Creek (SB-114 through SB-119 and SB-128) to determine any potential impact from the storm drain system. These samples were analyzed for metals (including hexavalent chromium), VOCs, TPH, and PCBs.

As discussed in [Section 2.0](#), a former storm drainage ditch was identified on the east side of Main Street (northwestern corner of the present day Safeway Shopping Center parking lot) during the review of historical aerial photographs. In January 2001, a soil and groundwater investigation was conducted along this former alignment to determine the impact from reported historic releases to the storm-drain system. Soil and groundwater samples were collected from a total of five locations (SB-135 through SB-139). An additional sediment sample was also collected from the historic outfall area of the drainage ditch (SB-119) in Baechtel Creek. To supplement this data, three permanent monitoring wells have been installed in the area of the current and historic storm-drain system alignment and have been added to the routine monitoring and sampling program for the Site (W41A, W42A and W43A).

3.5.2.1 VOC Source Area Adjacent to the On-Facility Storm-Drain System

Results from storm water sampling activities, in addition to historical soil and groundwater sampling, indicate a potential VOC source located in the area adjacent to the storm-drain line between SWD-2 and SWD-4 on the northern Facility boundary. Based on discussions with a former Remco employee (Figg-Hoblyn Deposition), this area contained a barrel rack, which contained drums that were reportedly utilized to store and dispense solvents. Based on this information, a comprehensive soil and groundwater assessment adjacent to the storm-drain system alignment was performed in the spring of 2000. The objective of the assessment was to provide sufficient data to evaluate the extent and magnitude of impact to the shallow soil and groundwater adjacent to the storm-drain line.

Soil and groundwater samples were collected from nine soil borings (SB-83 through SB-91) adjacent to the storm-drain system between SWD-2 and SWD-4 and analyzed for hexavalent chromium, VOCs, and TPH-diesel. Soil samples were collected at several depths (approximately 2, 6, and 10 feet bgs) to provide a vertical profile of VOC concentrations in soil. Grab groundwater samples were collected from these borings from multiple depths to allow a vertical profile of VOC concentrations in groundwater. A total of 27 soil samples and 18 groundwater samples were collected. The results of this investigation are presented in [Sections 5.2 and 5.3](#).

3.5.3 Category 3: VOCs Due to Surface Releases

Category 3 soil borings, as proposed in the RI/FS Work Plan (Henshaw, 1998d), were completed at 19 locations, as shown on [Figure 3-9](#) (SB-005, SB-006, SB-008, SB-009, SB-011, SB-012, SB-014, SB-016, SB-017, SB-019, SB-021 through SB-024, SB-026 through SB-028, SB-033, and SB-034). The original purpose of these borings was to evaluate potential sources and distribution of VOCs associated with potential historical surface releases to areas which were unpaved prior to the various Remco building additions. Both the soil and groundwater samples from each Category 3 boring were analyzed for VOCs.

The initial investigation, which utilized a sampling grid, identified areas of elevated concentrations of VOCs in soils and groundwater but did not indicate any specific source areas. Additional source area investigations were conducted which focused on operational areas in an attempt to identify specific VOC source areas. These follow up VOC source area investigations were focused in the following locations:

- Areas proximal to and downgradient of the northwest corner of the Remco building (Building 1979, Paint Shop)
- Various trenches and sumps located in areas with operations historically associated with VOCs
- Sanitary sewer line between the Remco Facility and Franklin Avenue

These additional VOC source investigations are described below.

3.5.3.1 Areas Surrounding and Downgradient of the Building 1979 Paint Shop

Based on the results of the Category 3 borings completed in the northwest portion of the main Remco building, an A-Zone well (W29A) was installed in March 2000. The groundwater sample collected from this well confirmed the presence of VOCs in the shallow groundwater (Table 5-3b-1). A focused soil and groundwater investigation was implemented to more fully evaluate the source for these VOCs. Five soil borings were completed in the A-Zone in a step out fashion upgradient of W29A (SB-120, SB-121, SB-123, SB-158 and SB-159). Soil and groundwater samples were collected and analyzed for VOCs.

In addition to the evaluation of the A-Zone in this area, the deeper B- and C-Zones were also investigated. During drilling and installation activities associated with the completion of the soil boring for the proposed monitoring well W29B, approximately 70 feet of sand was encountered (from a depth interval of approximately 20 to 90 feet bgs). The recorded stratigraphy suggested the absence of a confining layer between the B- and C-Zones in this area. The soil boring for well W29B was then grouted to the surface. To further investigate the stratigraphy and hydrogeology in this area prior to well installation, a CPT was performed in the adjacent area (CPT16). Groundwater hydropunch (grab) samples were collected from nine depths at the approximate depths of 16, 24, 32, 42, 50, 61, 69, 76, and 87 feet bgs. These groundwater samples were analyzed for VOCs by EPA Method 8260B. In December 2000, three monitoring wells were installed, W29A1 in the A-Zone, W29B1 in the B-Zone, and W29B2 in the C-Zone.

Based upon preliminary results (see Section 5.3) and the more limited confining layer between the A- and B-Zones in this area, further evaluation of the lithology and groundwater quality was conducted using a CPT rig in January 2001. CPTs were advanced at eight locations (CPT-17 through CPT-24) oriented along two transects in the vicinity of monitoring well W29A, at one location near monitoring well pair B2/B3 and at a single location near well W31C (CPT-25). Groundwater grab samples were collected at two locations (CPT-19 and CPT-21) from three depths between 30 and 50 feet bgs.

In addition to the CPT logs acquired during this field effort, CPT logs produced by GeoSyntec during a 1995 investigation at the Facility were also reviewed. The 1995 GeoSyntec work

included fifteen CPTs (identified as REM1 to REM15 on the GeoSyntec maps and identified as CPT-1 through CPT-15 on the CPT logs) completed to depths ranging from 40 to 80 feet bgs and at evenly spaced locations along the Facility perimeter.

Both historical and recent CPT logs are used in the geologic interpretations provided in [Section 4.0](#). Sampling results are described in [Section 5.3](#).

3.5.3.2 Various Trenches and Sumps

Subsurface structures potentially associated with fuels, oils, coolants, solvents, and waste materials at the Site include sumps, trenches, pits, and tanks ([Sections 2.3.3](#) and [2.8.1](#)). The Willits Trust conducted an investigation culminating in the closing and abandonment of these structures. [Appendix 2-1](#) presents a summary report providing a description of each structure and the results of the sampling conducted during closure activities.

A focused source area investigation was completed in the vicinity of these structures which included the collection of soil and groundwater samples. Sampling locations and the analytical testing to be performed were determined based on a comprehensive review of historical operations at the Facility and data collected during the closure activities discussed above. For example, samples were collected adjacent to sumps and electrical equipment in use before 1975 and known to contain coolants and tested for the presence of PCBs. In addition to historical information, the recent soil and groundwater data collected during the initial phase of the RI was used to identify potential source areas associated with trenches and sumps. Specifically, the structures located in Buildings 1973 and 1979 were targeted based on the relatively high concentrations of VOCs observed in A-Zone grab groundwater samples. In contrast to this, sumps and trenches located in areas with more limited impact were not investigated.

The specific sumps and trenches and associated areas investigated along with the specific sampling locations are as follows:

- The cutting oil sump associated with the honing machine in the central portion of Building 1962 (SB-163, -164, and SB-187 through -193)

- The 10 hydraulic cylinders located in the western portion of Building 1967 (SB-46 and SB-165 through -170)
- The storm water management sump located just outside and west of Building 1967 (SB-52 and SB-140)
- The location of electrical switching gear/transformers located outside and to the south of Building 1962 and outside and to the north of Building 1973 (SB-194 and SB-199)
- The forklift maintenance sump located in the northern portion of Building 1945 (SB-198)
- Sump and trenches associated with machining equipment in the north west corner of Building 1975 (SB-147 and SB-196)
- Sumps and trenches associated with painting activities in Building 1979 (SB-44, -124, -125, -126, -141, -160, -161, and -162)
- Sumps associated with machining equipment located in the southern portion of Building 1973 (SB-127, -171, -172, and -195).

During the initial investigation soil borings were completed to collect soil and grab groundwater samples (SB-124 through SB-127). The strategy employed during this phase of the investigation was to collect multiple soil samples at various depths within each boring to determine the vertical extent of potential impact. Groundwater samples were collected from the shallowest groundwater encountered. If impact was observed, based on visual observation or preliminary analytical data, additional step out borings were completed to determine the lateral extent of impact (SB-122, SB-141, SB-160, SB-161, SB-162, SB-171, SB-172, SB-173, and SB-174). Analytical results from this phase of the investigation are presented in [Sections 5.2](#) and [5.3](#).

3.5.3.3 Sanitary Sewer Line Between the Remco Facility and Franklin Avenue, Between 37 and 43 Franklin Avenue

A soil and groundwater assessment was conducted adjacent to the north-trending sanitary sewer lateral exiting the northern property line of the Remco Facility and continuing to Franklin Avenue. This investigation was designed to determine if this sewer line is a potential historical

source and/or a current preferential pathway for contaminant migration. The sampling locations were located on 37 and 43 Franklin Avenue between the Facility boundary and Franklin Avenue (see [Figure 3-9](#)). The locations of the borings were determined in the field based on access, video and utility survey results.

A video survey of the sanitary sewer line was completed and discussed in [Section 3.2.2](#) above. Based on the results of the video survey and the line location, four borings (SB-104, SB-105, SB-106 and SB-109) were completed to total depth of approximately 7 feet bgs. Due to access limitations, these borings were completed using hand augering. Soil samples were collected from each boring at 3 feet bgs, coincident with the bottom of the sanitary sewer, and at the bottom of each boring (approximately 7 feet bgs). A grab groundwater sample was collected in SB-105, SB-106, and SB-109 (borings where groundwater was encountered) using a disposable bailer. These samples were analyzed for VOCs, dissolved chromium, hexavalent chromium, and TPH.

3.5.4 Category 4: Petroleum Hydrocarbons in the AST Area

Category 4 was designed to determine the impact from potential releases of petroleum hydrocarbons (including waste oils) from the AST area located at the west end of the Facility ([Figure 2-3](#)). One boring was completed in this area (SB-1) immediately downgradient of the former ASTs. Soil samples were collected with a macrocore sampler and groundwater sampling was completed using a temporary well installed within the soil boring. The samples were collected on October 15, 2000 and analyzed for TPH-diesel, TPH as gasoline (“TPH-gasoline”), PAHs, metals, VOCs, benzene, toluene, ethylbenzene, xylene (“BTEX”), methyl tert-butyl ether (“MTBE”) and PCBs. The location of this boring is shown on [Figure 3-10](#). Analytical results are discussed in [Sections 5.2](#) and [5.3](#).

3.5.5 Category 5: Diesel Fuel Line and Boiler Areas

Category 5 borings were designed to determine the impact of historical releases from the diesel fuel line. A total of eight borings (SB-4, SB-7, SB-10, SB-13, SB-15, SB-18, SB-20, and SB-21)

were completed along the north property line where the fuel line was formerly located (see [Figure 3-11](#)). Soil and groundwater samples were collected and analyzed for TPH-diesel and PAHs. Soil samples were collected with a macrocore sampler and groundwater sampling was completed using a temporary well screen installed within the soil boring.

After the initial RI (December 1999 through February 2001) 12 additional borings were completed adjacent to the borings indicated above and analyzed for TPH-diesel. These additional borings were utilized to more fully characterize the impact associated with the diesel fuel line and boiler areas. During the RI, the aboveground portions of the diesel line were removed and the sub-surface section existing from the northwest corner of the Remco building to the location of the former ASTs was pressure grouted (see [Section 3.2.5](#)). Analytical results are discussed in [Sections 5.2](#) and [5.3](#).

3.5.6 Category 6: Petroleum Hydrocarbons, Former UST Areas

Category 6 borings were designed to assess the potential impacts from a former diesel UST located near the north property line and a former gasoline UST located on the southern property boundary. Two borings (SB-020 and SB-027) were completed adjacent and/or downgradient of the former UST locations ([Figure 3-12](#)). Soil and groundwater samples were collected and analyzed for TPH-diesel, BTEX, MTBE, and PAHs. Samples collected from SB-027 (former gasoline UST location) were also analyzed for TPH-gasoline. Soil samples were collected with a macrocore sampler and groundwater sampling was completed using a temporary well screen installed within each soil boring.

After the initial RI (December 1999 through December 2000), seven additional borings were completed near the former diesel UST and analyzed for TPH-diesel. These additional borings are utilized to characterize the impact potentially associated with this tank. A summary of analytical results is presented in [Sections 5.2](#) and [5.3](#).

3.5.7 Category 7: Petroleum Hydrocarbons, Metals, PAHs, and PCBs, in Dust Suppression Areas

Prior to completion of the current Facility building and paving of the Facility, dust suppression activities reportedly consisted of applying oils onto areas prone to generate dust due to operations. Category 7 borings were designed to assess the effects from dust suppression activities. To be conservative, the Willits Trust assumed that some of the oils might have been waste oils containing metals, PAHs, and/or PCBs. A total of 15 borings (SB-2, SB-3, SB-6, SB-8, SB-9, SB-10, SB-15, SB-17, SB-19, SB-20, SB-25, SB-28, SB-32, SB-33, and SB-39) were completed in areas that were most likely subject to historic dust suppression activities ([Figure 3-13](#)).

Additional surface and shallow soil samples were collected at additional locations and analyzed for chemicals indicative of dust suppression activities as indicated on [Figure 3-13](#) (SB-001, SB-007, SB-021, SB-035, SB-036, SB-058, and SS-31, SS-32, and SS-36). These samples were collected pursuant to other source area investigations at the Site, and are utilized herein based on field observations or analytical results, to further characterize impact from dust suppression activities. Soil samples were collected and analyzed for TPH-diesel, metals, PAHs, and/or PCBs. Soil samples were collected with a macrocore sampler or, in the case of shallow samples, by hand-packing a soil tube. Analytical results are discussed in [Section 5.2](#).

3.5.8 Category 8: Lubricating Oils and Coolants within the Facility Building

Category 8 borings were designed to assess the effects from the potential release of lubricating oils and coolants from sumps and trenches used to contain these fluids. A total of 12 borings (SB-8, SB-9, SB-10, SB-12, SB-14, SB-17, SB-19, SB-24, SB-33, SB-44, SB-45, and SB-46) were drilled at locations indicated on [Figure 3-14](#). Soil and groundwater samples were collected from these borings and analyzed for TPH-diesel, metals, VOCs, and PAHs. Soil samples were collected with a macrocore sampler and groundwater sampling was conducted using a temporary well screen installed within each soil boring.

As discussed above, a review of the historical usage of sumps and trenches based on their location and proximity to operational areas was conducted. Based on this review, additional sampling locations were proposed to further characterize the subsurface conditions surrounding these structures. The investigations conducted on the sumps and trenches were based, in part, on the age and usage of the sump or trench. Sumps and trenches associated with equipment maintenance, or known to have received oils and coolants, were specifically targeted.

Based on this initial review, during February 2001 through April 2001, 11 additional soil and groundwater samples were collected at the locations shown on [Figure 3-14](#) (SB-163, SB-165, SB-168, SB-170, SB-187, SB-189, SB-191, SB-193, SB-196, SB-195, and SB-198). Based on the results of this initial sampling (presented in [Section 5.0](#)) additional borings were completed in areas requiring additional lateral definition. All soil and groundwater samples were analyzed for TPH-diesel, TPH as motor oil (“TPH-motor oil”), and PCBs. PCBs were also tested for in monitoring wells located on the northern Facility boundary and in sediment samples collected from Baechtel Creek. Analytical results are discussed in [Sections 5.2](#) and [5.3](#).

3.5.9 Category 9: Former Hazardous Materials Storage Areas

Category 9 borings were designed to evaluate the potential impact from hazardous materials storage areas. A total of two borings (SB-19 and SB-32) were completed in the former hazardous material storage areas ([Figure 3-15](#)). Soil and groundwater samples were collected and analyzed for TPH-diesel, metals, VOCs and PAHs. Soil samples were collected with a macrocore sampler and groundwater sampling was completed using a temporary well screen installed within the soil boring. Analytical results are discussed in [Sections 5.2](#) and [5.3](#).

3.6 EVALUATION OF LATERAL AND VERTICAL EXTENT OF CONTAMINATION

The following sections describe the field activities completed to determine the lateral and vertical extent of contamination at the Site as described in the RI/FS Work Plan and required pursuant to the Consent Decree.

3.6.1 Groundwater Plume Perimeter Investigation

The groundwater plume perimeter investigation was based on the results of the sampling of the on-Site existing wells and the grab groundwater samples collected as part of the RI. Based on this data, perimeter monitoring well locations were installed to define the lateral and vertical extent of groundwater contamination.

3.6.1.1 Grab Groundwater Sampling

MWH completed a perimeter-sampling event using DPT equipment in November through December 1999. Groundwater samples were collected at six downgradient locations (SB-69, SB-70, SB-71, SB-072, SB-073, and SB-74) along Franklin Avenue (see [Figure 3-3](#)). Groundwater samples were collected from both the A- and B-Zones. All samples were analyzed for VOCs. Samples from SB-72, -73, and -74 were also analyzed for hexavalent chromium and dissolved or total chromium. This data was utilized in determining locations for the wells discussed in the next section.

3.6.1.2 Monitoring Well Field Installation and Sampling

The initial well field at the Site in 1977 consisted of a total of 21 groundwater wells as follows:

- Five A-Zone monitoring wells (B3, B4, W7, W8A, and W9A)
- One A-Zone extraction well (EW-1A)
- One A-Zone diesel recovery well (CW)
- Eight B-Zone monitoring wells (B1, B2, B5, W1, W2, W4, W8B, and W9B)
- One B-Zone extraction well (EW-1B)
- One former private well (WU)
- Four C-Zone monitoring wells (W3, W5, W6, and W8C)

Based on the results of sampling and structural investigations, it was decided to abandon the diesel recovery well (identified DRW) and the former private well (WU). These wells were abandoned under the supervision of representatives of the County of Mendocino and the RWQCB during April and March 2000.

Monitoring wells were installed during the RI to fully define the lateral and vertical extent of contamination emanating from the Remco Facility. The locations of the wells were based on the results of the Phase I RI and the perimeter plume investigation. The following additional wells have been installed by the Willits Trust:

- 32 A-Zone monitoring wells
- 11 A-Zone Pilot Study temporary wells
- 6 B-Zone monitoring wells
- 2 C-Zone monitoring wells

The current well field includes a total of 74 monitoring wells, including four monitoring wells owned by Chevron located at the former Chevron retail petroleum station located north east of the Facility.¹⁹ The well field includes A-Zone wells located throughout the Facility and extending downgradient approximately 400 feet to the north (Highway 20 wells W39A and W40A) and northeast (Safeway Shopping Center parking lot, W41A, W42A, and W43A) of the Remco Facility. Given the significantly smaller areas impacted in lower zones, the B-Zone and C-Zone monitoring wells exist primarily within, around and immediately downgradient of the chromium source area. However, an A-, B-, C-Zone well cluster is located near the northwest corner of the Remco building (W29A1, W29B1, and W29B2). The lithologic data is presented in [Section 4.0](#).

3.6.2 Evaluation of Private Wells in Site Vicinity

A survey was conducted to identify all private wells within ½ mile of the Site. This survey was based on a review of public records, a review of a private well survey conducted by Versar (Versar, 1998b), and a written and/or oral survey of downgradient property owners and tenants within ½ mile of the Site. Wells identified within 1,000 feet downgradient of the Site were evaluated to determine the construction and condition of the wells. Upon approval by the

¹⁹ The Chevron wells were previously sampled and are currently utilized for measuring groundwater levels only

property owner,²⁰ water samples from the wells were collected and analyzed for VOCs, TPH-diesel, TPH-gasoline, and chromium using the methods specified in the RI/FS Work Plan. The data collected during these activities are presented in [Section 5.0](#) of this report. The locations of the off-Facility private wells (OW- series) sampled are presented in [Figure 3-16](#).

The private well formerly located at 37 Franklin Avenue (sample identification OW-17) was located approximately 50 feet north of Building 1973. This well was approximately 10 feet deep and 4 feet in diameter. This well was sampled and found to contain Facility-related VOCs in excess of State of California drinking water standards (CA MCLs). The analytical data for this well is presented in [Section 5.0](#).

Based on this data, the well was abandoned on March 29 and 30, 2000 under permit with the Division of Environmental Health, County of Mendocino. The well was pressure grouted with neat cement from the bottom of the well up to about 5 feet bgs. The upper 5 feet of construction materials (including surrounding soils) were excavated, transported to the Remco Facility, containerized, and properly disposed of at an approved waste facility in accordance with applicable law. The excavation was backfilled with pea gravel to approximately 2 feet bgs then compacted to grade with imported topsoil.

3.7 STORM WATER, SURFACE WATER, SEDIMENT, AND SHALLOW SOIL INVESTIGATIONS

The following sections describe RI investigations conducted at the Site concerning storm water, surface water, sediment, and shallow soils. Various parties, including Versar, Geosyntec, Henshaw, and MWH, have collected storm water, surface water, sediment, and soil samples at and around the Site. Previous investigations have been presented in [Section 2.0](#) of this RI report. [Figure 3-1](#) provides a comprehensive illustration of all storm water, surface water, sediment, and shallow soil sampling locations.

²⁰ Since access has not been granted to all wells, the procurement of access to the private wells and sampling of these wells is on going.

3.7.1 Storm Water Sampling and Storm-Drain System Evaluation

There are three storm water monitoring programs being conducted at the Site:

1. A routine storm water monitoring program executed in conjunction with the routine groundwater sampling program
2. A routine monitoring program associated with the *Storm Water Pollution Prevention Plan* (“SWPPP”, Montgomery Watson, 2000b)
3. A storm water monitoring program conducted to support the *In-Situ* Chromium Pilot Study conducted at the Site during 2000 and 2001

These three programs are described below.

3.7.1.1 Routine Storm Water Monitoring Program

As a part of the ongoing activities at the Site, the RWQCB issued Monitoring and Reporting Program (“MRP”) No. 98-59 (as revised March 19, 1999). Included in this MRP is a storm water monitoring program that requires storm water samples be collected twice per year during the months of December and February. Storm water sampling is required during both events from storm water catch basin, SWD-7, located at the discharge point from the Remco Facility (Figure 2-2). MRP 98-59 also requires all other Facility catch basins (SWD-1 through SWD-6) and the storm water outfall to Baechtel Creek (SWD-9) be sampled once per year. These storm water samples are required to be collected during, or immediately after a rainfall event, while surface-water flow is occurring. Storm water samples collected pursuant to MRP 98-59 are analyzed for:

- Total chromium by either USEPA Method 6010 [Inductively Coupled Argon Plasma (“ICP”)], 6020/200.8 [ICP/Mass Spectrophotometer (“MS”)], or 7191 (graphite furnace)
- Hexavalent chromium by USEPA Method 7196A/SM3500 (colorimetric)
- VOCs (with methyl ethyl ketone) by USEPA Method 8260B

3.7.1.2 Storm Water Pollution Prevention Program Storm Water Monitoring Program

The storm water monitoring plan, presented in the Willits Trust SWPPP, was designed to augment MRP 98-59 in a manner consistent with the requirements outlined in Section B of the

RWQCB General Permit. The SWPPP, in conjunction with MRP 98-59, requires that all on-Facility catch basins be inspected weekly during the rainy season, and if possible, during and following storm events. Observations regarding the presence or absence of inflow to each catch basin, estimated flow rates into each basin, and the presence or absence of flow within the storm-drain system, are also required. In addition to the monitoring and sampling requirements described above, the storm water monitoring plan presented in the SWPPP requires that a storm water sample be collected from the point of discharge of storm water from the Facility (SWD-7) within the first hour of the first significant rainfall event of the year. Storm water samples are also to be collected from the storm water outfall to Baechtel Creek (SWD-9) and from receiving water (RW) upstream and downstream locations (RW-1 and RW-2, respectively) in Baechtel Creek. A storm water sample is also to be collected from SWD-7 during a rainfall event, preceded by three consecutive days of dry weather, during December or February. Storm water samples collected pursuant to the SWPPP are to be analyzed for:

- Chromium (total, dissolved, and hexavalent) by USEPA Methods 6010, 7191, and 7196A
- VOCs by USEPA Method 8260B
- TOC by USEPA Method 415.1 or 9060
- Total Suspended Solids (“TSS”) by Standard Method 2540D (gravimetric)
- pH and Specific Conductance (“SC”) by field methods

The results from the SWPPP sampling have been reported in the 2000-2001 Annual Storm Water Monitoring and Pollution Prevention Report (MWH, 2001a) and are summarized in [Section 5.4](#) of this report.

3.7.1.3 Pilot Study Storm Water Monitoring Program

A field-scale pilot study to evaluate the *in-situ* treatment of chromium and VOCs was conducted at the Facility. The study began just prior to the 2000 rainy season (September 2000). The purpose of this pilot study is to determine the viability of *in-situ* remediation of hexavalent chromium and VOCs. As part of this pilot study, a comprehensive storm water monitoring program was developed to determine if pilot study activities would impact the storm water. This program is specified in the MRP RI-2000-54, which the RWQCB issued on September 11, 2000.

This program required that storm water catch basins were to be inspected weekly and, if water was present, samples were to be collected for the following analyses:

- TPH-diesel by USEPA Method 8015M
- Calcium, iron, manganese, potassium and sodium by USEPA Method 200.7
- Dissolved chromium, USEPA Method 6010
- Hexavalent chromium by USEPA Method 7196A
- VOCs by USEPA Method 8260B
- Alkalinity (total, carbonate, bicarbonate, and hydroxide) by USEPA Method 310.1
- Chloride, nitrate and sulfate by USEPA Method 300.0
- Sulfide by USEPA Method 376.1

Storm water samples were collected from catch basins downgradient (SWD-4, SWD-5, and SWD-7) and upgradient (SWD-3) of the pilot study area prior to initiating the pilot study in September 2000. Subsequent to the pilot study injection activities (September 2000), storm water samples were collected monthly pursuant to the pilot study Monitoring and Reporting Program during October, November, and December 2000. Based on concurrence from the RWQCB, the storm water monitoring program was continued after the December 2000 sampling event, as outlined in the SWPPP and MRP 98-59. The results of the sampling events were reported in pilot study documents previously submitted to the RWQCB (monthly status reports, *Six-Month Post-Injection Report* and *One-Year Post-Injection Report*). These data are also summarized in this report and further discussed in [Appendix 3-8](#) (*One-Year Post Injection Report* [MWH, 2001b]). Based on the sampling, the Willits Trust has concluded that pilot study activities have not impacted storm water at the Site.

3.7.1.4 1998 Storm Water and Stream Sediment Analytical Report

During the first quarter of 1998, storm water sampling activities identified low levels of VOCs and hexavalent chromium in storm water samples collected from the northeastern most catch basin (SWD-7) at the Facility. In response, Henshaw promptly collected storm water and stream sediment samples in order to assess the following:

- Quality of storm water in the Remco storm-drain system
- Storm water quality subsequent to installation and initial operation of the shallow surface water discharge control sump, activated on April 17, 1998
- Quality of surface water entering Baechtel Creek from the storm-drain system outlet
- Quality of surface water in Baechtel Creek immediately downgradient of the storm-drain system outlet to Baechtel Creek

To meet these objectives, Henshaw collected storm and surface water samples from four locations:

- Catch Basin No. 7 (SWD-7), where the storm drain exits the Remco property
- The storm-drain system outfall to Baechtel Creek (SWD-9)
- Surface water within Baechtel Creek approximately 10 feet downstream of the storm-drain system outfall (S-09)
- Surface water within Baechtel Creek approximately 25 feet downstream of the storm-drain system outfall (S-10)

The results are presented in the *Storm Water and Stream Sediment Analytical Report* (Henshaw, 1998a) and are summarized in [Sections 5.4](#) and [5.5](#) and [Tables 5-4-1a](#) through [5-4-5a](#) and [Tables 5-5-1](#) through [5-5-3](#).

3.7.2 Baechtel Creek, Broaddus Creek, and South Drainage Ditch Sampling

There are three surface water bodies located in the vicinity of the Remco Facility. The South Drainage Ditch is a seasonal creek that runs parallel to the southern boundary of the Facility. There is no direct hydraulic communication between this ditch and the Facility. Broaddus Creek is located approximately 500 feet north of the Facility. The other nearby surface water body is Baechtel Creek, located approximately 300 feet east of the eastern Facility boundary. Baechtel Creek currently (and historically) receives surface water run-off from the Remco Facility.

Several consultants, including GeoSyntec, Versar, and Henshaw, have sampled surface water and sediment from the South Drainage Ditch and Baechtel Creek (see [Section 2.0](#)). During preliminary endangerment assessment (“PEA”) activities, Henshaw collected 8 sediment and 11

surface water samples from Baechtel Creek and the South Drainage Ditch (sediment samples BC-1 through BC-5 and SDD-6 through SDD-8; surface water samples SW-01 through SW-11). Surface water samples were collected by submerging the sample container approximately one inch below the surface of the water and allowing the container to fill. Sediment samples were collected by scraping the top two to three inches of sediment from the bottom of the creek into the sample container. Samples were analyzed for chromium (total and hexavalent), TPH, PCBs, and VOCs.

MWH completed a soil, groundwater and sediment investigation within these surface water bodies to determine the presence, if any, of potential chemicals of concern, which may have emanated from the Remco Facility. A total of eight sediment samples (S-01 through S-08) were collected from the sediment surface of the South Drainage Ditch at the locations indicated on [Figure 3-4](#). The purpose of this investigation was to validate the historical data set previously collected. Two of the samples (S-04 and S-05) were collected in an area, which reportedly contained low levels of hexavalent chromium (Versar, 1998a). The remaining sample locations were based on a grid. The samples collected were analyzed for priority pollutant metals including hexavalent chromium. The analytical results of this investigation are presented in [Section 5.6](#).

A sediment, soil and groundwater investigation was also conducted in and around Baechtel Creek, based on the potential for adverse impact due to reported past releases (see [Table 2-3](#)). Sediment samples were collected from eight locations within the banks of Baechtel Creek (SB-113 through SB-119, and SB-128). Soil and groundwater samples were collected from three locations along the bank of Baechtel Creek (SB-110 through SB-112) and at three locations within the banks of Baechtel Creek (SB-113, -116, and -117). Soil samples were also collected at SB-114 and SB-115 within the banks of Baechtel Creek to a total depth of 5 feet bgs within the banks of Baechtel Creek.

Sediment sampling locations in Baechtel Creek were determined based on historical reports and known discharge points for storm water discharges. There are two locations of storm water discharge points into Baechtel Creek associated with the Remco Facility. Currently the storm

water from the Facility is discharged to a storm water drain system, which discharges into Baechtel Creek (behind the Safeway building). This is labeled as storm water sample location SWD-9 on [Figures 2-2](#) and [3-1](#). Historically (before 1964) the storm water from the Facility was conveyed via an open ditch into Baechtel Creek approximately 350 feet downstream of SWD-9.

The sediment sample collected at SB-113 is immediately down stream of the South Drainage Ditch outfall into Baechtel Creek and upstream of SWD-9. This location was designed to augment the data set associated with previous sediment sampling events (e.g., BC-4, -5 and SDD1) and was used to determine potential impacts due to discharges from the South Drainage Ditch and other upstream locations.

Sediment sampling locations SB-114 and SB-115 were also selected to augment the existing data set associated with previous sediment investigations (e.g., SDD2, S-09, -10 and BC-1, -2, -3). The data collected at these locations are utilized to determine the potential impacts from storm water discharges at SWD-9 and other upstream locations.

Sediment sampling locations SB-118, -119 and -128 are located at the historic storm water outfall from the Facility. These sampling locations are designed to determine the impact, if any, of historic storm water discharges at this location. Sediment sampling locations SB-116 and SB-117 are located approximately 300 and 600 feet down stream of this historic outfall location. These sampling locations were designed to provide data on the extent of all upstream impacts related with all potential sources.

Soil and groundwater samples were analyzed for metals (including hexavalent chromium), TPH, VOCs, and PCBs. The results of these investigations are presented in [Sections 4.0](#) and [5.0](#) of this document.

3.7.3 Shallow Soil Sampling

A total of 53 surface soil samples have been collected at the Site and surrounding areas. The interval between land surface and six-inches bgs is considered representative of surface soil.

Surface soil samples were collected both from the Facility and from areas surrounding the Facility. These off-Facility areas included residential properties on the north and west sides of the Facility, the South Drainage Ditch, and Baechtel Grove Middle School to the south of the Facility. All surface soil samples were analyzed for total and hexavalent chromium. In addition, eleven of the surface soil samples were also analyzed for total metals (priority pollutant metals) and six surface soil samples were also analyzed for TPH-diesel. Surface soil sampling locations are shown on [Figure 3-4](#) and further discussed in [Section 5.0](#).

Additional surface and sub-surface (equal to or greater than six inches in depth) soil sampling was conducted in March 2001. Surface and sub-surface soil samples were collected at five locations co-located with earlier surface soil sampling locations. To determine a vertical profile for the historical soil horizon, samples were collected from the surface (0-2 inches bgs), and at approximately 6 and 12 inches bgs.

3.7.4 Properties Adjacent to Baechtel Creek

A soil and groundwater investigation was completed on property adjacent to the east side of Baechtel creek at 796 Railroad Avenue (Railroad Avenue property). Historical reports of releases of water containing chromium to the storm-drain system, and subsequently to Baechtel Creek, have been documented ([Table 2-3](#)). It has further been reported that some of the properties on the east side of Baechtel Creek irrigated their land with water pumped out of Baechtel Creek (Evans and Dunbar Depositions). This investigation was designed to assess if there is any effect to these properties as a result of historical Remco operations.

Sampling locations at the Railroad Avenue property were determined based on a review of historical aerial photographs and a Site reconnaissance with the current owner of the property. Samples were collected from areas that are most likely to have historically received irrigation water from Baechtel Creek. Specifically, locations suspected of being utilized for vegetable gardens were targeted.

Samples were collected from a total of seven locations (SB-175 through SB-180 and SB-186) (Figure 3-1). Hand dig techniques were utilized due to access constraints. Soil samples were collected from each boring from the surface and 5 feet bgs. Groundwater was encountered, and grab groundwater samples collected, in two of the borings (SB-176 and SB-177). Soil samples were analyzed for total chromium and hexavalent chromium, while groundwater samples were analyzed for dissolved chromium and hexavalent chromium. The results of this investigation are discussed in Sections 5.2 and 5.3.

3.8 AIR SAMPLING

Air sampling was conducted to characterize the quality of air at the Site and to characterize the ambient air quality in the City of Willits.

3.8.1 Remco Facility

Henshaw collected three indoor air samples in August 1999 (AS-01 through AS-03) and four outdoor air samples in March 2000 (AS-11 through AS-14) from the Facility in evacuated stainless steel sample containers (“Summa” canisters). The air samples were analyzed for VOCs.

Henshaw Associates collected additional air samples to be analyzed for chromium on two occasions during November and December 1998. This sampling was conducted to ensure worker safety and was not intended to characterize the air quality at the Site. The first round of total and hexavalent chromium air monitoring was conducted during sump, pit, trench, and tank closure activities (Henshaw, 1999a). The second round of sampling was conducted during the fourth quarter monitoring activities. In addition, MWH collected personal air samples during sub-surface drilling activities in the chrome source area during RI drilling activities in October 1999. The results of the air sampling conducted are presented in Section 5.7.

3.8.2 Residential and Surrounding Properties

Four air samples were collected within off-Facility residential locations located downgradient of the Remco Facility at 37 Franklin Avenue in November 1999 and March 2000 (AS-04), and 67 Franklin Avenue (AS-05) and Luna Apartments #9 (AS-06) in November 1999. The four samples were analyzed for VOCs. The sample collected from Luna Apartments, #9 was also analyzed for total and hexavalent chromium. Four additional air samples were collected as part of the PEA from the Baechtel Grove Middle School cafeteria and gymnasium (AS-07 and -08, respectively), downtown Willits at City Hall (AS-09), and south of the Remco Facility at the northeast corner of Holly and Poplar Streets (AS-10) (Henshaw, 2000). The air sampling locations are illustrated on [Figure 3-5](#). These samples were analyzed for VOCs. In addition, the samples collected from the Baechtel Grove Middle School were also analyzed for total and hexavalent chromium.

3.9 AQUIFER TESTING

Hydrogeologic investigations have been conducted at the Site to provide additional data on vertical and horizontal components of groundwater flow. Alvin Franks performed the earliest hydraulic tests at the Site in 1982 based on water level recovery tests. GeoSyntec conducted a pumping test in October 1994 on B-Zone monitoring well W1. Henshaw completed a pumping test on B-Zone extraction well EW-1B during January 1997. Henshaw also attempted to conduct a pumping test at A-Zone extraction well EW-1A, but low yield rendered the test unsuccessful.

Additional aquifer testing was completed as part of the RI investigation at the Site. The methodology and results of aquifer testing performed in support of the RI are described in [Appendix 3-7](#). Both short term (slug tests) and long term (pumping tests) have been performed. Slug tests were performed in 22 wells to evaluate the variations in hydraulic conductivity across the Site. Constant discharge pumping tests were performed on two A-Zone wells to compare with the slug test data and to provide an estimate of the maximum sustainable rate of groundwater extraction. The data collected are used to estimate groundwater flow rates in [Section 4.0](#) and evaluate contaminant migration rates in [Section 6.0](#).

3.10 ECOLOGICAL SURVEY

An ecological survey was completed as part of the PEA. This survey identified ecological habitats existing on the Site and proximal to the Site. The area surveyed included the South Drainage Ditch and Baechtel Creek. Observed species and potential habitats were identified and classified. Potential receptors were identified; specifically species that have the potential to bio-accumulate Site contaminants. In addition, sensitive species (protected or the potential to become protected) were identified. A more thorough discussion of these activities is included in the PEA, which is available in the document depository (Henshaw, 2000).

3.11 PERIODIC MONITORING

Periodic monitoring at the Site is divided into three categories:

- IRA monitoring (weekly and monthly)
- Groundwater monitoring (quarterly and semi-annually)
- Storm water monitoring (first rainfall event, December and February)

The following sections discuss the activities completed under each category.

3.11.1 IRA Monitoring

IRA monitoring is conducted on both a weekly and monthly basis. Routine activities are completed to ensure effective treatment system operation. Weekly monitoring includes the following:

- Measure the depth to water (“DTW”) in the storm drain alignment piezometers
- Record the flow volumes of extracted water from each extraction point
- Measure the concentration of hexavalent chromium (at pre-treatment, mid-point and post treatment locations) using a field HACH™ Kit

Monthly monitoring includes:

- Treatment system sampling with analyses to be conducted by a state-certified laboratory

These monitoring activities are presented to the RWQCB in the monthly IRA treatment system monitoring report as well as the annual summary report submitted by July 1 of each year. The IRA monitoring system is illustrated in [Figure 3-17](#)

3.11.2 Groundwater Monitoring

Groundwater monitoring events are conducted on a quarterly basis. The groundwater wells are completed in three water bearing intervals. The three intervals are defined as the A-Zone (uppermost saturated zone, from ground surface to 15-22 feet bgs), the B-Zone (intermediate saturated zone, approximately 19-43 feet bgs), and the C-Zone (deeper saturated zone, approximately 50-75 feet bgs). Water levels from all monitoring wells are measured quarterly. The water elevation data is used to construct potentiometric surface maps, evaluate groundwater flow direction and horizontal and vertical gradients. Historical groundwater elevation data is included in [Appendix 2-1](#). Potentiometric surface maps completed for the three water-bearing zones from data collected during the October 2000 and February 2001 water level survey events are presented and discussed in [Section 4.0](#).

Groundwater samples are collected from all monitoring wells on a semi-annual basis. Newly installed wells are initially sampled quarterly for one year to establish a baseline for each sample location. The groundwater samples are analyzed for VOCs, chromium, and TPH. A summary of monitoring and sampling events are presented in [Section 5.0](#). The results of groundwater monitoring and sampling are presented in semi-annual reports submitted by the Willits Trust to the RWQCB.

3.11.3 Storm Water Monitoring

Storm water monitoring is conducted at the Facility as specified in the RI/FS Workplan. In addition, storm water sampling is conducted pursuant to RWQCB monitoring requirements

(MRP 98-59 and RI-2000-54), and to the SWPPP. These programs were discussed previously in [Section 3.7.1](#).

3.11.4 Well Box Sampling

During routine groundwater monitoring activities conducted in May 1998 (second quarter 1998), water was observed to be at or above the top of the well casing in subgrade well vaults of seven wells. Water samples were collected from these wells in order to evaluate whether groundwater samples may have been influenced by surface water or groundwater infiltration into well vaults. [Table 3.2](#) presents the analytical results from the well vault water samples. This assessment was performed due to the observed presence of water in well vaults and analytical results for groundwater samples from the first quarter of 1998 which were anomalously high compared to previous results, particularly with respect to chromium in B-Zone and C-Zone groundwater samples.²¹

If water was accumulated in a well vault, the level of the water in the vault was observed relative to the top of the well casing in order to identify whether vault flooding might have potentially influenced any groundwater analytical results at a given well. In the event that any vault water level was above the top of the well casing or at the top of well casing, a sample of the vault water was collected and analyzed. The vault water level was above the top of the well casing at seven wells: W8A, W8C, W9A, W9B, W1, W3, and W5, and samples were collected of this vault water. Based on comparison of analytical results from the well vault samples and the groundwater monitoring record, only results from W5 and W8A appear to have been impacted from inundation of the well vaults.

Also during second quarter 1998 sampling, the condition of each well vault and well casing (e.g. missing bolts from well vault covers, the general condition of the well vaults and well casing

²¹ The results for total chromium analyses for groundwater samples collected from the B-Zone wells were higher than previous sampling events in four of the nine B-Zone wells. In three of the four wells, dissolved chromium was substantially less than reported total chromium, indicating that the relatively high total chromium results were likely related to sediment entrained in the water samples. In the fourth well, W1, total chromium and hexavalent chromium were detected at historical maximum concentrations. Historical maximum concentrations of total chromium, dissolved chromium, and hexavalent chromium were detected in groundwater samples from C-Zone wells W3, W5, and W6.

caps, and the condition of the well vault gasket) was documented. Damaged rubber gaskets and well caps were replaced prior to the commencement of the next rainy season to prevent future occurrence of well vault and/or well casing inundation.

4.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

This section presents the physical characteristics of the Site, including demography and land use, surface features, meteorology, surface water hydrology, geology, hydrogeology, and ecology.

4.1 DEMOGRAPHY AND LAND USE

As described in [Section 2.1](#), the Remco Facility is located in a mixed residential and commercial area along the western side of the highly traveled US Highway 101. Highway 101 (Main Street) is the principal thoroughfare in the City of Willits. The population of Willits is 5,073 (U.S. Census Bureau, 2000). Approximately 650 persons live within a one-mile radius of the Facility. The Facility property is currently zoned for heavy industrial use. The areas to the north and immediate west of the Facility are zoned residential. Farther to the west is an area of limited industrial and heavy industrial use. Public facilities, including a middle school, and residential areas are located to the south, and commercial facilities are located to the east.

4.2 SURFACE FEATURES

The Facility is located on an elongated parcel of approximately seven acres in size. The Facility is bounded on the south by the CWR. To the south of the CWR is a small seasonal drainage ditch (referred to as the “South Drainage Ditch”), and south of the drainage ditch is Walnut Street, the Baechtel Grove Middle School, and residences. To the west of the Facility are horse corrals and commercial structures, and to the north are residences, apartments, and a market. To the east, across the highway, is a Safeway Shopping Center.

A concrete-floored metal building of approximately 154,000 square feet (“Main Building”), which was formerly used for office space and manufacturing, occupies more than half of the Facility. A second smaller building of approximately 17,000 square feet, formerly utilized for raw and spent materials storage, is located on the western portion of the Facility.

The Facility has an asphalt-paved surface that slopes generally northeastward from a surface elevation of approximately 1,386 feet above msl in the southwest corner to approximately 1,376 feet above msl in the northeast corner over a horizontal distance of about 1,150 feet ([Figure 2-1](#)). Immediately to the south of the Facility, the embankment for the CWR tracks rises approximately 1 to 2 feet higher than the grade of the Facility.

4.2.1 Aerial Photography Review

An understanding of historical and current surface features can be obtained through a review of aerial photography of the Site vicinity. As discussed in [Section 3.1.2](#), an aerial photography review was completed as outlined in the RI/FS Work Plan (Henshaw, 1998d). The results of this review were used to guide the RI as described further below. A total of 17 historical photographs were obtained and reviewed. A representative photograph from each decade beginning in the 1940s through the 1990s and a complete description of each photograph is included in [Appendix 3-1](#). The following is a summary of significant observations on use of the Site, particularly with respect to the Facility operations.

The first photograph reviewed, circa 1941, was taken before any development of the property where the Remco Facility is located. This photograph indicates the property consisted of an open undulating grassy field with a few stands of mature trees existing in the central and western portions of the property. A few small drainage features are evident crossing the property from the southwest to the northeast. The surrounding areas were mixed residential and industrial in roughly the same percentage as exists today, although in several cases the locations of residences and commercial operations have changed.

The first photograph that indicates commercial development of the property was an undated photograph assumed to be taken around 1945, based on the structures visible on the property. In this photograph, a Quonset hut is evident near the southeast corner of the property. Former employees have identified this Quonset hut as the original Harrah Brothers Machine Shop. Two residences are also present in what is now the central portion of the Remco Facility.

Photographs from subsequent years show increasing industrial operations at the property with multiple expansions from the eastern boundary of the Facility to the western boundary of the Facility. The maximum extent of the industrial operations is evident on the photograph taken September 4, 1991, when the operations encompassed a portion of an adjoining property located west of the Facility (104 Franklin Avenue). A history of building expansions is presented in [Figure 2-3](#). As evident in the aerial photographs taken during the operational period of the Facility, varying amounts of outdoor storage of materials and equipment were evident at times to the west of the Main Building. As the Main Building was expanded westward, the outside storage area immediately to the west of the Main Building also moved westward. This resulted in multiple areas where potential releases of raw waste materials may have occurred during Remco operations at the Facility. As noted in the specific photograph descriptions ([Appendix 3-1](#)), the storage of materials typically occurred immediately west of the Main Building, as existed at that time. In addition to operations apparently related to the machining and plating businesses, the northwestern corner of the property may have been utilized for light industrial operations such as truck repair (photograph taken on March 15, 1956).

The areas surrounding the Facility experienced significant changes. The ratio of industrial to residential properties has remained fairly consistent, however the location and types of commercial operations and surface features have changed. Additional details regarding these changes are discussed in [Appendix 3-1](#). Although the number and location of houses along Franklin Avenue and Main Street have shifted over time, Franklin Avenue and surrounding areas have remained primarily residential throughout the time period reviewed, with a few minor exceptions as follows:

- The northern half of the 103B Franklin Avenue property, located adjacent to the western Facility boundary area, was utilized for storage during later Facility operations (evident in the 1991 photograph). This area was formerly the location of a residential unit (last observed in the March 15, 1956 photograph).
- The area east of the Facility (the present day Safeway Shopping Center) was reportedly used for residential and vehicle repair from about 1952 until the early 1960s (Schissel, 2002). The Safeway Shopping Center was built in the mid- to late-1960s.

- The storm-drain system alignment east of the Facility was formerly (in the 1950s) perpendicular to Main Street and emptied into Baechtel creek approximately 250 feet north of the current outfall (July 14, 1952 and March 15, 1956 photographs). This former alignment is shown on [Figure 2-2](#).

In addition to the review of Site history, the aerial photography review was used to evaluate additional areas to be investigated during the RI. The specific additional environmental concerns identified during the review of historical aerial photographs and the investigations completed during the RI to address these concerns are summarized below.

- The light industrial activities formerly conducted at the northwest corner of the Facility represented a potential source of contamination. Soil and groundwater sampling was completed in this area for VOCs, metals, and TPH. In addition, the monitoring well network installed as part of the RI monitors the groundwater in this area. No specific environmental impact has been observed in relation to these historical activities, as discussed in [Sections 5.0](#) and [6.0](#).
- The property adjacent to the western Facility boundary, which was utilized for storage by Remco (103B Franklin Avenue), was the subject of a focused soil and groundwater investigation. Samples were analyzed for metals and solvents based on the materials observed to be stored on the property (September 4, 1991 photograph). No significant environmental impact has been observed in relation to these historical activities. The results of this sampling are presented in [Section 5.0](#).
- A focused soil, sediment, and groundwater investigation was completed to characterize potential impacts associated with the past storm-drain system alignment. This investigation identified the presence of contaminants, some of which are likely to be associated with the Remco Facility. Three monitoring wells have been installed adjacent to the historical storm-drain system alignment to monitor the observed impact. A discussion of the results of this investigation is presented in [Section 5.0](#).

The environmental concern arising from the observed storage of waste materials in several areas was addressed in the RI/FS Work Plan (Henshaw, 1998d). The RI/FS Work Plan developed a sampling network throughout the Facility designed to identify source areas. After potential source areas were identified, additional investigations were conducted to evaluate the extent of impacts.

4.3 METEOROLOGY

As described in [Section 3.1.2](#), a climatological investigation was undertaken as part of the RI activities to evaluate climatological conditions that may have affected the distribution of contaminants at the Site. Specifically, this investigation included an evaluation of the predominant wind direction at the Site in order to evaluate the potential for airborne distribution of contaminants, which may have been released during historical Facility operations. As discussed in [Section 3.1.2](#), the County of Mendocino Air Quality Management District (“MAQMD”) operates a meteorological monitoring station allowing weather data collection approximately 200 feet east of the Site on the roof of the Safeway Shopping Center. Data provided by the MAQMD from this monitoring station included compiled measurements of wind speed and direction for the winter, spring, summer, and fall seasons over the period of 1996 to 2001.²² The data obtained from MAQMD were plotted as wind roses in [Figure 4-1](#). Wind roses show the percentage of time the wind blew from a particular direction for a given wind speed.

As can be seen in the wind rose diagrams ([Figure 4-1](#)), the data collected during the winter shows that the majority of winds range from one to five miles per hour (“mph”). Most frequently, winds are from the west (approximately 7.5 percent of the time), although winds also blow from the south, south-southeast, and southeast approximately six percent of the time and from the east and east-northeast approximately four percent of the time. Winds rarely blow from the north and northeast (approximately two percent of the time).

During the spring, stronger winds predominate, ranging between 5 to 10 mph, and are mostly from the west-northwest and northwest at 12 percent and 8 percent of the time respectively. Lighter winds in the one to five mph-range also are predominately from the west-northwest, west, and northwest.

Data from summer months are very similar to spring months indicating a predominant wind direction from the west-northwest at 5 to 10 mph up to 14 percent of the time. The data suggest the strongest winds occur during the summer months. During the fall, wind data begin to look

²² This climatology station was established in 1996.

similar to that of winter months with winds in the one to five mph range predominately from the west, west-northwest and to a lesser degree from the west-southwest. Stronger winds in the 5 to 10 mph-range are still predominately from the west-northwest.

For the period between February 1, 1960 and December 31, 2000, the City of Willits had an average rainfall of 51.22 inches per year and an average snowfall of 4.3 inches per year (Western Regional Climate Center, Willits Station 1 NE, 049684-1, elevation 1350 feet msl). Precipitation is seasonal, with the heaviest rainfall occurring during the spring and winter months.

Average daily high temperatures range from 54.7°F in December to 85.4°F in July, with an average annual high temperature of 69.4°F. Average daily low temperatures range from 32.6°F in December to 47.3°F in July, with an average annual low temperature of 39.2°F.

4.4 SURFACE WATER HYDROLOGY

The Remco Facility is located on the floor of the southwestern part of Little Lake Valley between the channels of two perennial streams, Broaddus Creek to the north and Baechtel Creek to the east. [Figure 4-2](#) illustrates the location of the Site in Little Lake Valley with respect to the various surface water features.

4.4.1 Surface Water Bodies in the Site Vicinity

Baechtel Creek is located approximately 275 feet to the east of the Facility across Main Street, on the eastern side of the Safeway Shopping Center. Baechtel Creek originates in the hills south of the Site and generally flows to the north-northeast until it merges with Outlet Creek northeast of downtown Willits. There is a tributary to Baechtel Creek, referred to as No-Name Creek, which originates in the hills southwest of the Site. Surface water in No-Name Creek flows intermittently in a northeasterly direction until it intersects a drainage ditch (referred to as the South Drainage Ditch) along the south side of the CWR tracks. The South Drainage Ditch crosses through a culvert under Highway 101 and empties into Baechtel Creek.

Broaddus Creek is located north of the Site and drains the hills west of the Site. Broaddus Creek flows eastward until a point approximately 500 feet north of the Facility (its closest point to the Facility), and from that point flows generally to north-northeast until it enters Outlet Creek northeast of downtown Willits.

Broaddus Creek, Baechtel Creek, and several other creeks merge and form Outlet Creek approximately 7,000 feet northwest of the Site. Outlet Creek flows northward and drains Little Lake Valley at its northwestern margin. Outlet Creek continues generally northward until it enters the Eel River south of the town of Tatu.

4.4.2 Facility Surface Water Occurrences

No natural surface water bodies exist on the Facility. Surface water occurrence at the Facility consists of runoff associated with rainfall events during the fall through spring seasons, referred to in this report as storm water. The historical development of the storm-drain system at the Facility is described in [Section 2.5.1](#), and [Section 3.2.1](#) describe investigations performed related to the storm-drain system. Discharges of storm water from the Facility are currently governed and monitored pursuant to RWQCB MRP 98-59 and the Willits Trust SWPPP. The raised grade of the CWR tracks, located between the Facility and the South Drainage Ditch and the northward slope of the land surface of the Facility prevents the flow of surface water runoff from the Facility to the South Drainage Ditch.

In addition to rainfall runoff during winter and spring, groundwater is especially shallow during these seasons and groundwater seeps have been observed to result in temporary surface water ponding and, in some instances, flowing at the surface. The following occurrences of surface water flow at the Facility have been noted:

- Along the southwestern portion of the Facility, a small amount of surface water is routinely observed flowing onto the Facility from properties to the west for several days after rainfall events during the winter and spring. This surface water generally infiltrates through areas of degraded asphalt in the southern portion of the Facility, or if there is sufficient flow, enters storm water drain SWD-1 ([Figure 2-2](#)).

- Groundwater surfacing has been observed during the winter and early spring months inside the central portion of the Main Building. This water does not flow, but creates puddles on the floor of the Main Building.

4.4.3 Facility Storm-Drain System

Rainfall and other surface water flow to several catch basins and is conveyed through a lined and sealed underground storm-drain system located along the Remco Facility northern boundary to the northeast corner of the Facility. At this point, the storm water enters the City of Willits storm-drain system and is conveyed through a subsurface conduit south and eastward discharging to Baechtel Creek. The approximate location of the outfall is shown on [Figure 3-16](#). The extent of lining of the storm-drain system on the Facility includes the majority of the storm water line along the northern property line and the lateral storm water line extending under the building to the south (see [Figure 2-2](#)). The only section of the storm water line on, or underlying the Facility that is not lined, is a short section from Catch Basin 6 (SWD-6), located near the front parking lot area of the Facility, to the point of intersection with the storm-drain system at SWD-7. As discussed in [Section 3.11.3](#) of this report, storm water originating at the Facility is routinely monitored and sampled in accordance with RWQCB MRP 98-59 (routine monitoring and sampling program) in conjunction with the SWPPP prepared for the Facility (Montgomery Watson, 2000b).

4.5 GEOLOGY AND HYDROGEOLOGY

This section describes the regional and Site-specific geologic setting and hydrogeology. The information presented was obtained both through literature review as well as based on geologic interpretation of the data collected prior to and during the RI. The focus of the review and investigation performed has been to understand the geologic and hydrogeologic setting and its effect on contaminant migration at the Site.

4.5.1 Regional Geology

The Site is situated along the southwestern margin of the north-northwest trending Little Lake Valley. Little Lake Valley is one of several structural depressions in the northern Coast Ranges

formed by movement of faults related to the San Andreas fault system (Alt and Hyndman, 1981). A trace of the Maacama fault has been mapped approximately 300 to 500 feet east of the Site, oriented generally parallel with Main Street (U. S. Army Corps of Engineers, 1978). The stratigraphic column for the first 900 feet underlying the region from oldest to youngest consists of the Franciscan Formation of Jurassic to Cretaceous age, continental deposits of Plio-Pleistocene age and Holocene Alluvium. The mapped distribution of these formations in Little Lake Valley is shown on [Figure 4-3](#) and their extent with depth is shown on [Figure 4-4](#). The following descriptions of these formations are taken from Cardwell (1965) and Farrar (1986) and are focused on the regional information developed in the vicinity of the Site.

4.5.1.1 Franciscan Formation

The Franciscan Formation forms the bedrock underlying the Site and the surrounding mountains. The Franciscan Formation is of Jurassic and Cretaceous age, and is composed primarily of strongly deformed sedimentary rocks of marine origin principally sandstone, graywacke, mudstone, and shale with lesser amounts of chert, greenstone, and serpentinite (Jennings and Strand, 1960; Cardwell, 1965). The nearest outcrop of the Franciscan formation to the Site was noted by these references as “south of Broaddus Creek”.

4.5.1.2 Continental Deposits

Overlying the Franciscan Formation are continental deposits which accumulated in the valley during the Pleistocene and early part of the Pliocene. The continental deposits are generally comprised of compact to semi-consolidated beds of alluvial fan-derived gravels and sands interbedded with silts and clays associated with flood plain and lake-deposits. According to Farrar, “the vertical distribution of poorly sorted units and clay beds varies markedly. Individual beds range in thickness from 1 foot to more than 100 feet.” Along the southwestern part of the valley, the continental deposits are described as largely clay, silt, shale, and mudstone. Outcrops of these sediments in Haehl Creek, approximately 1.5 miles south of Willits and southeast of the Site were described as “blue-gray to tan massive silty clay, beneath about 15 feet of Recent alluvium” (Cardwell, 1965). As shown on [Figure 4-4](#), in well 24J located southwest of the Site, the deposits were described as predominantly gravel. This lateral variability in character of the continental deposits is significant in the description of the Site-specific geology in [Section 4.5.2](#).

Despite the presence of sands and gravels, well yields intercepting these continental deposits are described as relatively low and the groundwater typically occurs under confined to semi-confined conditions.

4.5.1.3 Alluvial Deposits

Overlying the continental deposits over most of the valley floor are alluvial deposits of Holocene age. Holocene alluvium was described as consisting of uncemented gravel, sand, silt and clay (Farrar, 1986).

As illustrated on [Figure 4-3](#), Holocene alluvium forms the surficial deposits beneath the Facility and the continental deposits form the surficial deposits south of the Site. A regional geologic cross section that passes in very close proximity to the Site is shown on [Figure 4-4](#) and illustrates the extent of these deposits with depth. As shown on this geologic cross section, the continental deposits south of the Site are believed to extend beneath the Holocene alluvium with depth and dip in a northward direction (Farrar, 1986). In the vicinity of the Site, the Holocene alluvium is shown as extending to an approximate depth of 15 feet, and the continental deposits are shown as extending to an approximate depth of over 100 feet (Farrar, 1986).

4.5.2 Site Geology and Hydrogeology

The subsurface stratigraphy beneath the Site was evaluated using the logs of more than 74 monitoring wells, nearly 190 soil borings, and over 35 CPTs that were advanced at the Site. Detailed geologic logs for the monitoring wells and soil borings, and the results for the CPTs are presented in [Appendix 4-1](#). [Table 4-1](#) summarizes well construction details. Most of the borings were less than 20 feet deep, but approximately 34 of the borings, monitoring wells and CPTs reached depths in excess of 65 feet and provide information on the characteristics of the deeper lithology of the Site.

The borings show that the stratigraphy beneath the Site consists of alluvial deposits of gravel, sand, silt, and clay. Available data suggest that the coarser-grained material was deposited in

stream channels while the finer-grained material was probably deposited in relatively slow moving water in the area between the stream channels or as lake deposits.

Cross sections were constructed from the logs of soil borings, monitoring wells and CPTs which depict the subsurface lithology underlying the Site to a maximum depth of 89 feet bgs, the greatest depth investigated at the Site. The locations of the cross sections are shown on [Figure 4-5](#), and the cross sections (A-A' through F-F') are shown on [Figures 4-6 through 4-11](#). Selected chemical data are presented on the cross sections as an aid to understanding the distribution of chemicals in groundwater beneath the Site with depth, as well as help in evaluating the contaminant migration pathways and connection of geologic units. Chemical results are discussed in detail in [Section 5.0](#). Lithologic information for monitoring wells B1 through B5 was based on descriptions of soil cuttings generated during drilling.²³ As is illustrated on the cross sections, to the maximum depth investigated, the subsurface is predominantly comprised of clays and silts with irregularly interbedded sands, silty sands, clayey sands, and gravels.

To illustrate lithologic information obtained from CPTs, the electronic data file containing the interpreted soil behavior type was plotted on the cross sections. In order to calibrate the collected CPT data to traditional logs obtained during drilling of soil borings and monitoring wells, the CPTs were advanced at two test locations previously logged using conventional techniques. CPT-25 was located near the boring/well cluster SB-49/W31B/W31C (near the north central portion of the Site), and CPT-16 was located near boring/well cluster SB-98/W29A1/W29B1/W29B2 (near the northwestern portion of the Site). The data collected at these two calibration points are presented on cross section B-B' ([Figure 4-7](#)).

As shown on cross section B-B', the data collected at CPT-25 and recorded lithology for SB-49 compare quite favorably. Small differences were noted between the log obtained at CPT-16 and soil boring SB-98, which are likely related to inferences made by the field geologist across intervals of insufficient soil recovery during drilling and/or subtle distinctions in soil type based

²³ Pre-RI lithologic information is considered of poor quality, because it is difficult to determine an accurate depth of lithologic changes using only drill cuttings. Therefore, only the location and approximate well screen intervals for these monitoring wells are shown on the cross sections.

upon field observations (e.g. silty sands versus sandy silts). However, overall the comparison was again favorable. In addition, the logs obtained using CPT provided increased lithologic detail over conventional logging particularly in the deeper intervals tested. For certain measured CPT soil behavior types (soil behavior types greater than 10, see [Appendix 4-1](#) for description), there is some variance in the soil classification related to the CPT methodology. This ambiguity is reflected in the soil description shown on the CPT logs (also included in [Appendix 4-1](#)) where these intervals are described as “stiff fine-grained” or “over-consolidated to partially-cemented.”

According to the CPT contractor, these terms are used as a “catch-all” phrase that can only be resolved by comparing the intervals identified in this manner with soil descriptions from conventional drilling logs. At CPT-16, the intervals identified on the CPT log as “stiff fine-grained” or “over-consolidated to partially-cemented” corresponded to intervals described on the field logs as comprised of sands and gravels, and probably indicate some degree of cementation of these soils.

4.5.2.1 Hydrogeologic Zones

This section provides a description of the water-bearing zones identified during the remedial investigation and earlier environmental testing. Three water-bearing zones have previously been described at the Site and are referred to, from shallowest to deepest, as the A-, B-, and C-Zones. Although the water-bearing zones are generally fine-grained deposits, they tend to contain more coarse-grained deposits than surrounding strata. The identified coarse-grained deposits do not generally form a continuous layer laterally over the entire area investigated; however, in some cases the lenses are observed/interpreted to locally interconnect and, therefore; exhibit varying degrees of hydraulic communication with each other. The cross sections show interpreted interconnections based on the observed lithology in borings and CPT logs. Due to the complex depositional environment of these alluvial deposits, geologic interpretation is difficult. Contaminant distribution data is helpful in evaluating flow zones and hydraulic communication.

In most locations investigated, between the A-, B-, and C- water-bearing zones exist two zones of finer-grained deposits referred to as the A/B-Aquitard and the B/C-Aquitard. Although the A-, B-, and C-Zones should not be interpreted as separate water-bearing zones, the characteristics of

these zones and the distribution of contaminants supports the definition of five unique stratigraphic horizons for the purposes of Site characterization. The following paragraphs discuss the characteristics of each of these zones beneath the Remco Facility and the surrounding areas investigated.

4.5.2.1.1 A-Zone

The A-Zone is the shallowest of the three zones investigated beneath the Site. The A-Zone is identified as the shallow depth interval in which a greater abundance of coarse-grained deposits occur within the overall fine-grained strata. These saturated coarse-grained deposits generally occur between depths of 10 to 20 feet, although their occurrence has been noted as shallow as the water table (3 to 8 feet bgs) and as deep as 25 feet bgs. Therefore, for the purposes of this report, the A-Zone is defined to extend from first encountered groundwater to varying depths ranging from 15 feet bgs to a maximum of approximately 25 feet bgs (Figures 4-6 through 4-11). Soils comprising the A-Zone may be representative of the regional Holocene age alluvial deposits described above. The A-Zone is characterized by clays and silts with occasional thin interbeds of silty sand to clayey sand. The interbedded sands are typically less than 5 feet thick and appear to be laterally discontinuous beneath the Site. Where present, the coarser-grained sediments within the A-Zone are typically interbedded with finer-grained sediments. Lithologically, the coarser-grained material within the A-Zone includes fine- to coarse-grained sand, with fine- to medium-grained sand being more common. Gravelly sands were identified less frequently. In general, the coarser-grained A-Zone deposits are shallowest beneath the southwestern portion of the Site and deepen to the northeast.

4.5.2.1.2 Artificial Fill

In addition to the natural coarse-grained deposits in the A-Zone, several areas of the Site exhibit shallow artificial fill materials that are potential preferential pathways for shallow groundwater flow and contaminant migration. This is particularly true because of the shallow depth to which groundwater rises during the winter and spring months. It should be noted that not all of the fill materials observed in the shallow subsurface at the Site are coarse-grained; some appear to be reworked native fine-grained soils. The presence or absence of fill and the type of fill varies significantly across the Site, with the coarser-grained fills (sand and gravel) being the most

important to evaluate for potential preferential contaminant pathways. The connectiveness and type of fill materials was considered during data interpretation as part of the RI. For this reason, where saturated, the coarser-grained artificial fill is included as part of the A-Zone for discussion within this report.

Artificial fill has been observed in most areas underlying the main building; however, as discussed above, the thickness and fill type varies. This would generally be expected based on the nature of Facility development. As described in [Section 2.0](#), the main building is a composite of twelve separate building additions, built between 1945 and 1986. A review of the types of fill encountered during RI drilling underlying each of these structures was performed. In most cases, fill was characterized as sandy or silty gravel to gravelly clay. The thickness of fill underlying the main building ranged from less than one foot in borings completed in Building 1962 to up to 4 feet in Building 1979 at SB-161. In a few locations such as SB-044 (Building 1979) and SB-09 (Building 1986), former asphalt pavement surfaces were noted beneath the building floor. In these cases concrete was underlain by approximately 0.5 feet of roadbase overlying asphalt, which was in turn overlying another 0.5 feet of roadbase. There were also several places within the main building where no fill was noted on the boring logs, particularly in Buildings 1962, 1965, and 1973.

In areas surrounding the main building, the presence and type of fill was more variable. In many cases, about 1 to 1.5 feet of roadbase was noted underlying asphalt pavement. In the area along the northern property boundary several borings noted no fill underlying the pavement, but in other areas 1 to 2 feet of silty sand to gravel was noted. The fill materials upon which the main building and paved areas of the Facility were built do not appear to extend beyond the boundaries of the Facility. In off-Facility areas, such as residential areas to the north, fill if noted to be present, was not typically as coarse as observed at the Facility. Coarser fill materials not related to the Remco Facility, were encountered underlying Franklin Avenue and Highway 20, which is typical of public roadways, but again no interconnection was observed between these fill materials and those underlying the Facility.

As discussed in [Section 3.2](#), a utilities investigation was performed to evaluate utility features and surrounding fill materials as potential preferential routes of contaminant transport. [Figure 2-9](#) illustrates the underground utilities at the Facility. Particular attention was paid to the sanitary sewer exiting the north-central area of the Facility toward Franklin Avenue and the storm-drain system alignment along the northern property boundary, as the northern Facility area exhibits some of the most elevated concentrations of Site contaminants in soil and shallow groundwater (see [Section 5.0](#)). Observations of fill surrounding both the storm drain and the sanitary sewer did not suggest that a continuous coarse-grained fill exists along these utilities that would represent a preferential pathway. Also as discussed above, some borings drilled north of the main building exhibited fill materials, although the presence and type was less consistent than underlying the building. No evidence of a connection between fill under the main building with a coarser grained fill along these conduits was noted.

A color coded map illustrating the total thickness of the observed sands and gravels beneath the water table comprising the A-Zone permeable units is presented as [Figure 4-12](#). The map presents the approximate total cumulative thickness of predominantly sand and gravel lenses within the A-Zone (including saturated coarse-grained fill) as defined in the boring logs and CPTs and on the cross-sections. Silts and clays are present within the A-Zone, but the thickness of silt and clay is not included in the thickness shown on [Figure 4-12](#). In general, there is too much heterogeneity in the A-Zone soils and insufficient density of borings to allow contouring the thickness data. The purpose of this figure is to identify areas where there is a greater abundance of sands and gravels across a water-bearing zone which may provide intervals of greater transmissivity and therefore provide more likely routes of movement of dissolved chemicals in groundwater. Similarly, where sands and gravels are thin or absent, a lower transmissivity is suggested and may act to inhibit groundwater flow and chemical transport.

As indicated on [Figure 4-12](#), the A-Zone sands and gravels underlying the Facility are less than 10 feet thick and the thickest accumulation of sands that underlie the Facility are found in a roughly east-west trending belt that stretches beneath the northern and central portions of the property. Beneath the western portion of the Facility, the A-Zone sands and gravels are predominately thinner and are separated by intervals across which sands or gravels were not

identified. It should be noted that adjacent borings exhibiting similar sand thicknesses should not necessarily be interpreted as a single feature such as a buried former stream channel, as the data represent cumulative thicknesses not necessarily at the same elevation. However, the degree of interconnectiveness of the more permeable units likely increases with greater abundance and thickness.

Significantly, the sands and gravels comprising the A-Zone are thin along much of the length of Franklin Avenue (approximately 120 feet north of the Site) in and along the southern Remco Facility boundary. Test locations north of Franklin Avenue, as well as south and north of Highway 20 ([Figure 4-12](#)), suggest that the A-Zone sands and gravels re-occur and may be significantly thicker in those areas. The east-west linear trend of the sand thickness data (along the northern portion of the Facility and along Highway 20) suggest that the A-Zone sands and gravels may have been deposited as former courses of historical streams in this area of the Site, roughly following the same drainage pattern as present day streams.

4.5.2.1.3 A/B-Aquitard

Beneath the A-Zone is a sequence of interbedded silts and clays, with a lack of significant coarser deposits that define the A-Zone above and the B-Zone below. The thickness of clays tends to become more reduced with depth, exhibiting a bluish or grayish color (see [Section 4.5.2.2](#) below). However, the color of the soil was not used to define the upper boundary of this unit. Rather, the lack of coarser grained deposits is most important from a contaminant migration standpoint. The presence of the bluish or grayish clay appears consistent with the blue-gray silty clay noted in Haehl Creek by Cardwell (Cardwell, 1965), which was identified as comprising the Plio-Pleistocene continental deposits described in [Section 4.5.1](#). These silts and clays generally range in thickness from 3 to 10 feet. Although the A/B-Aquitard is nearly entirely comprised of silts and clays, there are a few isolated coarse-grained lenses, generally less than one foot in thickness, that occur within this interval. The aquitard is thinnest in the area of well cluster W29A1/W29B1/W29B2 located in the northwestern corner of the Facility (shown on cross sections B-B' and E-E', [Figures 4-7](#) and [4-10](#), respectively). The A/B-Aquitard is also thin at W-30B shown on cross section C-C' ([Figure 4-8](#)). Near CPT REM14 (shown on cross

section D-D', [Figure 4-9](#)) in the south central portion of the Facility, the silts and clays of the A/B-Aquitard are interbedded with several very thin sands.

Soil samples collected from the A/B-Aquitard were submitted for physical testing by Henshaw in 1997 during the installation of monitoring wells EW-1A and EW-1B. Results of these analyses are shown in [Table 4-2](#). Vertical permeability (or vertical hydraulic conductivity) for two samples collected at EW-1 from the A/B-Aquitard was measured to be 2.77×10^{-8} centimeters per second ("cm/s") and 2.99×10^{-8} cm/s, confirming the fine-grained texture of these soils and the expected low vertical permeability.

4.5.2.1.4 B-Zone

Beneath the A/B-Aquitard, a deeper interval was identified for which there was a greater abundance of coarse-grained deposits within the generally fine-grained deposits. This interval is defined as the B-Zone and is typically encountered across a varying depth interval from approximately 20 to 40 feet bgs in most of the deeper borings and CPTs at the Site ([Figures 4-6](#) through [4-11](#)). As described in [Section 4.5.1](#), soil types encountered over this depth interval would be expected to be associated with the Plio-Pleistocene continental deposits. Similar to the A-Zone, the B-Zone is characterized by silts and clays with interbedded sands and gravels. In contrast with the A-Zone, across the B-Zone there is greater lateral continuity of the coarse-grained deposits. The coarse-grained interbeds of the B-Zone soils are composed primarily of fine- and medium-grained sand and gravelly sand with lesser amounts of sandy gravel. Although the number of logs that penetrate to the B-Zone is much less than for the A-Zone, a greater lateral continuity of the B-Zone sands and gravels is interpreted. This is reflected in the sand and gravel thickness map prepared for the B-Zone and presented as [Figure 4-13](#). As shown on this map, the sands and gravels comprising the B-Zone are predominantly less than 5 feet in total thickness, but are present in almost all locations where borings extended deep enough. Thicknesses less than 2.5 feet occur over a broad area north of the Facility, extending north as far as Franklin Avenue and Highway 20. The thickest accumulations of B-Zone sands and gravels identified occur in the central portion of the Facility and near W-29B1 in the western portion of the Facility. The sparser density of B-Zone data at the Site makes it more difficult to evaluate trends than within the A-Zone. However, the general

orientation of the deposits as mapped suggests a more northeasterly-southwesterly orientation of the B-Zone sands and gravels. These data suggest that the source of the sands and gravels may be a former course of a stream during Plio-Pleistocene time, located to the south of the Site.

4.5.2.1.5 B/C-Aquitard

Between the B-Zone and C-Zone is an intervening layer of predominantly silts and clays. Beneath the central portion of the Facility and in the vicinity of the chrome plating tanks, the B/C-Aquitard occurs as silts and clays, which range from 15 to 20 feet in thickness. West of the central portion of the Facility, the B/C-Aquitard thins considerably, and may be absent completely, as the B-Zone appears to directly overlie the C-Zone. The observed thinning of the B/C-Aquitard is illustrated on cross section B-B' (Figure 4-7) west of CPT26, on cross section C-C' (Figure 4-8) west of soil boring SB-38, and on cross section D-D' (Figure 4-9) west of REM14. To the north, the B/C-Aquitard thickens to approximately 16 feet as shown on cross section E-E' (Figure 4-10) in the vicinity of CPT28. To the east, there is less data on the extent of the B/C-Aquitard, but based on the log for REM10 shown on cross section C-C' (Figure 4-8), the B/C-Aquitard appears to be about 5 feet in thickness.

4.5.2.1.6 C-Zone

The coarse-grained deposits of the C-Zone are typically encountered at depths ranging from 35 feet bgs (to the west) to 60 feet bgs (to the east). The total depth of the coarse-grained deposits of the C-Zone was not penetrated during the field investigations. Due to the depth of the C-Zone and the low to non-detect concentrations of chemicals reported in groundwater samples previously reported in this zone, the evaluation of the C-Zone deposits was developed from less data than was available for the A- and B-Zones.

Based upon the available data, the lithologic character of the C-Zone is interpreted to be quite different beneath the western and eastern portions of the Site. To the west, thick occurrences of unconsolidated to partially cemented sands and gravels with interbedded silts were identified on CPT and boring logs (see cross sections B-B', C-C', and D-D'; Figures 4-7 through 4-9, respectively). The observed soil types are consistent with the description of the continental deposits as compact to semi-consolidated beds of alluvial fan-derived gravels and sands interbedded with silts and clays (Section 4.5.1).

Beneath the eastern portion of the Site, the C-Zone consists primarily of silt and clayey silt with occasional interbeds of clay and thin sands. A map illustrating the total thickness of sands and gravels in the C-Zone above an elevation of 1320 feet msl was prepared and is presented in [Figure 4-14](#). Sand and gravel thicknesses were measured to this elevation because the full depth of the C-Zone was not encountered and the elevation of 1320 feet msl was generally attained by most of the CPTs, soil borings, and monitoring wells. As illustrated on the thickness map of the sands and gravels of the C-Zone ([Figure 4-14](#)) the coarse-grained deposits beneath the western portion of the Site reach a maximum thickness of over 20 feet, and beneath the eastern portion of the Site the thicknesses are less than one foot. The fine-grained sediments beneath the eastern portion of the Site are also consistent with the continental deposits that were described in Haehl Creek southeast of the Site as blue-gray to tan massive silty clay ([Section 4.5.1](#)). The change in character of the soils comprising the C-Zone laterally beneath the Site, and the declining elevation of the top of these deposits to the north and east, is consistent with the mapped occurrence of the continental deposits south of the Site ([Figure 4-3](#)) described in [Section 4.5.1](#).

As indicated on the regional geologic map ([Figure 4-3](#)), the continental deposits south of the Site were mapped as extending nearly to the southwest and southeast corners of the Facility, and in between the surficial continental deposits do not extend as far north. Beneath the western portion of the Facility the C-Zone sands and gravels occur at relatively shallow depths ranging from 30 to 35 feet (cross sections B-B', C-C', and D-D'; [Figures 4-7](#) through [4-9](#), respectively). To the north, the C-Zone sand and gravel deposits were encountered at deeper depths of approximately 40 to 45 feet (cross section E-E', [Figure 4-10](#)). This change in depth to the north is consistent with a northerly dip described for the continental deposits ([Section 4.5.1](#)). As indicated above, this interpretation is based upon the available data and is consistent with the regional geology, however based on the relatively limited data collected from the C-Zone these sands may not be as laterally continuous as interpreted in the cross sections or the isopach map.

The following are specific findings of the CPT investigation in the western portion of the Facility and downgradient areas designed to evaluate the presence and extent of the thick sequence of coarse-grained deposits of the B- and C-Zones in this area:

- Results of the CPT investigation in the area of well W29A did confirm the presence of coarse-grained units over an approximate interval of 25 to 75 feet bgs. These coarse-grained units were interpreted from the soil behavior type as sands and “stiff fine grained”. A comparison of the stratigraphy logged for W29B and the intervals identified as “stiff fine grained” indicates that this material is likely fine- and medium-grained sand. The reported soil behavior type is also described as “overconsolidated or cemented”.
- The transition from fine-grained (such as silts and clays) to coarser-grained sediments below 25 feet is most evident between CPT-13 and CPT-14 located along the southern Facility boundary. The coarse grained sediments appear to persist eastward until about CPT-23, where they are still evident, but significantly diminished. In the area of well W29B, the coarse-grained sediments between 25 and 75 feet were identified at every location tested. To the north the coarse-grained sediments were not noted on the earlier CPTs along Franklin Avenue, however most of these CPTs did not extend below 40 feet.
- Groundwater samples were readily collected at each location tested, suggesting that these units are likely fairly permeable. The results of sampling to evaluate the vertical extent of impact is discussed in [Section 5.0](#).

For monitoring wells installed into the fine-grained deposits of the C-Zone beneath the eastern portion of the Facility, observed recharge rates during quarterly sampling are fairly slow and typically range from several hours to several days, consistent with the fine-grained texture of these sediments. As illustrated on cross sections B-B', C-C', and D-D' ([Figures 4-7 through 4-9](#), respectively), the data from CPT logs, soil borings, and well construction logs obtained in the central portion of the Site indicates a consistent profile of nearly uninterrupted silts and clays across the entire C-Zone interval with just a few thin sand lenses less than one-foot thick.

4.5.2.2 Oxidized and Reduced Zones

The distribution of oxidized and reduced soils was evaluated by the color of the soils observed during drilling. Those intervals of the bore holes in which the color of the soil is identified as some combination of brown, yellow-brown, or red-brown were interpreted to be oxidized. These colors are associated with oxidized minerals such as ferric iron. Those soils in which color is described as combinations of gray, black, blue, or green, often associated with minerals such as ferrous iron, are interpreted to be within a reduced environment. A relatively small proportion of soils at the Site contains both the red/brown and gray/green colors. These soils are located in

transition zones between oxidized and reduced zones. It should be noted that the terms oxidized or reduced are relative and should not be interpreted to mean that no further reduction can occur in the oxidized soil zone. In fact, there is direct evidence that hexavalent chromium has been reduced in A-Zone soils and groundwater.

An inspection of the cross-sections (see [Figures 4-6](#) through 4-11) shows that oxidized soils are typically associated with shallower A-Zone sediments, while reduced soils are associated with the deeper A/B-Aquitard, B-Zone, B/C-Aquitard, and C-Zone sediments. Across most of the Site, oxidized soils typically extend to depths ranging from 15 and 25 feet. The conditions observed appear to represent natural depositional and geologic phenomenon and do not appear to have been significantly affected by chemicals that may have been released as a result of past Facility operations. However, an overall evaluation of the geochemistry of Site soils is relevant to contaminant persistence and migration. The significance of oxidized and reduced soil conditions on contaminant migration is further discussed in [Section 6.0](#).

4.5.3 Physical Testing of Site Soils

Physical test results performed by Henshaw at the time of installation of wells EW-1A and EW-1B provide information on the physical characteristics of the soil in the A-Zone, A/B-Aquitard, and the B-Zone. These results are summarized in [Table 4-2](#) and the laboratory reports are provided in [Appendix 4-2](#). The average measured porosity of the A/B-Aquitard was 0.38 and of the B-Zone was 0.25. Moisture contents were reported as 23 percent in soils collected from the A-Zone and A/B-Aquitard, and were less in the B-Zone, ranging from 13 to 15 percent. However, the relevance of the B-Zone moisture data is questionable since the B-Zone is continuously saturated. As discussed above, vertical permeability for two samples of the A/B-Aquitard was measured to be between 2.77×10^{-8} cm/s and 2.99×10^{-8} cm/s, and for one sample from the B-Zone was measured to be 3.04×10^{-6} cm/s. These vertical permeability measurements reflect a very low permeability of the A/B-Aquitard and low vertical permeability within the B-Zone. Further discussion of the influence of the measured vertical permeability to the expected fate and transport behavior of chemicals in groundwater will be provided in [Section 6.0](#).

4.5.4 Groundwater Occurrence and Flow

Groundwater is encountered at relatively shallow depths typically ranging from three to eight feet below the ground surface at the Site. In the winter and spring months, groundwater has risen to the ground surface and wells completed into the saturated zone have exhibited flowing (artesian) conditions. As described above, three water-bearing horizons have been defined at the Site. Groundwater data are collected quarterly from all monitoring wells installed at the Facility and wells installed in off-Facility locations by the Willits Trust. This section provides a description of groundwater flow direction and gradient based upon water level measurements measured in October 2000 and February 2001,²⁴ and a description of the hydraulic characteristics and flow velocity for the three water bearing zones based upon short- and long-term aquifer testing. The water levels for October 2000 and February 2001 are also shown on the cross section where this data was available for these dates.

4.5.4.1 Groundwater Flow Direction and Gradient

A summary of historical water level data collected at the Site from April 1991 to February 2001 is presented in [Table 4-3](#). A chart of the historic water level elevations over time for selected A-, B-, and C-Zone monitoring wells is presented on [Figure 4-15](#). As shown on [Figure 4-15](#) and on the cross sections, groundwater levels generally fluctuate approximately 4 feet annually in all three zones in response to seasonal precipitation, with the highest water levels typically occurring in the winter and spring months and the lowest water levels occurring in the summer and fall months.

Potentiometric maps were prepared based on water level measurements recorded on October 16, 2000 (a seasonal low water level) for the A-, B-, and C-Zones ([Figures 4-16 through 4-18](#), respectively), and for water level measurements recorded on February 19, 2001 (a seasonal high water level) for the A-, B-, and C-Zones ([Figures 4-19 through 4-21](#)). Additional potentiometric interpretations are available in semi-annual groundwater monitoring reports

²⁴ The groundwater gradient has been relatively constant over the period monitored by the Willits Trust from August 1997 to present. October and February are 2001 are considered representative of the average groundwater conditions at the Site. The results of all quarterly groundwater level monitoring events are presented in the semi-annual monitoring reports, available for review at the Willits Public Library.

prepared by the Willits Trust.²⁵ As indicated on [Figure 4-16](#), the hydraulic gradient in the A-Zone was to the northeast at approximately 0.009 to 0.020 feet/foot (“ft/ft”). Similarly, in the B-Zone ([Figure 4-17](#)) the hydraulic gradient was toward the northeast at approximately 0.016 to 0.019 ft/ft. Within the C-Zone ([Figure 4-18](#)), the hydraulic gradient was to the northeast at 0.034 to 0.038 ft/ft, but was more to the east than the A- and B-Zones. For the February 2001 water levels ([Figures 4-19](#) through 4-21), the measured hydraulic gradients for the three zones were consistent with the October 2000 data (approximately 0.008 to 0.029 ft/ft in the A-Zone; 0.016 to 0.038 ft/ft in the B-Zone; and 0.035 to 0.049 ft/ft for C-Zone), but the gradient in the A-Zone was more to the east of northeast than during October 2000. This slight shift in the hydraulic gradient in the A-Zone between the October 2000 and February 2001 water level measurements was also noted on potentiometric surface maps for October 1999 and February 2000, although these earlier maps were based upon significantly fewer measurements. The data collected to date suggest the influence of seasonal precipitation on the direction of groundwater flow in the A-Zone. The direction of groundwater flow in the B- and C-Zones during February 2001 was consistent with the October 2000 results and reflected no seasonal shift in groundwater flow direction.

[Table 4-4](#) summarizes vertical groundwater potentiometric head differences measured during the most recent four quarters (Third Quarter 2000 through Second Quarter 2001) of groundwater level monitoring. Although there are minor fluctuations over the previous four quarters, a downward gradient was typically recorded between the A- and B-Zones. Similarly, a downward gradient was generally reported between the B- and C-Zones over the previous four quarters. The influence of the downward gradient will be discussed further in [Section 6.0](#).

4.5.4.2 Hydraulic Characteristics and Flow Velocity

As discussed in [Section 3.9](#), extensive aquifer testing has been conducted in monitoring wells located at the Site, and has included short-term aquifer testing (slug tests) in 14 A-Zone monitoring wells, five B-Zone monitoring wells, and three C-Zone monitoring wells. Although a slug test was conducted for C-Zone monitoring, W3, the results were not used due to the lack of

²⁵ Review of these potentiometric maps for other sampling events indicate that there is very little variability in the direction of groundwater flow either seasonally or over the past several years of monitoring.

reliable response from this well (e.g., no response or poor curve fit). Details of the slug testing are presented in [Appendix 3-7](#) and the results are summarized in [Table 4-5](#). In addition to the short-term aquifer testing, longer-term aquifer tests (pumping tests) were performed in two A-Zone wells as part of recent RI activities and in two B-Zone wells during earlier studies. The results of the pumping tests are summarized in [Appendix 3-7](#) and [Table 4-6](#). Based on the results of the aquifer tests, the hydraulic conductivity of the A-Zone is estimated to range from 3.7×10^{-4} to 3.6×10^{-3} cm/s. The B-Zone hydraulic conductivity is estimated to range from 3.2×10^{-4} to 6.1×10^{-3} cm/s, based upon the recent slug tests and the pumping tests conducted by Henshaw in 1997 and GeoSyntec in 1994. The C-Zone hydraulic conductivity is estimated to range from 4.3×10^{-5} cm/s to 2.8×10^{-3} cm/s, based upon slug testing performed by MWH during the RI.

The longer-term pumping test results were derived from analysis of pumped well responses, which may explain why the pumping test results appear to support slightly lower conductivity estimates compared to the slug test results (particularly those derived from the Bouwer-Rice method). In general, the hydraulic conductivity values obtained from pumping test analyses agreed reasonably well with the values obtained from slug test analysis.

The flow of groundwater through porous media is described by Darcy's Law (Fetter, 1993):

$$V = Ki/n_e$$

where:

V = seepage velocity of groundwater (length/time)

K = hydraulic conductivity (length/time)

n_e = effective porosity of soil (unitless)

$i = dh/dl$ = hydraulic gradient (length/length)

Groundwater seepage velocity can be estimated using a combination of laboratory and field procedures. The hydraulic gradient is ascertained as described above using a potentiometric flow map that is based on the groundwater elevations at each well. The hydraulic conductivity can be estimated using the field aquifer tests conducted. The effective porosity can be estimated in the laboratory, or based on published values for specific soil types.

The following describes each input to the velocity calculation, along with a brief summary of the work performed at the Site relative to each of the input parameters.

4.5.4.2.1 Hydraulic Gradient

The hydraulic gradient (“dh/dl” or “i”) is a measure of the change in hydraulic head (“h”) over an incremental distance. As groundwater flows downgradient, the water surface slope in the direction of flow is equal to the hydraulic gradient. The hydraulic gradient can be estimated by measuring water elevation in monitoring wells.

As described in [Section 4.5.4.1](#), the horizontal hydraulic gradient for the A-Zone ranges from approximately 0.008 to 0.029 ft/ft with an average of 0.010 ft/ft. The range of horizontal hydraulic gradient values in the B-Zone range from approximately 0.016 to 0.038 ft/ft, with an average of 0.022 ft/ft. The range of horizontal hydraulic gradient values in the C-Zone range from approximately 0.034 to 0.049 ft/ft, with an average of 0.039 ft/ft. The vertical hydraulic gradient between the A- and B-Zones is generally downward with a range of 0.05 ft/ft upward to 0.32 ft/ft downward. The vertical hydraulic gradient between the B- and C-Zones is less and ranges from 0.02 ft/ft upward to 0.12 ft/ft downward.

4.5.4.2.2 Hydraulic Conductivity

Hydraulic conductivity (“K”) is a measure of the water transmitting capacity of a groundwater zone, or the ease by which a fluid can move through porous media. Its value is dependent on both properties of the soil media and the fluid (i.e., fluid density and viscosity). High values of hydraulic conductivity indicate that fluids are readily transmitted through the groundwater, while low values indicate a poor transmitting capacity. The hydraulic conductivity can be estimated through laboratory studies and field aquifer (pumping) tests.

Hydraulic conductivity values have been estimated from field aquifer tests. Twenty-two slug tests and six continuous drawdown pumping tests were performed at the Facility. The results of these field tests were evaluated to estimate hydraulic conductivity values. [Tables 4-5](#) and [4-6](#) present a summary of the data collected. The data illustrate the variability of hydraulic conductivity within each zone and between the zones. For example, the lower hydraulic

conductivity value for the C-Zone in the eastern portion of the Facility reflect the fine-grained texture of these sediments beneath this area of the Facility. Slug test results for well W29B2 installed in the coarse-grained sediments of the C-Zone beneath the western portion of the Site, showed higher hydraulic conductivities.

4.5.4.2.3 Porosity and Effective Porosity

Porosity (“n”) is a measure of the open space in a groundwater zone. It is a ratio of void volume in the soil to total volume. Porosity gives an indication of the capacity the soil has for holding a fluid such as water. Effective porosity refers to only that portion of the void volume that is readily available for groundwater flow. As described in [Section 4.5.3](#), porosity was measured at 0.25 in a sample collected from the B-Zone and approximately 0.38 for the A/B-Aquitard. For the A- and C-Zones, the effective porosity was estimated to be 0.25 based upon ranges of porosity available in the published literature (Freeze and Cherry, 1979).

4.5.4.2.4 Calculation of Groundwater Seepage Velocity

In summary, all the parameters necessary to calculate groundwater seepage at the Site have been obtained through direct measurements, field studies, or literature references. For the purposes of the calculation of groundwater seepage velocity, the effective porosity was assumed to be the same as the estimated porosity. When calculating groundwater velocity estimates, the low and high hydraulic conductivity values of the central tendency from the short-term aquifer test results (average, geometric mean, harmonic mean, and median values in [Table 4-5](#)) were used. Based on the range of hydraulic conductivities estimated, groundwater seepage velocity at the Site was estimated to range from approximately 1.5×10^{-5} to 1.4×10^{-4} cm/s, or 15 to 145 feet per year (“ft/yr”) in the A-Zone. In the B-Zone, velocity is estimated to range from 2.8×10^{-5} to 5.4×10^{-4} cm/s, or 29 to 559 ft/yr. In the C-Zone, velocity is estimated to range from approximately 6.7×10^{-6} to 4.4×10^{-4} cm/s, or 7 to 455 ft/yr. [Table 4-7](#) summarizes the estimated groundwater velocities calculated for the A-, B-, and C-Zones.

These estimates of groundwater flow velocity should generally be considered to be conservatively high particularly for the A-Zone since they do not take into account the heterogeneity of the Site hydrogeology. As noted in [Appendix 3-7](#) and as illustrated in the cross

sections, the trend in thickness of A-Zone coarser grained deposits is generally east-west (cross gradient). The lack of appreciable coarser grained deposits within the A-Zone underlying Franklin Avenue may act to retard northward contaminant migration. Furthermore, contaminant migration is significantly slower than the actual velocity of groundwater. Groundwater flow and its effect on contaminant migration are further discussed in [Section 6.0](#).

The vertical seepage velocity between the A- and B-Zones is estimated to be approximately 0.0072 feet per year using an average vertical gradient of 0.09 ft/ft. Clearly, the rate of vertical flow is extremely small compared to the horizontal rate of groundwater flow.

4.6 ECOLOGY

An ecological evaluation of the Site vicinity was performed as part of the PEA (Henshaw, 2000). According to this evaluation, the sparse ruderal vegetation on the Facility property provides no significant terrestrial habitat. Baechtel Creek is the only off-Facility area offering significant habitat with the potential to be impacted by releases from the Facility. In addition, the South Drainage Ditch and railroad bed was considered to provide limited quality habitat and a travel corridor for a variety of invertebrates, small mammals, and birds.

No endangered or special status species have been identified within the Facility or the Site boundaries. Additional information regarding the ecology of the Site vicinity may be obtained by reviewing the PEA (Henshaw, 2000).

5.0 NATURE AND EXTENT OF CONTAMINATION

The primary purpose of the RI is to characterize the nature and the lateral and vertical extent of hazardous substances at, or emanating from, the Remco Facility. Both physical and chemical testing of samples collected at the Site were used to characterize the specific nature and lateral and vertical extent of the contamination. Samples were collected and analyzed for chemicals potentially utilized during past operations at the Facility (or degradation products of chemicals potentially used at the Facility) based on historical Facility operations and waste management practices, as described in [Sections 2.0](#) and [3.0](#). The preliminary chemicals of concern (“PCOCs”) identified for the Site include the following groups of chemicals:

- Metals
- VOCs
- Petroleum hydrocarbons
- PAHs
- PCBs

Environmental media with the potential to be impacted by historic Site operations were identified and sampled. The media of concern identified for the Site include the following:

- Soil
- Groundwater
- Storm water
- Surface water
- Sediment
- Air
- Man-made features (building surfaces, asphalt areas and other surfaces)

[Table 3-1](#) provides a complete list of analyses that were conducted by environmental media and chemical group.

The initial sampling strategy completed at the Site, as outlined in the RI/FS Work Plan (Henshaw, 1998d), was based on specific potential release (source) scenarios. The nine potential source categories are presented below and are fully described in [Section 3.5](#).

- Category 1: Chromium Source Area
- Category 2: Chromium and VOCs in Storm-Drain System
- Category 3: VOCs Due to Surface Releases
- Category 4: Petroleum Hydrocarbons in the AST Area
- Category 5: Diesel Fuel Line and Boiler Area
- Category 6: Former UST Areas
- Category 7: Petroleum Hydrocarbons, Metals, PAHs, and PCBs in Dust Suppression Areas
- Category 8: Lubricating Oils and Coolants within the Facility Building
- Category 9: Former Hazardous Materials Storage Areas

These potential release scenarios were defined as specific contaminant source categories to ensure that PCOCs were adequately investigated.

Many of the sample locations and analyses were selected to determine the impact from multiple potential sources. For example, the samples collected from soil boring SB-019 were analyzed to determine the potential impact from the following source categories:

- Category 3: VOC impact due to the alleged disposal of solvents to the land surface
- Category 7: Petroleum hydrocarbon, PAH, and metals impact due to dust suppression techniques
- Category 8: Petroleum hydrocarbon, PAH, and metals impact due to the hydraulic lifts and the use of coolants at the Facility

In order to reduce the redundancy of presenting the same data under multiple categories, the data is presented in this section as one data set segregated by chemical and media. A discussion of the data with respect to the potential sources of contamination is discussed, along with the CSM, in [Section 6.0](#).

The initial investigation of the nine source categories, outlined above, was completed in the spring of 2000. Based on the results of this initial investigation, and additional information obtained from depositions of former Remco employees, specific data gaps were identified as discussed in the *Interim RI Report* (Montgomery Watson, 2000d). The scope of the initial investigation was expanded to further investigate and characterize the issues related to these data gaps. Focused investigations were conducted to collect the needed data to fill these data gaps as described in [Section 3.0](#). With the exception of the low detection level 1,4-dioxane and hexavalent chromium sampling (conducted in May through August 2001), these focused investigations were conducted from April 2000 through April 2001.

The following sections discuss the distribution of chemicals detected in these environmental media. Tables and figures summarizing the data are presented along with a discussion of the data in each section below. A complete summary of the analytical data generated during the RI is presented in [Appendices 5-1](#) through [5-3](#). Test results are tabulated in [Appendix 5-1](#). Laboratory Reports are presented in [Appendix 5-2](#). An assessment of quality assurance/quality control (“QA/QC”) activities along with data validation results are presented in [Appendix 5-3](#).

5.1 DATA EVALUATION AND DEVELOPMENT OF PRELIMINARY SCREENING CRITERIA

Preliminary screening criteria were developed to provide a basis for defining the extent of contamination at the Site. These preliminary screening criteria are media-specific and have been developed for constituents detected in soil, groundwater, surface water, storm water, and sediment. Various criteria including regulatory guidance and Site-specific background concentrations were considered for each constituent detected in each media. [Appendix 5-4](#) describes the selection of the preliminary screening criteria used to evaluate the PCOCs detected at the Site. The purpose of comparing the Site data against the preliminary screening criteria is to determine whether the Site has been adequately characterized to assess the extent to which the release of these Hazardous Substances may present an endangerment to the environment or human health and to support the analysis and design of potential response actions. However, all chemicals detected above background levels will be evaluated in the risk assessment, will be

considered in identifying applicable or relevant and appropriate requirements (ARARs), and will be considered in defining site cleanup goals.

The statistical evaluation of Site data has been tabulated and is presented in the following tables:

- [Table 5-1-1a](#) Statistical Analysis of Constituents Detected in Surface Soil
- [Table 5-1-1b](#) Statistical Analysis of Constituents Detected in Subsurface Soil
- [Table 5-1-2a](#) Statistical Analysis of Constituents Detected in Grab Groundwater Samples
- [Table 5-1-2b](#) Statistical Analysis of Constituents Detected in Groundwater Monitoring Well Samples
- [Table 5-1-2c](#) Statistical Analysis of Constituents Detected in Private Well Groundwater Samples
- [Table 5-1-3](#) Statistical Analysis of Constituents Detected in Storm Water
- [Table 5-1-4](#) Statistical Analysis of Constituents Detected in Surface Water
- [Table 5-1-5](#) Statistical Analysis of Constituents Detected in Sediment

These tables summarize the number of samples collected by media and chemical analysis and provide the following statistical and screening information:

- Total number of detections, including estimated (J_o) detections²⁶
- Total number of samples analyzed
- Frequency of detection
- Minimum and maximum detected concentrations including estimated detections (below the laboratory reporting limit, i.e., J_o)
- Location and depth of the maximum detected concentration above the reporting limit
- Preliminary screening criteria concentration
- Number of detections exceeding the preliminary screening criteria (including estimated J_o detections)
- Frequency of exceedance of the preliminary screening criteria

²⁶ Data summary tables and figures illustrate chemicals detected at concentrations above the laboratory-reporting limit. If a detection was noted by the laboratory below the reporting limit, the result is considered estimated. In such cases, the result is shown as <"reporting limit" J_o in tables and figures throughout this report (i.e., the laboratory reporting limit is provided).

5.2 DISTRIBUTION OF CHEMICALS IN SOIL

Soil samples were collected from the surface to a maximum depth of 84.5 feet bgs. Soil samples were collected, transported, and analyzed as described in [Section 3.0](#) and [Appendix 3-3](#). The depth of soil sampling was dictated by the objectives of the sampling program, as outlined in [Section 3.0](#). The terminology used in this report relating to depth of sampling is as follows.

- Surface soil sample²⁷ 0 to less than 0.5 feet bgs
- Shallow soil sample 0.5 feet to 3 feet bgs
- Deeper soil sample Greater than 3 feet bgs

The RI soil sampling locations are presented in [Figures 3-1](#) through 3-4. The sampling locations associated with each potential source category are presented in [Figures 3-7](#) through 3-15.

The following sections discuss the analytical results for soil samples collected at the Site by chemical constituent group. The occurrence of VOCs in soils is discussed in [Section 5.2.1](#). The distributions of other organic PCOCs (TPH, PAHs, and PCBs) are presented in [Sections 5.2.2](#), [5.2.3](#) and [5.2.4](#). The distribution of metals in soils is discussed in [Section 5.2.5](#). Other analytical results (e.g., general minerals) are discussed in [Section 5.2.6](#).

A summary of the analytical results is provided in [Appendix 5-1](#). The laboratory analytical reports are provided electronically as [Appendix 5-2](#). A summary of the analytical detections is provided in [Tables 5-2-1](#) through 5-2-8.

5.2.1 Volatile Organic Compounds in Soil

A total of 230 soil samples were collected and analyzed for VOCs.²⁸ [Table 5-2-1](#) summarizes the results of laboratory analysis of soil samples for VOCs that were detected. A statistical

²⁷ The reference point for all samples is the ground surface. Therefore, for locations with thick asphalt or concrete, no “surface soils” exist. Further, all soil samples are defined based on the top of the sample. Therefore, if a sample was collected over the depth of 0.5 foot to 1 foot, it is defined as being collected at 0.5 foot bgs.

²⁸ Due to the historical pre-RI variation in laboratory methods and analyte lists, not all VOCs were analyzed in every sample.

summary of the shallow and deep soil samples analyzed for VOCs is provided in [Table 5-1-1b](#). [Figure 5-1](#) illustrates VOCs detected in soil samples collected between 1 and 3 feet bgs.²⁹ [Figure 5-2](#) illustrates VOCs detected in soil samples collected at depths greater than 3 feet bgs.

As shown in [Table 5-1-1b](#), 38 individual VOCs have been detected in soil samples. Although VOCs were detected in Site soil samples at a number of locations, only five VOCs (1,1,1-TCA, 1,1-DCA, 1,1-DCE, PCE, and TCE) exceeded their respective preliminary screening criteria. All the samples exceeding the preliminary soil screening criteria were collected from on-Facility locations.³⁰ No exceedances of the preliminary screening criteria were reported for any off-Facility soil samples, or for any on-Facility soil samples collected below a depth of 16 feet bgs. The maximum detected concentrations for 1,1,1-TCA (SB-141) and 1,1-DCA (SB-124) were reported for samples collected near the former paint shop in Building 1979. The maximum detected concentrations for 1,1-DCE, PCE, and TCE were reported for samples adjacent to the storm-drain system along the northern Facility boundary (SB-083 and SB-089).

The most frequently detected VOCs in soil were acetone and methylene chloride. Neither of these chemicals was detected at a concentration exceeding the preliminary screening criteria (160,000 µg/kg and 890µg/kg, respectively). In addition to being frequently detected in soil samples, these are both common laboratory-related chemicals. For data collected after June 2000, reported detections of acetone and methylene chloride found to be attributable to laboratory contamination have been qualified as discussed in [Appendix 5-3](#). However, data collected before June 2000 and qualified as “J_o” (estimated detections below the laboratory-reporting limit) represent the largest percentage of reported detections of acetone and methylene chloride in soil. Due to the relatively low levels of the chemicals detected, these

²⁹ Surface soils were not analyzed for VOCs due to the propensity for VOCs to volatilize when exposed to the atmosphere.

³⁰ All VOC detections in Site soils will be considered in the Risk Assessment. Further, the potential impact of VOCs in Site soils on shallow groundwater will be evaluated.

earlier data were not reviewed with respect to potential laboratory sources of this contamination.³¹

5.2.1.1 Shallow Soils

5.2.1.1.1 VOC Detections Above the Preliminary Screening Criteria

Although VOCs were detected in shallow soil samples at a number of locations, only 1,1,1-TCA, 1,1-DCE, and 1,1-DCA were detected at concentrations above their preliminary screening criteria in soil samples collected from depths of less than 3 feet bgs ([Figure 5-1](#)). These soil samples are all within the Remco Facility boundaries. For 1,1,1-TCA, the only exceedance of the preliminary screening criteria (63,000 µg/kg) was at SB-141 (Building 1979) at a concentration of 108,000 µg/kg. For 1,1-DCE, the only exceedances of the preliminary screening criteria (5.4 µg/kg) were detected at SB-125 and SB-174 (Building 1979) at concentrations of 12.2 µg/kg and 10.5 µg/kg, respectively, and at SB-134 (north of Building 1964) at a concentration of 22.1 µg/kg. For 1,1-DCA, only one sample exceeded the preliminary screening criteria of 330 µg/kg. This sample was collected from SB-124 at 3 feet bgs (Building 1979), in which 1,1-DCA was detected at 580 µg/kg.

5.2.1.1.2 VOC Detections Below the Preliminary Screening Criteria

As can be seen in [Figure 5-1](#), the pattern of individual VOC detections at relatively low levels (i.e., below preliminary screening levels) in shallow soil samples is somewhat sporadic, with no discernable large source areas. In most areas where there are higher concentrations detected, the impacted area appears limited. For example, directly adjacent to SB-141, where the highest detection of 1,1,1-TCA was noted, 1,1,1-TCA was detected at concentrations significantly lower in two soil samples (SB-161 at 10.1 µg/kg and SB-162 at 7.97 µg/kg). These samples are within 20 feet of the highest detection.

³¹ As required by the Quality Assurance Project Plan ("QAPP") of the RI/FS Work Plan, 25 percent of all data were validated. Additional data in excess of this 25 percent were also validated if deemed necessary for the purposes of the RI. Additional data validation may be conducted for the risk assessment, if deemed necessary for that purpose.

In addition to the detection of 1,1,1-TCA, 1,1-DCE, and 1,1-DCA in shallow soils, the following additional VOCs were detected at concentrations below the preliminary screening criteria: cis-1,2-DCE, PCE, TCE, acetone, methylene chloride, methyl ethyl ketone (MEK; 2-butanone), and Freon 113 [estimated detections (J_o) only].

PCE, TCE, and cis-1,2-DCE were detected in the area of the 1979 Building Paint Shop and the storm-drain system along the northern Facility boundary. Cis-1,2-DCE was also detected near the 1967 Paint Shop and the eastern and western portions of Buildings 1979 and 1972, respectively. Acetone and methylene chloride are widely distributed at low concentrations in shallow soils and are common laboratory contaminants. MEK was detected in Building 1967, within the chromium *in-situ* pilot study area in the plating area, to the west of Building 1979 and to the west of the main Facility building. Freon 113 was detected in a single sample adjacent to the storm-drain system along the northern Facility boundary.

In addition, the following VOCs³² were detected in multiple samples at low concentrations only once: carbon disulfide, chloroethane, dibromochloromethane, ethylbenzene, xylenes, and p-isopropyltoluene. The following chemicals were detected in the central portion of Building 1962: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene, naphthalene, p-isopropyltoluene, and sec-butylbenzene.

5.2.1.2 Deeper Soils (greater than 3 feet bgs)

The VOCs detected in soil samples collected at depths greater than 3 feet bgs are illustrated on [Figure 5-2](#). For these deeper soil samples, the highest concentrations of VOCs were detected along the northern Facility boundary (e.g. SB-089) and within Buildings 1979 and 1973. In addition, the observed VOCs correlate well with the groundwater data presented in [Section 5.3.1](#).

Although VOCs were detected in a number of locations in the deeper soils, the areal extent of individual VOCs is relatively small. For example, in Building 1979, the 6 feet bgs sample

³² Naphthalene is an analyte included in both USEPA Method 8260s (VOCs) and USEPA Method 8310 (PAHs). For the purposes of this report, detections of naphthalene are discussed as a PAH. However, the detections of naphthalene are summarized in data summary tables based on the analytical method (i.e., with VOCs when detected via USEPA Method 8260 and with PAHs when detected via USEPA Method 8310.)

collected from SB-127 had a cis-1,2-DCE concentration of 1,130 $\mu\text{g/kg}$, whereas the 6 feet bgs sample collected at SB-172 (20 feet to the northeast), exhibited no cis-1,2-DCE above the reporting limit of 5 $\mu\text{g/kg}$.

5.2.1.2.1 VOC Detections Above the Preliminary Screening Criteria

There are no VOC detections exceeding the preliminary screening criteria in samples collected from off-Facility locations. Only three VOCs exceeded their respective preliminary screening criteria in on-Facility deeper soils: TCE, PCE, and 1,1-DCE. The concentrations and number of VOCs in soil exceeding the respective preliminary screening criteria and related compounds generally decrease with depth. There are no VOC detections exceeding the preliminary screening criteria in samples collected in on-Facility locations at depths greater than 16 feet bgs.

TCE was detected in one location at a concentration only slightly above the preliminary screening criteria of 280 $\mu\text{g/kg}$ (detected at 320 $\mu\text{g/kg}$). This sample was collected at a depth of 16 feet bgs at a location adjacent to the storm-drain system along the northern Facility boundary. The concentration of TCE at this location was significantly lower in samples collected closer to the ground surface. TCE was also reported as being present in a sample collected from Building 1973 (SB-127), although at a concentration below the reporting limit of 500 $\mu\text{g/kg}$. Because the reporting limit is above the preliminary screening criteria for this chemical, it is possible that TCE is present at this location at a concentration above the preliminary screening criteria. However, TCE was detected at levels below the preliminary screening criteria at an adjacent sampling location (SB-171). TCE was only detected in one off-Facility soil sample at a concentration of 10.7 $\mu\text{g/kg}$, well below the preliminary screening criteria of 280 $\mu\text{g/kg}$. This sample was collected at a depth of 9 feet bgs from SB-093 in the Safeway Shopping Center parking lot. There was no TCE detected in three other soil samples collected in the immediate vicinity of this soil sample.

There were two detections of PCE above the preliminary screening criteria (570 $\mu\text{g/kg}$) in samples collected below 3 feet bgs. These two exceedances were collected in soil samples underlying the storm-drain system along the northern Facility boundary (SB-088 and SB-089) at

depths of 9 feet bgs and 6 feet bgs, respectively. The soil samples collected from 10 and 16 feet bgs at these two respective locations contained lower levels of PCE, at concentrations below the preliminary screening criteria. There have been no reported PCE detections from soil samples collected at depths greater than 16 feet bgs.

PCE has been detected in one off-Facility soil sample at a concentration of 5.34 µg/kg, significantly below the preliminary screening criteria of 570 µg/kg. This sample was collected at a depth of 7 feet bgs immediately to the north of the Facility boundary along the sanitary sewer line to the north of the Facility (SB-104).

Concentrations in excess of the preliminary screening criteria (5.4 µg/kg) of 1,1-DCE were detected in samples collected below 3 feet bgs in three areas on the Facility. The first area is within the paint shop in Building 1979 (SB-008, SB-124, and SB-174).³³ The second area is along the storm-drain system along the northern Facility boundary (SB-083, SB-084, SB-085 and SB-086). The third area where 1,1-DCE was detected in soils at a concentration above the preliminary screening criteria is near the former paint shop in Building 1967 (SB-019).

5.2.1.2.2 VOC Detections Below the Preliminary Screening Criteria

PCE, TCE, and 1,1-DCE were detected in deeper soils at concentrations below the preliminary screening criteria. These soils were generally located within the area of the Building 1979 Paint Shop, the storm-drain system along the northern Facility boundary, and the western area of Building 1972. There were no detections of 1,1-DCE in any off-Facility soil samples.

In addition to PCE, TCE, and 1,1-DCE, the following additional VOCs were detected in deeper soils within the Facility boundaries at concentrations above their reporting limits, but at concentrations below their respective preliminary screening criteria: 1,1,1-TCA, 1,1-DCA, cis-1,2-DCE, methylene chloride, acetone, Freon 113, MEK, and toluene.

³³ 1,1-DCE was also detected below the reporting limit (12.5 µg/l) and potentially above the preliminary screening criteria at one additional location (SB-123) immediately to the west of Building 1979.

The distributions of the chlorinated aliphatics, 1,1,1-TCA, 1,1-DCA, and cis-1,2-DCE, are discussed below. Methylene chloride was detected adjacent to the storm-drain system along the northern Facility boundary and within the chrome plating area.³⁴ Acetone was detected in the chrome plating area and in the Safeway Shopping Center parking lot.³⁵ Freon 113 has been detected in samples collected from the area along the storm-drain system along the northern Facility boundary and south and east of Building 1964 Plating department. MEK was only detected off-Facility in the Safeway Shopping Center parking lot and toluene was only detected in the chrome plating area.

1,1,1-TCA was not reported above the preliminary screening criteria (63,000 µg/kg) in samples collected at depths of more than 3 feet bgs, and was not detected at any level in samples collected below 16 feet bgs. 1,1,1-TCA was predominantly detected in soil samples in areas typically associated with the paint shops, Building 1973, and along the northern Facility boundary. 1,1,1-TCA has not been detected in off-Facility soil sampling locations.

1,1-DCA was not detected in deeper soil samples at concentrations above the preliminary screening criteria (330 µg/kg). 1,1-DCA was detected at low levels in soils in the paint shop areas, along the northern drainage ditch, and in the plating area. The majority of the reported 1,1-DCA detections were within the top 6 feet bgs, with all detections limited to the upper 16 feet bgs. 1,1-DCA was detected at an estimated concentration below the reporting limit (< 5.0 µg/kg J_o) in only one soil sample collected from an off-Facility location adjacent to the storm-drain system along the northern Facility boundary on the east side of Main Street (SB-093).

Cis-1,2-DCE was not detected above the preliminary screening criteria (4,300 µg/kg) in deeper soils. However, it is a degradation product of other VOCs (PCE and TCE) that were detected at

³⁴ Methylene chloride was also detected at levels below the reporting limit in the following additional areas: Building 1979 Paint Shop, area to west of Building 1979, and in the Safeway Shopping Center parking lot.

³⁵ Acetone was also detected at levels below the reporting limit at numerous locations, both on- and off-Facility.

concentrations exceeding the preliminary screening criteria. The distribution of cis-1,2 DCE is similar to the distribution of PCE and TCE in Site soils.

5.2.2 Petroleum Hydrocarbons in Soil

The Remco Facility was known to utilize diesel and gasoline as fuel sources (e.g., for vehicles and boilers). Petroleum hydrocarbons were also used as lubricants and coolants. In addition, waste oils may have been used on unpaved areas to mitigate dust. In order to determine the potential impact of these activities, soil samples were collected and analyzed for TPH-gasoline, TPH-diesel, and TPH-motor oil. These analyses quantify the amount of hydrocarbons within a specific carbon range, for example TPH-diesel quantifies the total hydrocarbons existing within the diesel range (the diesel range is established by the laboratory based on the California LUFT Manual [State Water Resources Control Board (SWRCB), 1989] and USEPA Method 8015 Modified (USEPA, 1998). It is important to note, however, that many organic compounds consist of hydrocarbons (i.e., a structure containing bonded hydrogen and carbon molecules). Analytical procedures for TPH are not exclusive of these other potentially interfering organic compounds (naturally occurring or otherwise). Therefore, TPH analyses may quantify compounds not necessarily associated with petroleum products.

To address the potential for non-petroleum hydrocarbons to be classified as petroleum products, an extensive review has been conducted on data collected during the RI as part of the data validation process. The review of analyses for petroleum hydrocarbons in soil did not indicate that non-petroleum related hydrocarbons had been quantified during TPH analyses. Thus, the values reported for the TPH analyses are considered representative of petroleum hydrocarbons, as illustrated in [Figure 5-3](#). Additional information on the review of the TPH data is provided in the QA/QC Assessment ([Appendix 5-3](#)).

A total of 192 soil samples were collected and analyzed for petroleum hydrocarbons as follows:

- Seven surface soils (0 to <0.5 feet bgs)
- 76 shallow soil samples (0.5 to 3.0 feet bgs)
- 103 deeper soil samples (> 3.0 to 15.0 feet bgs)

Sampling for petroleum hydrocarbons in soil included analysis for TPH-diesel, TPH-gasoline, and TPH-motor oil, as shown in [Tables 5-1-1a](#) and [5-1-1b](#). [Tables 5-2-2a](#) and [5-2-2b](#) summarize the results of laboratory analysis of subsurface and surface soil samples. There is no established soil screening criteria for TPH, however, the RWQCB has established default soil removal guidelines for soil based on conservative leaching models (SWRCB, 1989). According to the RWQCB “scoring” analysis, using information for soil conditions at the Site, the guidance indicates concentrations of TPH-gasoline less than 10 mg/kg and TPH-diesel less than 100 mg/kg will likely not cause a threat to groundwater. [Figure 5-3](#) illustrates TPH detections in soil samples collected at the Site, along with areas that exceed 10 mg/kg and 100 mg/kg for TPH-gasoline and TPH-diesel, respectively. Analytical results indicate that the areas exceeding these thresholds are presently confined within the Facility boundaries.

Low levels of TPH (both as diesel and heavier motor oil fractions) were detected in a number of soil samples at the Site. Concentrations of TPH-diesel detected range from below the reporting limit (<5.0 mg/kg) to 8,560 mg/kg. The primary areas found with TPH exceeding 100 mg/kg are depicted on [Figure 5-3](#) and include the following:

- Building 1964, Plating Department and surrounding area. Former location of a 7,500-gallon diesel UST and associated piping (SB-020; 648 mg/kg, SB-060; 1,160 mg/kg)
- Building 1962 near the location of a cutting oil sump (SB-163, 5,540 mg/kg)
- Along the storm-drain system north of Building 1973 along the path of the former underground diesel fuel line (SB-090, 213 mg/kg)
- Building 1973 near the location of former sub-grade trenches (SB-195 8,560 mg/kg)
- Building 1979 Paint Shop near the location of a 1981 release from the diesel fuel line (SB-141, 3,290 mg/kg)

Other detections of TPH-diesel were noted throughout the Site in a more sporadic distribution at concentrations above and below 100 mg/kg. The detection of TPH-diesel in SB-110 next to Baechtel Creek is likely unrelated to Facility operations given that TPH-diesel was not reported above the reporting limit in other samples collected between the Facility and this location.

TPH-motor oil was analyzed in areas of the Facility where oils were used. TPH-motor oil was only detected in two areas of the Facility and ranged from 10.2 to 11,500 mg/kg. The larger area is to the north, east and southeast of the chrome plating area, Buildings 1945 and 1962, and adjacent to the storm-drain system along the northern Facility boundary. The second area is within the southwest portion of Building 1973 and the northwest portion of Building 1975.

TPH-gasoline was analyzed at a lower frequency, relative to TPH-diesel and TPH-motor oil, and was only detected above the 1.0 mg/kg laboratory reporting limit in two samples located near Building 1964 (Plating department) at concentrations of 11.8 mg/kg and 314 mg/kg.

Although the discussion above focuses on the results of TPH analyses, it is important to note that the assessment of health risks and the development of cleanup goals typically focus on individual chemicals contained within the petroleum products, rather than the TPH itself. That is, TPH concentrations indicate potential areas of concern, but are typically not the sole criteria used to define areas that require remediation. The following are the PCOCs, which are typically contained in petroleum products:

Petroleum Hydrocarbon Product	Chemicals within Petroleum Hydrocarbon Product
Diesel fuel	PAHs
Gasoline	Aromatic hydrocarbons (benzene, toluene, xylenes, and ethylbenzene) and MTBE
Motor oil (product and waste)	PAHs and metals
Lubricating oil/cutting oil (product and waste)	PAHs, metals and potentially PCBs

The former diesel line and UST are the predominant potential sources for TPH-diesel at the Site. PAHs were analyzed for and detected in soil samples located along this former diesel line and adjacent to the former diesel UST (Figure 5-4). This data indicates that PAHs are associated with the petroleum hydrocarbon impacts seen in these areas. Soil samples collected from locations to the south of the diesel line and UST, without significant TPH impact, were tested for

PAHs. No PAHs were detected in these samples. Results of other soil samples tested for PAHs are discussed below in [Section 5.2.3](#).

Aromatic hydrocarbons such as BTEX were analyzed in soil and groundwater samples along with other VOCs. As discussed above, TPH-gasoline was detected in two soil samples near the Building 1964 Plating department. Benzene was detected in groundwater in this area (monitoring well W37A) at concentrations exceeding the preliminary screening criteria of 0.14 µg/L in groundwater. Other aromatic hydrocarbons were not detected above the reporting limits in this location. MTBE was not detected in soil samples at concentrations above the reporting limit.

The results for VOCs in soils have been discussed previously in [Section 5.2.1](#). The results for VOCs in groundwater and the distribution of benzene in A-Zone groundwater are discussed further in [Section 5.3.1](#).

Soil samples were collected and analyzed for PCBs in areas with the potential to be impacted by lubricating and cutting oils. These areas include hazardous material storage areas, sumps, and trenches (which historically contained waste oils) and locations adjacent to electrical transformers. The only reported detections of PCBs were associated with the petroleum hydrocarbon impacts identified at the cutting oil sump (Building 1962). The TPH fingerprint reported in the area of the cutting oil sump resembles neither of the patterns for TPH-diesel nor TPH-motor oil identified in other soil samples.³⁶ Characteristically, the TPH chromatogram for samples collected in this area is significantly different than the TPH chromatograms for samples in other areas at the Facility indicating that the petroleum hydrocarbon, and therefore the associated PCB impact, is unique to the cutting oil sump in Building 1962.

³⁶ The laboratory methods for the determination and reporting of TPH compounds is explained in [Appendix 5-3](#).

5.2.3 Polynuclear Aromatic Hydrocarbons in Soil

A total of 44 soil samples were collected from depths of 1 to 14 feet bgs and analyzed for PAHs by USEPA Method 8310, as part of the RI and related activities. [Table 5-2-5](#) summarizes the results of laboratory analysis of soil samples for PAHs.³⁷ [Figure 5-4](#) illustrates the positive detections of PAHs (including naphthalene USEPA Methods 8260 and 8310). A statistical summary of the soil samples analyzed for this constituent group is included in [Table 5-1-1b](#).

Three constituents of the PAH chemical group were detected in soil at the Site: benzo(a)anthracene, indeno(1,2,3)pyrene, and naphthalene. The only detection of benzo(a)anthracene reported was at a concentration of 125 µg/kg from a soil sample collected on the Facility property at SB-020 at a depth of 10 feet bgs. The only detection of indeno(1,2,3) pyrene reported was at a concentration of 114 µg/kg from a soil sample collected on the Facility property at SB-044 at a depth of 10.5 feet bgs. Both detections exceeded the preliminary screening criteria of 62 µg/kg and were in on-Facility locations known to be affected by releases of diesel. SB-020 is located adjacent to the location of a former diesel UST east of the Plating area and SB-044 is located in the Building 1979 Paint Shop adjacent to the sub-surface diesel line ([Figure 3-4](#)).

Naphthalene was detected at four locations in soils. Three of the locations are on the Facility as follows:

- 1) east of the Paint Room in Building 1979 (SB-125);
- 2) in Building 1973 (SB-171); and
- 3) near the storm-drain system former diesel fuel line (SB-058).

³⁷ As discussed in [Section 5.2.1.1](#), naphthalene is an analyte that is included in both USEPA Method 8310 (PAHs) and USEPA Method 8260 (VOCs). Detections of naphthalene by EPA Method 8260 are discussed with the PAH results by EPA Method 8310.

The fourth detection of naphthalene in soils was off-Facility in the Safeway Shopping Center parking lot (SB-135).³⁸ None of the naphthalene detections exceeded the preliminary screening criteria (5,600 µg/kg). The naphthalene detections at SB-135 and SB-125 are co-located with TPH-diesel detections.

5.2.4 Polychlorinated Biphenyls in Soil

A total of 40 soil samples were collected from 2 to 11 feet bgs and analyzed for PCBs as part of the RI and related activities. [Table 5-2-6](#) summarizes the results of laboratory analysis of soil samples for PCBs. A statistical summary of the soil samples analyzed for this constituent group is included in [Table 5-1-1b](#).

Soil samples were initially collected and analyzed for PCBs as described in the RI/FS Work Plan (Henshaw, 1998d). These sampling locations were based on the locations of potential historic operations, such as dust suppression (Category 7) and the storage and use of lubricating oils and coolants (Category 8). A total of five locations (SB-001, -009, -020, -025, and -039) were sampled during this initial phase. This initial phase of the investigation did not indicate any PCB impact in any of the primary samples collected.³⁹

At a related Phase I investigation at an off-Facility location (266 Shell Lane), state regulators identified and sampled drums owned by Remco. The analyses of these drums indicated the presence of PCBs (Montgomery Watson 2000c). In addition, PCBs were identified as potential contaminants in sumps and trenches located within the Facility during closure activities (*Sump, Pit, Tank, and Trench Closure Report*, [Appendix 2-1](#)). Based on this information and the age of the sump or trench, additional sampling was conducted adjacent to former sumps and trenches within the Facility, as discussed in [Section 3.5.8](#). Sumps and trenches associated with equipment maintenance, or known to have received oils and coolants, were specifically targeted. In

³⁸ Naphthalene was also detected at levels below the reporting limit along the former underground diesel line north of Buildings 1973 and 1979 and in the area of the motor oil/PCB-impacted soils.

³⁹ It is noted that one on-Facility QC sample (duplicate of SB-001) reported a detection of PCBs, however it could not be validated. In addition, no PCBs were detected in a co-located sample (SB-197) at this location.

addition, areas adjacent to transformers (SB-199) or electrical switching equipment (SB-194) were also targeted (Figure 3-4).

Soil and grab groundwater samples were collected at fourteen locations (SB-163 through -165, SB-168 through -170, SB-187, SB-189, SB-191 through SB-193, SB-196, SB-195, and SB-198) and analyzed for PCBs from February through April 2001. In addition, groundwater samples from monitoring wells were collected and analyzed for PCBs from B4, W7, W20A, W25A, W27A, W29A1, and W37A during February 2001.

One constituent of the PCB chemical group (Aroclor 1242) has been detected in eight soil samples, between 2 feet bgs and 6 feet bgs, collected in one area at the Facility. The highest concentration of Aroclor 1242 detected was 101 µg/kg, which exceeded the preliminary screening criteria of 22 µg/kg.⁴⁰ This sample was collected from a depth of 2 feet bgs at SB-187, located adjacent to a cutting oil sump in Building 1962. These PCB detections are associated with oil-saturated soils adjacent to the cutting oil sump. This oil exhibited a unique TPH pattern not encountered in samples collected anywhere else on the Facility, as previously discussed in Section 5.2.2.

5.2.5 Metals in Soil

Soil samples were analyzed for various metals including priority pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) and hexavalent chromium. Soil samples analyzed for metals were collected from the surface to 84 feet bgs as part of the RI and related activities as follows:

- 11 surface soil samples were analyzed for priority pollutant metals
- 42 surface soil samples were analyzed for total and hexavalent chromium

⁴⁰ Table 5-1-1b shows a maximum detection of 142 µg/kg for Aroclor-1242 at SB-001. The table also shows a single detection of Aroclor-1248 at 108 µg/kg at the same sample location. These Aroclor concentrations were detected in the duplicate sample collected at SB-001; the primary sample at SB-001 did not detect either Aroclor at the detection level of 33.0 µg/kg.

- 106 shallow and deeper soil samples were analyzed for priority pollutant metals
- 304 shallow and deeper soil samples were analyzed for total chromium
- 314 shallow and deeper soil samples were analyzed for hexavalent chromium

Tables 5-2-3a and 5-2-3b present the analytical results for chromium (total and hexavalent) detected in soils. Tables 5-2-4a and 5-2-4b present the analytical results for all other remaining metals detected soil samples. Figures 5-5, 5-6, and 5-7 illustrate the detections of hexavalent chromium in surface soils (0 to 0.5 feet bgs), shallow soils (0.5 to 3 feet bgs), and deeper soils (3 to 84 feet bgs), respectively. Figures 5-8 and 5-9 present the detections of total metals detected in surface and shallow soils (0 to 3 feet bgs) and deeper soils (3 to 84 feet bgs), respectively. Lastly, statistical summaries of the detected metals in soils are provided in Table 5-1-1a for surface soils and 5-1-1b for subsurface soils collected from depths at or greater than 0.5 feet bgs.

All the metals detected, with the exception of hexavalent chromium, are naturally occurring in Site soil. As expected, metals have been detected in all soil samples at the Site. In order to evaluate the potential impact of the Facility operations on the concentrations of metals in soil samples, it was necessary to characterize the naturally-occurring concentrations of metals in Site soils. This was completed during the RI and the information gathered was used to develop background concentrations to be used during the evaluation of the Site (Appendix 3-2).

Background concentration for metals were estimated based on the 95 percent upper tolerance limit (“UTL”) for concentrations in the background soil. Based on the definition of the 95 percent UTL, it is expected that some samples (approximately five percent), which are not impacted from Facility operations, would exceed the 95 percent UTL. Therefore, use of the 95 percent UTL to define Site background concentrations is considered to be a conservative estimation of Site background concentrations. The estimated background metals concentrations will likely be further evaluated as part of the upcoming Risk Assessment.

5.2.5.1 Hexavalent Chromium

A total of 356 soil samples were analyzed for hexavalent chromium. A total of 42 of these samples were collected from surface soils (less than 0.5 feet bgs), while 91 samples were collected from shallow soils (0.5 to 3 feet bgs), and 223 samples were collected from deeper soils (greater than 3 feet bgs). The vast majority of hexavalent chromium in soils was found to exist within Facility boundaries. The distribution of hexavalent chromium in soil samples is discussed below.

5.2.5.1.1 Hexavalent Chromium in Surface Soil

Forty-two surface soil samples were analyzed for hexavalent chromium as part of the RI and related activities, as depicted in [Figure 5-5](#). Hexavalent chromium was detected in only one surface soil sample, which was collected near the southwest corner of the Facility (SS-31), at a concentration of 0.828 mg/kg. No surface soils exist within the chrome plating area (Building 1964).⁴¹ However, elevated hexavalent chromium was detected in shallow soils immediately underlying the concrete flooring as described below.

5.2.5.1.2 Hexavalent Chromium in Shallow Soil Samples

Hexavalent chromium was detected in shallow soil samples (0.5 to 3 feet bgs), predominantly in the chrome plating area at concentrations up to 49 mg/kg (SB-057). Additional lower level detections were observed at three other locations. One of these locations is on-Facility to the south of Building 1986 (SB-026), the other two locations are off-Facility in the Luna Apartments parking lot (SB-068) and north of the former plating area in Building 1964 (SB-181). The hexavalent chromium detection at the Luna Apartments was 0.627 mg/kg and was collected from SB-068 at 1 foot bgs. It is noted that this sampling location is underneath the paved parking lot, and as such, there are no impacted soils exposed at the surface in this area. The hexavalent chromium detection north of Building 1964 was 0.148 mg/kg [below the California Residential Preliminary Remediation Goal (“PRG”) of 0.2 mg/kg] and was collected at a depth of 0.5 feet bgs from SB-181. A surface soil sample collected from a depth of 0.2 feet bgs at this same

⁴¹ The concrete in the plating area is at least six inches thick and therefore no surface soils exist in this area.

location did not detect any hexavalent chromium. In addition, another surface soil sample collected within 10 feet to the north of SB-181 did not detect any hexavalent chromium.

5.2.5.1.3 Hexavalent Chromium in Deeper Soil Samples

Hexavalent chromium was detected in deeper soil samples predominantly in the plating area, as depicted in [Figure 5-7](#). The concentrations and detections of hexavalent chromium in deeper soils decrease significantly away from the chromium plating area in both lateral and vertical directions. The maximum reported concentration of 158 mg/kg detected for hexavalent chromium was reported in a sample collected from the eastern portion of the plating area (SB-056 at a depth of 11 feet bgs). The deepest sample in which hexavalent chromium was detected was also collected from the plating area. A concentration of 0.2 mg/kg of hexavalent chromium was reported from a sample collected at 67 feet bgs in boring SB-043.

Hexavalent chromium was detected in deeper soils from two other on-Facility locations, both near the northern storm-drain system (SB-084 and SB-051). However, concentrations detected in these two samples are significantly less than concentrations detected in the chrome plating area.

5.2.5.2 Total Chromium

Of the 346 soil samples analyzed for total chromium, 42 of the samples were collected in surface soils, 83 samples were collected from the shallow soils and 221 samples were collected from deeper soils. Because chromium is a naturally occurring metal in soils, it was detected in all samples. As discussed in [Appendix 3-2](#), the Willits Trust has estimated the naturally occurring background concentration (95 percent UTL) for chromium in soils to be 117 mg/kg. The distribution of total chromium in the Site soils above the estimated background concentration is discussed below for surface, shallow and deeper Site soils.

5.2.5.2.1 Total Chromium in Surface Soils

Forty-two surface soil samples were analyzed for total chromium. There were five detections of total chromium above the estimated background concentration of 117 mg/kg. These samples were collected from the following locations: south of Building 1962 (SS-32) near where Remco

had historically plated a hydraulic cylinder in 1971 (see [Section 2.3.1.2](#)), two locations east of the chrome plating area along the northern storm-drain system (SS-33 and SS-35), one location near the southwest corner of the Facility (SS-31), and one location to the south of the Facility, immediately north of Walnut Street (SS-09).

5.2.5.2.2 Total Chromium in Shallow Soils

Total chromium was analyzed for and detected in shallow soil samples as illustrated on [Figure 5-8](#). Total chromium in shallow soils in excess of the estimated soil background concentrations were only detected in and around the metal plating area and in soils adjacent to the northern storm-drain system east of the chrome plating area.

5.2.5.2.3 Total Chromium in Deeper Soils

Total chromium samples were collected and analyzed in 221 deeper soil samples as shown on [Figure 5-9](#). With one exception, the detections of total chromium at concentrations higher than the estimated soil background concentration are in the chrome plating area.⁴² Furthermore, the total chromium concentrations generally decrease with depth, with no sample containing total chromium in excess of the estimated background concentration below 34 feet bgs. The lateral extent of chromium above the 95 percent UTL within the 25-35 feet bgs interval is limited in extent to the immediate vicinity of the two deeper plating tanks (Tank Nos. 6 and 7).

5.2.5.3 Other Metals (Excluding Chromium)

A total of 117 soil samples were collected and analyzed for priority pollutant metals (11 surface soil samples and 106 shallow and deep soil samples). Soil samples were collected at depths to 84 feet bgs. Copper, lead, and zinc were detected in all samples including those used to estimate background concentrations at the Site. The frequency of detection for the other metals varies ([Tables 5-1-1a](#) and [5-1-1b](#)). Antimony, arsenic, cadmium, copper, lead, nickel, and thallium exceeded their respective preliminary screening criteria at one or more sample points. Zinc was not detected above its preliminary screening criteria, but is known to have been used at the

⁴² Total chromium was detected at 222 mg/kg in a soil sample collected from 10 feet bgs at SB-012, located in the welding shop.

Facility. Metals known to be used at the Site or detected at concentrations exceeding their respective preliminary screening criteria are discussed below.

5.2.5.3.1 Antimony

Antimony was detected above the preliminary screening criteria (6 mg/kg; estimated 95 percent UTL of Site background) in only two soil samples. Antimony was detected at 57.6 mg/kg J⁴³ in one of the soil samples collected from a depth of 1 foot bgs adjacent to the former above-ground plating tanks (SB-150). Antimony was detected in the second sample at 10.2 mg/kg at a depth of 1 foot bgs at SB-151, approximately 17 feet east of the former above-ground plating tanks.

5.2.5.3.2 Arsenic

Arsenic is naturally occurring in soils and was detected in all but one of the soil samples analyzed at the Site. However, arsenic was not detected in any surface soils at concentrations in excess of the preliminary screening criteria of 8.29 mg/kg (estimated 95 percent UTL of Site background). Arsenic was detected in one shallow and four deeper soil samples at concentrations above the 95 percent UTL. The one shallow soil location is SB-143, approximately 100 feet east of the chrome plating area along the northern storm-drain system. The four deeper soil locations are as follows: SB-010 and SB-015 adjacent to the northern storm-drain system; SB-12 located in the central area of Building 1975; and SB-019 located in the southeast corner of Building 1967.

5.2.5.3.3 Cadmium

Cadmium plating was conducted at the Facility. The areas within Building 1964 where cadmium plating occurred are indicated on [Figure 2-4](#). Cadmium was detected in seven samples exceeding the preliminary screening criteria of 0.9 mg/kg (10 percent of the residential PRG for soils). These exceedances were detected in both surface and shallow soil samples in the following locations: north of the chrome plating area (SB-20 and SB-134 at 2 feet bgs), adjacent to the northern storm-drain system [SB-181 at 0.5 feet bgs, SS-33 at the surface, SB-142 (2 and 3 feet bgs)], and to the south of Building 1967 (SS-32 at the surface).

⁴³ J is a validation flag generally indicating an estimated value, see [Appendix 5-3](#) for a detailed explanation.

5.2.5.3.4 Copper

Copper was detected at two locations at concentrations above the preliminary screening criteria of 290 mg/kg (10 percent of the residential PRG for soil). One of these samples was collected at a depth of 2 feet bgs at SB-134, located immediately north of the Building 1964. The second sample was collected at the surface, south of Building 1967 (SS-32).

5.2.5.3.5 Lead

Lead is also naturally occurring at the Site and was detected in all soil samples analyzed for lead. It exceeded the preliminary screening criteria of 40 mg/kg (10 percent of residential PRG for soil) in nine surface soil samples⁴⁴ and six shallow soil samples. Three of the surface soil exceedances were detected in off-Facility locations: north of Building 1964 (SB-181), north of Building 1973 (SB-182), and immediately west of the Facility (SB-183). The remaining six surface soil exceedances were detected in on-Facility locations: southwest corner of the Facility (SS-31), south of Building 1962 (SS-32), and east of the chrome plating area along the northern storm-drain system (SS-33 through SS-36).

The locations of the six shallow soil sample locations are described below. One exceedance was detected in a sample collected from 1 foot bgs near the former horizontal above-ground chrome plating tanks (SB-150). Two exceedances were detected from soil samples collected north of the chrome plating area, one on-Facility (SB-134 at 2 feet bgs) and the second immediately to the north of the Facility (SB-181 at 0.5 foot bgs). One exceedance was detected immediately west of the Facility's southwest corner (SB-184 at 1 foot bgs). The last two exceedances were detected north of Building 1979 (SB-007 at 1 foot bgs) and in the southeast corner of Building 1967 (SB-019 at 2 feet bgs).

5.2.5.3.6 Nickel

Nickel is also present in background soils and was detected in all but one of the soil samples analyzed at the Site. However, it exceeded the preliminary screening criteria of 161 mg/kg (95 percent UTL of Site background) in only one soil sample collected near the center of

⁴⁴ Nine out of 11 (80 percent) surface soil samples analyzed for lead exceeded the preliminary screening criteria.

Building 1975. At this location, nickel was detected at a concentration of 170 mg/kg in a soil sample collected at a depth of 10 feet bgs (SB-012). It is noted that this value is only slightly above the estimated 95 percent UTL for this metal, and is most likely representative of background conditions.

5.2.5.3.7 *Thallium*

Thallium was only detected in one soil sample above the preliminary screening criteria of 0.52 mg/kg (10 percent of residential soil PRG). At SB-181, thallium was detected at 1.06 mg/kg at a depth of 0.5 feet bgs. As stated above for nickel, the single detection of this metal at a concentration only slightly above the estimated Site background concentration (and below the residential soil PRG) is most likely representative of native conditions.

5.2.5.3.8 *Zinc*

Zinc was detected in every soil sample analyzed for metals. Although zinc metal plating was reportedly conducted at the Facility, none of the zinc detections exceeded the preliminary screening criteria of 2,300 mg/kg (10 percent of residential soil PRG), indicating that Facility operations have had no adverse effect on the concentration of zinc in soils at the Site.

5.2.6 Other Constituents in Soil

[Table 5-2-7](#) summarizes the results of other analyses performed for soil samples. The analyses performed include general minerals (calcium, magnesium, sodium, and potassium), ferrous iron, total organic carbon, cation exchange capacity, phosphorus and orthophosphate, and pH. These analyses were used to assist with the characterization of the Site and may be used in the evaluation of potential remedial alternatives.

Based on information regarding cyanide use in plating operations, eight soil samples were collected from soil borings located in the vicinity of former plating operations and analyzed for cyanide. Cyanide was not detected in the soil samples at concentrations above the reporting limit. These results are presented in [Appendix 5-1](#).

5.2.6.1 Total Organic Carbon

A total of 25 soil samples were collected from 6 to 62.5 feet bgs and analyzed for TOC as part of the RI and related activities. All of the sampling locations were located in and around the former plating area. The detected concentrations ranged from a low of 690 mg/kg (SB-048 at 10 feet bgs) to a high of 7,320 mg/kg (SB-043 at 40.5 feet bgs). TOC content of the soil tends to increase with depth with the highest concentrations being detected in the 40 feet bgs range.

5.2.6.2 General Minerals

The general minerals analyzed as a part of the RI include calcium, magnesium, potassium, phosphorus, orthophosphate, and sodium. A total of 26 soil samples were analyzed for one or more of these constituents. The samples were collected from a depth of 1 to 62.5 feet bgs. The sampling locations for these constituents are focused in and around the plating area. The following ranges of concentrations were encountered:

- Sodium was detected in soil samples at concentrations ranging from 92.7 to 160 mg/kg
- Potassium was detected in soil samples at concentrations ranging from 695 to 1,540 mg/kg
- Magnesium was detected in soil samples at concentrations ranging from 102 to 12,900 mg/kg
- Calcium was detected in soil samples at concentrations ranging from 1,960 to 3,580 mg/kg
- Phosphorous was detected in soil samples at concentrations ranging from 24.6 to 341 mg/kg
- Orthophosphate was detected in soil samples at concentrations ranging from less than the method detection limit (0.500 mg/kg) to 11.7 mg/kg

Preliminary screening criteria (soil PRGs) do not exist for these general minerals.

5.2.6.3 Ferrous Iron

A total of 26 soil samples were analyzed for ferrous iron in and around the plating area from 6 to 62.5 feet bgs. The majority of the analyses (24 of 26) reported concentrations at less than the reporting limit (<1.00 mg/kg). The only positive detections were 1.39 mg/kg and 2.22 mg/kg,

reported for samples collected from SB-038 (19.5 feet bgs) and W21A (10.5 feet bgs), respectively.

5.2.6.4 Soil pH and Cation Exchange Capacity

Soil pH was measured on eight samples collected in and around the plating area at depths ranging from 1 to 11 feet bgs. The reported values ranged from a low of 4.61 to a high of 7.86.

Cation Exchange Capacity (“CEC”) was measured on 10 soil samples collected in and around the plating area from soil borings SB-043 and SB-049 at depths ranging from 13 to 62.5 feet bgs. The reported values ranged from 24.1 milliequivalents per kilogram (“meq/kg”) to 425 meq/kg. The significance of the general mineralogy and the above parameters is discussed further in [Section 6.0](#).

5.3 DISTRIBUTION OF CHEMICALS IN GROUNDWATER

Groundwater samples have been collected from groundwater wells, including monitoring wells, piezometers, former extraction/recovery wells, and private wells in the Site vicinity. The wells installed specifically for environmental monitoring and remediation have been screened at various depths ranging from 2 to 75 feet bgs. Although well construction details for the private wells are not available, the water samples collected from these wells is assumed to be from approximately 6 feet bgs (approximate depth to water table) to 30 feet bgs (the measured maximum depth of the private wells). Grab groundwater samples have been collected at discrete depths, ranging from first encountered groundwater to a total depth of 74 feet bgs. These grab samples have been collected using various accepted methods, including HydroPunch™, temporary wells, and open bore grab sample. All of these groundwater samples were collected, handled, shipped and analyzed as described in [Section 3.0](#) and [Appendix 3-3](#).

The distribution of the chemicals in groundwater is presented and discussed by analyte group. The groundwater sampling locations are indicated on [Figures 3-2](#) (groundwater monitoring wells), [Figure 3-3](#) (grab groundwater samples), and [Figure 3-16](#) (private wells). [Appendix 5-5](#)

presents time versus concentration plots for selected parameters detected in monitoring wells at the Site.

5.3.1 Volatile Organic Compounds in Groundwater

Over 900 groundwater samples have been collected and analyzed for VOCs. Laboratory analytical reports are presented in [Appendix 5-2](#). The VOCs detected in the groundwater samples are summarized in tables as follows. [Table 5-3a-1](#) presents a summary of VOCs detected in grab groundwater samples and [Table 5-3b-1](#) presents a summary of VOCs detected in groundwater samples collected from monitoring wells. [Table 5-1-2a](#) presents a statistical analysis of constituents detected in grab groundwater samples. [Table 5-1-2b](#) presents a statistical analysis of constituents detected in groundwater monitoring well samples and [Table 5-1-2c](#) presents a statistical analysis of constituents detected in private well groundwater samples.

[Figure 5-10](#) presents the VOCs detected in A-Zone⁴⁵ monitoring wells. The monitoring well data presented in this figure is from the First Quarter 2001 semi-annual groundwater and sampling event conducted from February 18 through 24, 2001 with two exceptions. The analytical results presented for the pilot study monitoring wells are the most recent results collected prior to the pilot study injection event (initiated the week of September 25, 2000). The analytical results presented for monitoring wells W17A and W17B are from October 24, 2000 sampling event because the two samples were apparently switched during the February 2001 event (based on a review of historical and subsequent detections for the two wells). [Figure 5-11](#) presents the results of all grab groundwater samples collected from the A-Zone, including grab samples collected from finer-grained material within the A-Zone and the A/B aquitard. [Figure 5-12](#) presents VOCs detected in B-Zone groundwater samples (both grab and monitoring well) and [Figure 5-13](#) presents VOCs detected in C-Zone groundwater (both grab and monitoring well) samples.

⁴⁵ [Section 4.5.2.1](#) defines and describes the A-Zone, B-Zone and C-Zone.

A total of 51 VOCs have been detected above the reporting limit in groundwater samples collected at the Site. Ten VOCs were only detected at concentrations below the reporting limit. The reporting limits for two of these VOCs (carbon tetrachloride and hexachlorobutadiene) were above the preliminary screening criteria in one sample each (0.1 µg/L and 0.86 µg/L, respectively). Because of the low frequency of the estimated detections of these two chemicals and because they were not detected in any groundwater samples above the reporting limit, they will not be discussed in detail in the report, although all the analytical results are included in [Appendix 5-2](#).

A total of 26 of the 52 chemicals detected above the reporting limit in groundwater were detected at least once at a concentration above the preliminary screening criteria. Of these 26 chemicals, the following six chemicals were detected infrequently:⁴⁶

- 1,1,2,2-tetrachloroethane
- 1,2-dichloropropane
- bromodichloromethane
- bromoform
- isopropyl ether
- dibromochloromethane

Due to the low frequency of detections of these six chemicals, they will not be discussed in detail in the report, although the analytical results are included in [Appendix 5-2](#).

The remaining 20 chemicals which were detected at concentrations above the preliminary screening criteria can be grouped into the following six chemical classes:

- Ketones (MEK and acetone)
- Aromatics (benzene and toluene)
- Organosulfur compound (carbon disulfide)

⁴⁶ Infrequently detected is defined as three or fewer detections.

- Chlorinated aliphatics (PCE, TCE, 1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, vinyl chloride, methylene chloride, chloroethane, and chloroform)
- Chlorofluorohydrocarbons (Freon 113)
- Ethers (1,4-dioxane and MTBE)

These detections are discussed below.

Subsequent to the submittal of the Draft RI report in December 2001 to the public, data for the Main Street 76 Station were obtained from the RWQCB. The data summarize results for grab groundwater samples collected from six borings, B-1 through B-6, by Environet Consulting in January 2000 (Environet, 2000). The groundwater samples were analyzed for TPH-gasoline, TPH-diesel, TPH-motor oil, BTEX, VOCs, and five ether-based oxygenates such as MTBE. These data are summarized on [Table 5-3a-8](#). However, the data has not been included in figures depicting contaminant distribution.

5.3.1.1 Ketones

MEK and acetone are both ketones that were used at the Remco Facility. However, with one exception,⁴⁷ MEK and acetone have been detected at concentrations in excess of the preliminary screening criteria (1,900 µg/L and 610 µg/L, respectively) only within the A-Zone in the molasses injection portion of the chromium *in-situ* pilot study test area. The area around these wells was dosed with molasses to evaluate this substance for use as a remedial alternative. As discussed in the *One-Year Post-Injection Report* ([Appendix 3-8](#)), the increase in acetone in groundwater is due to a fermentation reaction that occurs as molasses is being utilized as a source of carbon and energy by the subsurface microbial population. Common soil bacteria are capable of forming intermediate products such as acetone as a result of glucose fermentation. While MEK itself is not a product of a biologically-mediated reaction, it can be formed in the presence of oxidizers (such as hexavalent chromium) in the presence of acetone. This is known

⁴⁷ Acetone was detected in a single grab sample at a concentration only slightly over the preliminary screening criteria from SB-020, located immediately north of the chrome plating area.

as a Jones Oxidation. The observed generation and subsequent rapid degradation of acetone and MEK in the pilot study test area is discussed further in [Appendix 3-8](#).

5.3.1.2 Aromatics

Benzene and toluene are aromatic hydrocarbons contained in gasoline. Benzene was detected more frequently than toluene in groundwater at the Site. Benzene was detected in 12 grab groundwater samples and nine monitoring wells at concentrations exceeding the preliminary screening criteria (0.14 µg/L, California Preliminary Health Goal). In A-Zone groundwater, benzene exceeded the preliminary screening criteria in the following areas: between Buildings 1973 and 1979; Building 1964 Plating Department; Building 1945; Building 1962; and along the storm-drain system along the northern Facility boundary north of Building 1973 and north of Building 1945.

In B-Zone groundwater, benzene exceeded the preliminary screening criteria (0.14 µg/L) at and north of the Building 1964 Plating department, off-Facility at the Luna Apartments, and in Building 1973. In C-Zone groundwater, benzene exceeded the preliminary screening criteria only in a single grab sample collected in the Building 1964 Plating department. Of these detections, the California Maximum Contaminant Level (“MCL”) (1 µg/L) was only exceeded at three locations in A-Zone groundwater between Buildings 1973 and 1979; in Building 1962; and at Building 1945. In the B-Zone groundwater the MCL was exceeded only at the Building 1964 Plating department.

Toluene was detected primarily in monitoring wells in Buildings 1964 and 1945 and sporadically in grab groundwater. Toluene concentrations exceeded the preliminary screening criteria of 40 µg/L in a single grab sample collected at SB-011 located on the western end of Building 1973. However, the detected concentration of 48 µg/L was not in excess of the California MCL of 150 µg/L.

5.3.1.3 Organosulfur Compounds

Carbon disulfide was detected at concentrations exceeding the preliminary screening criteria (0.39 µg/L; taste and odor threshold) in samples collected from five monitoring wells. Exceedances were detected in A-Zone groundwater at Building 1964 and at the Luna Apartments. Carbon disulfide was detected in shallow soil in Building 1964. Exceedances in B-Zone groundwater were detected in Building 1973 and in Building 1945. Carbon disulfide was also detected in B-Zone soil in Building 1973. The B-Zone locations of carbon disulfide detections do not correlate with A-Zone locations. Detected concentrations of carbon disulfide in both A-Zone and B-Zone groundwater were below California Proposition 65 regulatory levels and tap water PRGs, an MCL does not exist for carbon disulfide.

5.3.1.4 Chlorinated Aliphatics

PCE, TCE, 1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, vinyl chloride, chloroethane, methylene chloride, and chloroform are the twelve chlorinated aliphatic VOCs that were detected in groundwater above the preliminary screening criteria. Methylene chloride and chloroform are common laboratory-related chemicals and were detected at concentrations exceeding the preliminary screening criteria (4 and 0.16 µg/L, respectively) in groundwater.

The other 10 VOCs are commonly used as solvents or are direct degradation products of primary VOCs used as solvents (further described in [Section 6.0](#)). [Figure 5-14](#) presents the A-Zone distribution of these 10 chlorinated aliphatic VOCs (PCE, TCE, 1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, vinyl chloride, and chloroethane) shown as a total VOC plume. [Figure 5-14](#) also depicts the maximum extent of groundwater exceeding the Federal and/or California MCL, established for drinking water.⁴⁸ The visual depiction of the total VOC plume shows that VOCs exist in shallow groundwater underlying most of the Facility and in areas of the adjacent properties to the north. Further, [Figure 5-14](#) illustrates that there are four areas (on the Facility) with total VOC concentrations in excess of 1,000 µg/l, as follows:

⁴⁸ While many of these VOCs extend beyond the Facility boundaries in A-Zone groundwater, this groundwater is not being used for drinking water. Thus, drinking water thresholds or MCLs, are provided in this section for reference purposes only.

1) 1979 Building Paint Shop (and immediate area to west), 2) 1967 Building Paint Shop, 3) northern storm-drain system, and 4) Building 1973.

Figures 5-15 and 5-16 present the distribution of the same chlorinated VOCs in B- and C-Zone groundwater as presented for the A-Zone groundwater in Figure 5-14. A review of Figures 5-15 and 5-16 and the cross sections (Figure 4-6 through Figure 4-11) demonstrate that although VOCs have been detected in relatively deeper groundwater, the concentrations and lateral extent of contamination in B- and C-Zone groundwater are significantly reduced compared to the A-Zone groundwater. The only areas where deeper groundwater is impacted at levels in excess of the MCL are to the west of the Building 1979 paint shop, at and downgradient of the chrome plating area, and along the northern storm-drain alignment.

The following sections discuss the distribution of the ten chlorinated aliphatic VOCs that exceeded the preliminary screening criteria. Figures 5-17 through 5-23 consist of single (VOC) constituent figures for select chlorinated aliphatic VOCs. These figures present the results for the February 2001 monitoring well samples⁴⁹ (routine monitoring round) and the maximum detected concentrations at each location for all grab groundwater samples collected. These iso-concentration contours are presented to illustrate the distribution of each constituent. In addition, the areas exceeding the California MCL⁵⁰ for each chemical is indicated.

5.3.1.4.1 Tetrachloroethene

Figure 5-17 presents the distribution of PCE in A-Zone groundwater monitoring wells in February 2001 and the maximum PCE concentration for each grab sample location. Concentrations ranged from less than the reporting limit to a high of 10,300 µg/L (see below). The highest concentrations of PCE in groundwater were detected along the storm-drain system along the northern Facility boundary (SB-088 at 10 feet bgs reported a detection of 10,300 µg/L). Vertical profiling of the groundwater in this area was completed as discussed in Section 3.5.3.1.

⁴⁹ The analytical results presented for the temporary wells associated with the pilot study (TW1 through TW11) are from sampling events pre-dating injection events (i.e., pre September 25, 2000).

⁵⁰ Based on CCR Title 22, §64444

PCE detections generally decreased in concentrations with depth ([Table 5-3a-1](#)). Elevated levels of PCE were also detected around the Building 1979 Paint Shop, to the east of the plating area, northeast of the Hazardous Material Storage Building, and along the storm-drain system northeast of the Facility. This distribution is consistent with that noted for PCE detected in shallow soil samples.

The potential for dense non-aqueous phase liquid (“DNAPL”) was evaluated by comparing PCE concentrations in groundwater to one percent of the pure-phase solubility of PCE (USEPA, 1993). Concentrations greater than one percent of the pure-phase solubility indicate the likely presence of DNAPL, assuming the DNAPL is comprised of a single constituent (i.e., 100 percent PCE). The elevated levels adjacent to the storm-drain system indicate the likely presence of PCE as DNAPL in the A-Zone, as indicated in [Figure 5-17](#). The elevated concentrations in the area to the west of the Paint Shop and east of the Plating area also indicate the possible presence of DNAPL.

The only detection of PCE off-Facility in A-Zone groundwater in excess of MCLs occurs downgradient of the northern storm-drain system. Only low levels of PCE (levels below the MCL) were detected above the reporting limit in the B-Zone in the area of the chrome plating area and the northern storm-drain system. PCE was not detected in the C-Zone groundwater.

5.3.1.4.2 Trichloroethene

[Figure 5-18](#) presents TCE concentrations in A-Zone groundwater monitoring wells in February 2001 and maximum concentrations for all grab sample locations. Concentrations in groundwater at the Site ranged from less than the laboratory-reporting limit to a maximum detected concentration of 3,000 µg/L in an on-Facility sample. The horizontal pattern of detection of TCE generally is consistent with that of PCE (5-17). However, the TCE plume is larger than the PCE plume, indicating the potential breakdown of PCE to TCE and/or the further migration of TCE in groundwater. The TCE concentrations observed do not indicate the presence of TCE as a DNAPL at the Site. TCE contamination was also detected in on-Facility A-Zone groundwater in an area without an associated PCE detection (southwest corner of Building 1973, SB-127).

TCE was detected at low levels in B-Zone groundwater in the chrome plating area, along the northern storm-drain system, and downgradient of the northern storm-drain system (Figure 5-12). TCE detections above reporting limits in C-Zone groundwater were limited to two low concentrations in the chrome plating area, both below the MCL (Figure 5-13).

5.3.1.4.3 1,1,1-Trichloroethane

Figure 5-19 presents the distribution of 1,1,1-TCA in A-Zone groundwater monitoring wells in February 2001 and maximum concentrations for all grab sample locations. 1,1,1-TCA concentrations ranging from less than the reporting limit to 4,050 µg/L were detected in samples collected both on and off the Facility. The pattern of detection (Figure 5-19) is similar to PCE and TCE, suggesting that some of the source areas may be the same. The highest concentrations of 1,1,1-TCA were detected within the Paint Shops (Building 1979 and 1967), Building 1973, and adjacent to the storm-drain system. 1,1,1-TCA is noted to have migrated in the direction of groundwater flow, further than PCE and TCE. The concentrations of 1,1,1-TCA do not indicate the presence of 1,1,1-TCA as a DNAPL at the Site.

1,1,1-TCA was not detected in excess of the MCL within either B-Zone or C-Zone groundwater at concentrations above the MCL.

5.3.1.4.4 Cis-1,2-Dichloroethene

Figure 5-20 presents the detections of cis-1,2 DCE in A-Zone groundwater monitoring wells in February 2001 and maximum concentrations for all grab sample locations. Concentrations ranged from the reporting limit to 5,120 µg/L. Cis-1,2-DCE was detected in samples collected both on and off the Facility. Cis-1,2-DCE is a breakdown product of PCE and TCE and the pattern of detections is similar to PCE and TCE distributions. Higher concentrations of cis-1,2-DCE were detected immediately to the west of Building 1979, within the 1979 Paint Shop, northeast of the former Hazardous Material Storage Building and in the paint shop in Building 1973. Cis-1,2-DCE was also detected at concentrations above the MCL in B-Zone groundwater underlying Building 1979, to the west of Building 1979, at and downgradient of the deep chrome plating tanks, and underlying the northern storm-drain system. Cis-1,2-DCE was not detected at concentrations above the MCL in C-Zone groundwater.

5.3.1.4.5 1,1-Dichloroethene

Figure 5-21 presents 1,1-DCE in A-Zone groundwater monitoring wells in February 2001 and maximum concentrations for all A-Zone grab sample locations. Concentrations ranged from the reporting limit to 6,070 µg/L. The pattern of detections was consistent with other detections of solvents. This is expected since it is a breakdown product of TCE and 1,1,1-TCA. In the B-Zone, 1,1-DCE was also detected at concentrations above the MCL in Building 1979 Paint Shop (and to the west of Building 1979), at and downgradient of the vertical chrome plating tanks, and along the northern storm-drain system. 1,1-DCE was detected at only one location in C-Zone groundwater west of Building 1979 at a concentration above the MCL.

5.3.1.4.6 1,1-Dichloroethane

Figure 5-22 presents the 1,1-DCA concentrations in A-Zone groundwater monitoring wells in February 2001 and maximum concentrations for all grab sample locations. Concentrations ranged from the method detection limit to 2,430 µg/L (W38A). 1,1-DCA was detected in A-Zone groundwater above the MCL (5 µg/L) in the northern portion of the Facility, as illustrated on Figure 5-22. 1,1-DCA is a degradation product of 1,1,1-TCA and has a comparable distribution to 1,1,1-TCA. The highest concentrations reported on the Facility are from a monitoring well (W38A) located in the area of the former paint shop in Building 1967. 1,1-DCA was also detected at concentrations above the MCL in B-Zone groundwater to the northwest of Building 1979, at and downgradient of the chrome plating area, and along the northern storm-drain system. 1,1-DCA was also detected at concentrations above the MCL in C-Zone groundwater in the chrome plating area and to the northwest of Building 1979.

5.3.1.4.7 Vinyl Chloride

The distribution of vinyl chloride in groundwater monitoring wells in February 2001 and maximum concentrations for all grab sample locations is presented in Figure 5-23. Vinyl chloride concentrations ranged from non-detections to 6.95 µg/L.⁵¹ Vinyl chloride was detected primarily in the central area of the Facility in addition to other sporadic detections across the

⁵¹ Table 5-1-2a shows a maximum detection of 7.39 µg/L for vinyl chloride at SB-011. This detection was found in a duplicate sample. Vinyl chloride was detected at 6.95 µg/L in the primary sample collected at this location.

Facility. Vinyl chloride was detected at concentrations below the reporting limit in three samples collected off-Facility. The concentrations of vinyl chloride detected in all off-Facility groundwater samples were below the MCL. Vinyl chloride is a secondary breakdown product of other chlorinated VOCs, such as cis-1,2-DCE and 1,1-DCE, and as such, the source is likely the same as discussed previously for cis-1,2-DCE and 1,1-DCE. Vinyl chloride was not detected above the MCL in B-Zone or C-Zone groundwater.

5.3.1.4.8 1,1,2-TCA

Concentrations of 1,1,2-TCA ranged from the method detection limit to 5.98 µg/L at W21A (February 22, 2001). 1,1,2-TCA was detected infrequently compared to the other chlorinated solvents, which is consistent with the fact that it is less frequently used as a solvent. 1,1,2-TCA is used in adhesives, in the production of Teflon[®] tubing, in lacquer, and in coating formulations, and as a solvent for fats, oil, waxes, and other products. In the A-Zone, 1,1,2-TCA was primarily detected at concentrations exceeding the preliminary screening criteria of 0.20 µg/L (tap water PRG) north of the Building 1964 Plating department. The maximum detection of 5.98 µg/L slightly exceeded the California MCL of 5 µg/L. 1,1,2-TCA was not detected in B-Zone or C-Zone groundwater.

5.3.1.4.9 1,2-DCA

Concentrations of 1,2-DCA ranged from the method detection limit to 25.9 µg/L at W38A. Although the major use of 1,2-DCA is as an intermediate in the manufacture of vinyl chloride, 1,1,1-TCA, TCE, and PCE [National Institute of Environmental Health/National Toxicology Program, Central Data Management (NIEHS/NTP CDM, 1993)], 1,2-DCA is also a component of some metal degreasing mixtures. It is also a breakdown product of 1,1,2-TCA. 1,2-DCA was primarily detected above the preliminary screening criteria of 0.12 µg/L (tap water PRG) in A-Zone wells beneath and north of Building 1964, and beneath Buildings 1945, 1964, 1973, and 1979. A single low-level detection of 1,2-DCA was also reported at a concentration of 7.5 µg/L in a single groundwater sample collected from a boring at the Main Street 76 Station, to the north of the Facility. 1,2-DCA was consistently detected above the preliminary screening criteria in A-Zone groundwater at the southwest corner of the Facility. Concentrations exceeding the

preliminary screening criteria generally also exceeded the California MCL of 0.5 µg/L. In the B-Zone and C-Zone groundwater, 1,2-DCA was detected at concentrations exceeding the preliminary screening criteria at locations near the chrome plating area, the northwestern corner of Building 1979 and in the southwestern corner of the Facility.

5.3.1.4.10 Chloroethane

Concentrations of chloroethane ranged from the method detection limit to 66 µg/L. Although, less frequently detected, the pattern of detections is consistent with detections of other solvents. This is expected since chloroethane is a breakdown product of 1,1-DCA and 1,2-DCA. In the A-Zone, chloroethane was detected sporadically at concentrations exceeding the preliminary screening criteria of 4.6 µg/L (tap water PRG). In the B-Zone, chloroethane was primarily detected at concentrations above the preliminary screening criteria at well B2, located in the southwest corner of the Facility. Chloroethane was detected below the preliminary screening criteria in one sample collected from only one C-Zone well, W3, at a concentration of 0.255 µg/L.

5.3.1.5 Chlorofluorohydrocarbons

Freon 113 is the only chlorofluorohydrocarbon that was detected in groundwater. The distribution of Freon 113 in A-Zone groundwater is presented in [Figure 5-24](#). Freon 113 was predominantly detected in groundwater samples collected from the area adjacent and to the north of the storm-drain system along the northern Facility boundary and to the south and east of the Plating area. Concentrations of Freon 113 exceeded the preliminary screening criteria (1,200 µg/L, California MCL) in only two A-Zone grab groundwater samples, one A-Zone monitoring well, and one B-Zone monitoring well.

The A-Zone locations are southeast of the Plating area (SB-033) and northeast of the plating area at the Luna Apartments (SB-065 and W14A). This pattern of groundwater detections ([Figure 5-24](#)) is similar to that noted earlier for deeper soil samples (greater than 3 feet bgs). The highest concentrations of Freon 113 were reported in A-Zone groundwater south and east of the plating area. Freon 113 was reported in B-Zone monitoring well W17B located north of the

Luna Apartments on Franklin Avenue at a concentration of 1,290 µg/L in February 2001. Prior to November 2000 and in all subsequent groundwater samples, Freon 113 levels were below the reporting limit (0.5 µg/L) or at very low levels (1.15 µg/L in October 2000 for example) at this B-Zone location. Freon 113 was reported in the A-Zone pair to this well (W17A), below the reporting limit (0.5 µg/L) in February 2001. Prior to November 2000, and in all subsequent groundwater samples at W17A, Freon 113 levels were in the hundreds of µg/L range. Based on this information, it appears that the February 2001 results for W17A and W17B were switched and these results are not representative of A-Zone and B-Zone groundwater conditions at this location. No Freon 113 has been detected in C-Zone groundwater.

5.3.1.6 Ethers

1,4-Dioxane and MTBE are the two ethers that were detected in Site groundwater. The distribution of 1,4-dioxane in the A-Zone is presented in [Figure 5-25](#). The two areas where 1,4-dioxane was detected at the highest concentrations are in the southern portion of Building 1973 (near the former Paint Shop area) and to the west side of the Building 1979 Paint Shop. Concentrations ranged from the reporting limit to 2,200 µg/L reported for monitoring well W29A1 ([Figure 5-25](#)). Based on common uses of 1,4-dioxane, this chemical may have been used as a solvent stabilizer. This is consistent with the pattern of detections of 1,4-dioxane being similar to some of the other solvents detected in groundwater.

Due to high reporting limits for 1,4-dioxane using a standard USEPA laboratory analysis for VOCs (USEPA Method 8260B), a special sampling round was performed between July 31 to August 7, 2001 to collect and analyze groundwater data using a specific analytical method for 1,4-dioxane (USEPA Method 8270C) capable of reporting down to a limit of 2 µg/L. The results of these additional analyses help to better define the downgradient extent of this VOC in groundwater as illustrated on [Figure 5-24](#). [Table 5-3b-1a](#) provides the results for this additional sampling event.

1,4-Dioxane was detected above the preliminary screening criteria of 3 µg/L (California Action Level) in A-Zone groundwater at the Facility extending north to Highway 20. 1,4-Dioxane was

also detected above the preliminary screening criteria in B-Zone groundwater in Building 1973 and at Building 1964 Plating department and extending north of the Facility to the Luna Apartments. 1,4-Dioxane was detected above the preliminary screening criteria in C-Zone groundwater on the Facility property at locations similar to the B-Zone, but does not extend north of Building 1964. The extent of 1,4-dioxane in groundwater will continue to be monitored using EPA Method 8270C.

MTBE is a chemical additive to gasoline used extensively since the early 1990s. In 1981, USEPA approved the use of up to 10 percent by volume of MTBE in gasoline. A gasoline UST, formerly located to the south of the Facility ([Figure 2-5](#)), was removed in approximately 1984. Based on this information, it is possible that the gasoline stored on Site contained MTBE. However, MTBE was not detected at elevated levels immediately at and downgradient of the former gasoline UST.

The distribution of MTBE in A-Zone groundwater is presented in [Figure 5-26](#). Concentrations of MTBE ranged from the reporting limit to a maximum of 3,400 µg/L at the Main Street 76 Station. (The Main Street 76 Station data is not presented on [Figure 5-26](#).) MTBE was detected widely across the Site and in samples collected both on and off the Facility. The highest concentrations were noted in off-Facility samples north (Main Street 76 Station) and northeast (Chevron wells) of the Facility. MTBE was detected at relatively low concentrations (and rarely exceeded the preliminary screening criteria of 5 µg/L). The areas where MTBE was detected at the Facility are generally to the west and southwest of the Plating area, and adjacent to the northern storm-drain system.

5.3.1.7 VOCs Not Detected in Site Groundwater

N-nitrosodimethylamine (“NDMA”) is not a common drinking water contaminant, but has been detected elsewhere in groundwater associated with wastewater operations and military/aerospace installations. NDMA is used primarily in research and in the production of other chemicals (including rocket fuel), but has also been identified in solvents. NDMA was specifically targeted at the Site based on a concern raised by the City of Willits that this compound might be associated with chemicals used at the Facility. Groundwater samples were collected from

several monitoring wells located in and around the chromium source area based on the prevalent detections and historical use of solvents in this area. Groundwater samples collected from the following wells were analyzed for NDMA: CW, W11A, W21A, W24A, W25A, W26A, W27A, W28A, W29A, W7, and WU. NDMA was not detected in any of the groundwater samples. These results are summarized in the [Appendix 5-1](#) table titled *SVOCs In Groundwater Samples from Monitoring Wells*. NDMA is a borderline compound in terms of classification as a VOC or SVOC and has been analyzed by SVOC and VOC analytical methods. To simplify presentation of NDMA data, the results are tabulated in a SVOC table rather than included in the larger VOC table.

5.3.2 Petroleum Hydrocarbons in Groundwater

As discussed in [Section 2.4](#), the former Remco Facility was known to utilize diesel fuel, gasoline, and oil. In order to determine the potential impact associated with the use of these petroleum hydrocarbons groundwater samples were collected and analyzed for TPH-gasoline, TPH-diesel, and TPH-motor oil. These analyses quantify the amount of hydrocarbons within a range of hydrocarbons, for example TPH-diesel quantifies the total hydrocarbons existing within the diesel range.⁵² The analytical results for TPH in groundwater collected from grab samples and wells are presented in [Tables 5-3a-2](#) and [5-3b-2](#), respectively.

It is important to note, however, that all organic compounds consist of hydrocarbons (i.e., a structure containing bonded hydrogen and carbon molecules). Analytical procedures for TPH are not exclusive of these other potentially interfering organic compounds (naturally occurring or otherwise). Therefore, TPH analyses may quantify hydrocarbon compounds not necessarily associated with petroleum. In fact, review of Site data has determined that the laboratory reported detectable levels of non-petroleum related hydrocarbons as TPH (as gasoline and diesel) and included these values in the reported results.

⁵²The diesel range is established by the laboratory based on the California LUFT Manual (SWRCB, 1989) and USEPA Method 8015 Modified (USEPA, 1998).

For this and other reasons, data validation procedures performed on the data resulted in some of the data requiring qualification. This qualified data is indicated in the attached data tables and figures with data qualifier flags appended to the indicated concentration. These flags indicate a variety of conditions concerning the validity of the subject data. For example, the concentration reported for a specific chemical may be biased high or low (J- or J+, respectively) based on laboratory surrogate recoveries. A full description of data validation procedures, along with definitions of all data qualifiers is presented in [Appendix 5-3](#).

Relatively low level TPH detections (< 0.5 mg/L) are reported fairly evenly in A-Zone groundwater throughout the Site. These widespread low-level hydrocarbons detections are based on analytical results without a distinct petroleum hydrocarbon chromatogram pattern and may be associated with naturally-occurring organic (i.e., hydrocarbon) materials and not representative of petroleum hydrocarbons. TPH-diesel has been reported only sporadically at low levels in historical samples of B-Zone and C-Zone groundwater. The characteristic of this TPH was found to be inconsistent with TPH-diesel.

The TPH analytical results for the groundwater samples collected from A-Zone wells and grab groundwater samples are illustrated on [Figure 5-27](#). The pattern of TPH detection in A-Zone groundwater is consistent with that presented for soil. TPH-diesel is noted to be present throughout the Site at concentrations exceeding the preliminary screening criteria (taste and odor threshold). Significantly higher concentrations are reported in areas where fuels and oils were historically stored and used, along with areas where releases were documented.

The preliminary screening criteria for TPH-gasoline is 0.005 mg/L, which is below the method reporting limit of 0.050 mg/L. The preliminary screening criteria for TPH-diesel is 0.1 mg/L, which is above the method reporting limit of 0.050 mg/L. Based on an extensive review of the TPH analytical data (see [Appendix 5-3](#)), it was determined that chromatographic patterns below 0.5 mg/L did not have a definitive petroleum character. [Figure 5-27](#) indicates shading in areas of petroleum hydrocarbons detected in excess of 0.5 mg/L. These shaded areas are consistent with historical information regarding reported releases ([Table 2-4](#)) and field observations. Separate-phase petroleum hydrocarbons were observed during drilling and soil sampling

activities in the area in and around the former diesel UST (north of Building 1964), the area of the 1981 diesel line release (north of Building 1979), and adjacent to the cutting oil (Building 1962). The separate-phase petroleum hydrocarbons were observed to be adsorbed onto the soil matrix with no free-phase petroleum hydrocarbons observed in measurable thicknesses on the groundwater surface in temporary or permanent monitoring wells.

5.3.3 PAHs, PCBs and Pesticides in Groundwater

5.3.3.1 PAHs

Figure 5-28 summarizes the PAH analytical results for A-Zone groundwater. The analytical results for PAHs in 28 groundwater samples are presented in Tables 5-3a-1 and 5-3a-5. The analytical results for groundwater collected from wells is presented in Table 5-3b-1. The summary of detections in grab groundwater and monitoring wells, including screening criteria, is included in Tables 5-1-2a and 5-1-2b. The following six PAHs were detected in groundwater at concentrations above the preliminary screening criteria (the preliminary screening criteria are noted in parentheses):

- Naphthalene (6.2 µg/L)
- Benzo(a)pyrene (0.0015 µg/L)
- Benzo(b)fluoranthene (0.02 µg/L)
- Chrysene (0.1 µg/L)
- Dibenzo(a,h)anthracene (0.0092 µg/L)
- Indeno(1,2,3-cd)pyrene (0.092 µg/L)

PAH compounds were detected in areas where there were releases of diesel fuel. For example, PAHs were noted above the reporting limit in the area surrounding the former diesel UST and along the former diesel fuel line (along the northern property boundary).

The area around the former UST is where separate-phase petroleum product was observed during drilling operations. Elevated TPH-diesel concentrations in the groundwater in this area has reinforced these field observations. PAH compounds detected in this area are consistent with

historical releases of diesel at the noted locations. It is further noted that all of the detections of PAHs in groundwater at the Site are related to this diesel impact, except for the low-level detection of phenanthrene (0.0602 µg/L), north of the Hazardous Material Storage Building (SB-032).

A review was conducted comparing the extent of PAHs to the distribution of petroleum hydrocarbons. As discussed above, the samples collected in the areas around the diesel UST and fuel line showed detectable PAHs. Sampling locations to the south of the diesel line and UST, without significant TPH impact, showed non-detectable concentrations of PAHs. This data indicates that PAHs are likely to be detected where significant TPH impacts related to the diesel UST and fuel line occur.

5.3.3.2 PCBs

Table 5-3a-6 and 5-3b-6 summarize the detections of PCBs in grab and monitoring well groundwater at the Site. Figure 5-29 presents PCBs detected in groundwater. PCBs were only detected in one out of the 11 grab groundwater samples collected at the Facility. The detection of Aroclor 1016 in the sample from SB-163 is consistent with a heavily sedimented sample, given that PCBs were detected in the equivalent soil sample at that location. One groundwater sample from well W-7 detected Aroclor 1016, but subsequent sampling of this well did not reproduce these results. PCBs are generally not expected in groundwater samples given their very low solubility, and the detected Aroclor 1016 was most likely associated with the sediment contained in the sample.

5.3.3.3 Pesticides

Groundwater samples were collected from four locations on the Facility and analyzed for pesticides. The four wells sampled include the A- and B-Zone wells on the southwest corner of the Facility (B3 and B2 respectively) and the northeast corner of the Facility (B4 and B1 respectively). All constituents were reported at less than the reporting limit. Pesticides are not considered PCOCs at the Site, based upon Facility operations.

An analyses of the agricultural grade molasses utilized during the chromium *in-situ* pilot study reported the presence of relatively low levels of pesticides (delta-BHC and Heptachlor at 75.3 and 139 $\mu\text{g/kg}$ respectively). Groundwater samples collected on November 27, 2000 from temporary wells installed within the molasses injection area of the chromium *in-situ* pilot study (TW2, 3, 4, and 5) reported no detectable concentrations of pesticides. The results of these analyses indicate that there was no measurable effect from the injection of the agricultural grade molasses on Site groundwater. These results are presented in [Appendix 5-1](#). This issue is further discussed in the *November Status Report, In-Situ Reduction of Chromium Pilot Study* (Montgomery Watson, 2000e).

5.3.4 Metals in Groundwater

Grab groundwater samples and samples from monitoring wells were collected and analyzed for dissolved priority pollutant metals, along with hexavalent chromium. As has been discussed earlier, many metals are naturally occurring in groundwater. The statistical analysis for estimation of background concentrations for the Site is presented in [Appendix 3-2](#). Only arsenic, chromium, copper, lead, and zinc were detected in Site background samples. The other metals analyzed (antimony, beryllium, cadmium, mercury, nickel, selenium, silver, and thallium) would generally not be expected to be naturally occurring in Site groundwater samples at concentrations above the laboratory reporting limit, since they were not detected in the background samples.

Chromium compounds detected in grab groundwater and monitoring well samples are presented in [Tables 5-3a-3](#) and [5-3b-3](#), respectively. The distribution of chromium (hexavalent and dissolved) in groundwater at the Site is presented in [Figure 5-30](#) through [Figure 5-35](#). Dissolved metals detected in grab groundwater and monitoring well samples are presented in [Tables 5-3a-4](#) and [5-3b-4](#), respectively. Analytical results for antimony, arsenic, beryllium, cadmium, copper, iron, lead, manganese, nickel, silver, and zinc (except dissolved and hexavalent chromium) have been posted onto maps for the A-, B-, and C-Zones and are included as [Figures 5-36](#) through [Figure 5-38](#). [Tables 5-1-2a](#) (grab samples), [5-1-2b](#) (monitoring wells) and [5-1-2c](#) (private wells)

present a statistical summary, including the preliminary screening criteria, for all groundwater samples analyzed for metals.

5.3.4.1 Chromium

Groundwater samples were analyzed for hexavalent chromium, dissolved chromium, and total chromium. Total chromium groundwater samples are not filtered (may contain solids) and are preserved in the field with nitric acid. This sample collection procedure converts any trivalent chromium into a dissolved state. (In contrast, samples collected for the analyses of dissolved and hexavalent chromium are filtered removing all non-dissolved particles.) The total chromium results are summarized in [Tables 5-3a-3](#) and [5-3b-3](#).

The concentrations of dissolved chromium and hexavalent chromium in groundwater samples collected from the A-Zone are presented in [Figure 5-30](#). [Figure 5-31](#) shows the distribution of hexavalent chromium in A-Zone groundwater. The concentrations of dissolved and hexavalent chromium in groundwater samples collected from the B-Zone are presented in [Figure 5-32](#). The distribution of hexavalent chromium in B-Zone groundwater samples is presented in [Figure 5-33](#). The distribution of dissolved chromium and hexavalent chromium in groundwater samples collected from the C-Zone is presented in [Figure 5-34](#). The distribution hexavalent chromium in the C-Zone groundwater is presented in [Figure 5-35](#). [Figures 5-30](#) through [5-35](#) present February 2001 data for monitoring wells, unless otherwise noted.

Dissolved chromium was widely detected in groundwater samples collected at the Site. Concentrations of dissolved chromium above the preliminary screening criteria (0.0605 mg/L, Site background concentration) and the California MCL (0.05 mg/L) are present in A-Zone groundwater near the Building 1964 Plating department and to the northeast of that area of the Facility. The concentrations of dissolved chromium in groundwater samples above background levels are likely related to Facility operations, based on the Facility history and documented use of chromium in the manufacturing process.

[Figure 5-31](#) presents the areal distribution of hexavalent chromium in A-Zone groundwater. The plume is centered in the plating area and extends to the northeast, influenced by the groundwater

flow direction. Other smaller areas where hexavalent chromium was detected are noted along the storm-drain system.

Figures 5-32 and 5-33 illustrate the significant reduction in the extent and concentration of dissolved and hexavalent chromium concentrations for B-Zone groundwater samples compared to the A-Zone. The highest concentration of dissolved chromium in the B-Zone was detected in the immediate vicinity of the deep chrome plating tanks. This pattern is continued into the C-Zone, with the detections of both dissolved and hexavalent chromium within the plating area, at significantly reduced concentrations compared to the B-Zone, as illustrated by Figures 5-34 and 5-35.

The standard laboratory reporting limit for hexavalent chromium by USEPA Method 7196 is 0.005 mg/l. A special sampling event for analyses of hexavalent chromium in groundwater was performed between July 31 and August 7, 2001 utilizing USEPA Method 7199, which has a lower reporting limit of 0.001 mg/l. This special sampling event was performed to confirm the lateral extent of hexavalent chromium in groundwater at the Site. The data from this sampling event is summarized in Table 5-3b-3a. The results of this sampling event confirm previous interpretations regarding the extent of hexavalent chromium in groundwater.

5.3.4.2 Other Priority Pollutant Metals

Copper, mercury, selenium, silver and thallium were not detected in Site groundwater samples above the preliminary screening criteria. The priority pollutant metals that were detected at concentrations exceeding the preliminary screening criteria in groundwater are antimony, arsenic, beryllium, cadmium, mercury, and nickel. In addition, zinc was detected in Site groundwater, but at concentrations below its preliminary screening criteria. Figures 5-36, 5-37, and 5-38 summarize the analytical results for dissolved metals in A-, B-, and C-Zone groundwater, respectively. The distribution of these priority pollutant metals in groundwater is discussed below.

5.3.4.2.1 Antimony

Dissolved antimony was not detected in background samples and was rarely detected in Site groundwater samples. The preliminary screening criteria (0.06 mg/L) are conservatively set at the laboratory reporting limit consistent with the estimated background concentration ([Appendix 3-2](#)). Antimony was detected in 19 monitoring well samples and one grab sample. The majority of the detections occurred in the A-Zone, with three B-Zone detections, and one C-Zone detection. The maximum detection of antimony in groundwater at the Site was 2.68 mg/L reported for a monitoring well sample from TW3 (located beneath Building 1945). Antimony was detected in A-Zone groundwater in Building 1973, at and north of the Building 1964 Plating department, in Building 1945, and in Building 1979. The locations of these detections do not correlate with known Remco Facility operations. Further, based on a review of historical accounts of Facility operations, antimony is not a chemical known or suspected to have been used at the Remco Facility. Antimony was detected in one off-Facility A-Zone well located east of the Facility, across Main Street.

5.3.4.2.2 Arsenic

Dissolved arsenic was widely detected at the Site in all three water-bearing zones, indicating that arsenic is naturally occurring in Site groundwater. Arsenic exceeded the preliminary screening criteria of 0.0645 mg/L in five A-Zone samples (one grab groundwater and four monitoring well samples; three on-Facility and two off-Facility). The highest concentration of arsenic detected was 0.203 mg/L reported for a sample collected from TW5 in February 2001. Two of the other exceedances were detected at the Site in the primary and duplicate samples at nearby monitoring well TW8. Both TW5 and TW8 are located in the *in-situ* pilot study area. One of the two off-Facility A-Zone samples was a background sample (SB-102) which contained arsenic at 0.0671 mg/l. The other off-Facility sample where arsenic was detected at a concentration in excess of the preliminary screening criteria was collected at W42A in the Safeway Shopping Center parking lot. One exceedance was reported in B-Zone well W17B located off-Facility on Franklin Avenue near Main Street. No exceedances were reported for C-Zone groundwater.

5.3.4.2.3 Beryllium

Dissolved beryllium was not detected in background samples and was rarely detected in Site groundwater samples. Beryllium was only detected in six samples at concentrations which exceeded the preliminary screening criteria (0.004 mg/L, California MCL). These samples were collected from A-Zone monitoring wells north of the Building 1964 Plating department and in Building 1945. The maximum detection of beryllium in groundwater at the Site was 0.00881 mg/L reported for a monitoring well sample from TW3 (Building 1945). The locations of these detections do not correlate with known Remco Facility operations. Further, based on a review of historical accounts of Facility operations, beryllium is not a chemical known or suspected to have been used at the Remco Facility. Beryllium concentrations exceeding the preliminary screening criteria were not detected in B-Zone or C-Zone groundwater samples.

5.3.4.2.4 Cadmium

Dissolved cadmium was not detected in background samples and was rarely detected in Site groundwater samples. The preliminary screening criteria (0.0005 mg/L) are conservatively set at the laboratory reporting limit, consistent with the estimated background concentration ([Appendix 3-2](#)). All 10 detections of cadmium in monitoring well samples occurred in the A-Zone. The maximum detection of cadmium in groundwater at the Site was 0.0204 mg/L reported for a monitoring well sample from W36A (located north of the Facility adjacent to Highway 20). The highest detected concentration in a grab groundwater sample was 0.000506 mg/L detected at SB-007 (north of Building 1973). While cadmium is a metal known to have been used in plating operations at the Facility, the locations of these detections do not correlate with known Remco Facility operations.

5.3.4.2.5 Nickel

Dissolved nickel was not detected at background locations and was only occasionally detected in the A-Zone. Specifically, nickel was detected above the preliminary screening criteria of 0.1 mg/L (MCL) in the area east of the chrome plating area in temporary wells (TW1, TW4, TW5, and TW7) associated with the chromium *in-situ* pilot study. The wells in this area exhibit slightly acidic conditions (pH of 5 to 6) due to the injection of calcium polysulfide. Nickel is

soluble under acidic conditions and is likely present in this area as a vestige of the pilot study activities.

Dissolved nickel was also detected in A-Zone groundwater above the preliminary screening criteria at a single location in the breezeway east of Building 1975 (SB-146). Dissolved nickel was also detected in a single sample collected from B-Zone monitoring well W1 at the preliminary screening criteria. Dissolved nickel was not detected in C-Zone groundwater samples.

5.3.4.2.6 Zinc

Dissolved zinc was detected at background and various Site locations at a moderate frequency. However, no detections exceeded the preliminary screening criteria of 2.1 mg/L. The maximum detection of 0.383 mg/L of zinc in groundwater was reported for a sample collected from monitoring well W7 in February 2001 (located north of the Plating area). Other minor detections were noted distributed sporadically across the Site in all three water-bearing zones.

5.3.4.3 Non-Priority Pollutant Metals

Groundwater samples, primarily collected as part of the pilot study, contained concentrations of iron and manganese at concentrations exceeding the preliminary screening criteria. Iron and manganese are not priority pollutant metals. The distribution of these two metals in groundwater is discussed below.

5.3.4.3.1 Iron

Dissolved iron was frequently detected in A-Zone groundwater. It was not detected in B-Zone or C-Zone groundwater. Iron exceeded the preliminary screening criteria (0.3 mg/L) in 12 samples collected from six A-Zone monitoring wells located in the area of the chromium *in-situ* pilot study injections. As discussed in the *One-Year Post-Injection Report* ([Appendix 3-8](#)), the injection of calcium polysulfide and molasses resulted in an increase in dissolved iron concentrations, among other dissolved cations. After the groundwater conditions stabilized, iron concentrations decreased as the iron was re-absorbed onto soil.

5.3.4.3.2 Manganese

Dissolved and total manganese were frequently detected in A-Zone groundwater. Total manganese was detected in the two B-Zone monitoring wells and one C-zone monitoring well where groundwater samples were collected and analyzed for total manganese (W8B, W9B, and W8C). Dissolved manganese exceeded the preliminary screening criteria (0.05 µg/L; secondary MCL) in 33 samples collected from 15 A-Zone monitoring wells located in the area of the chromium *in-situ* pilot study. Background metals were not analyzed for manganese. As discussed in the *One-Year Post-Injection Report* ([Appendix-3-8](#)), manganese is potentially mobile under reduced conditions, but only slightly mobile under oxidized conditions. Manganese concentrations were monitored during the pilot test because they may potentially increase in both the calcium polysulfide and molasses injection areas as a more reduced environment is created in the groundwater. However, concentrations of manganese in downgradient wells have not shown increases that can be attributed to the pilot study injections. Both pre-injection and post-injection manganese concentrations exceeded the secondary MCL. Continued monitoring of manganese concentrations will occur for the pilot study.

5.3.5 Other Constituents in Groundwater

Other analyses, in addition to the chemical analyses discussed above, were performed for grab groundwater and groundwater monitoring well samples. The other analyses performed included general minerals (calcium, magnesium, sodium, and potassium), ferrous iron, total organic carbon and pH, in addition to the other physical and biological parameters. The purpose of collecting this data is to assist in the evaluation of the chromium *in-situ* pilot study and in the evaluation of potential remedial alternatives for the Site in the Feasibility Study. The analytical results for the other constituents detected are presented as [Table 5-3a-7](#) for grab groundwater samples and [Table 5-3b-5](#) for groundwater samples collected from monitoring wells.

Based on information regarding cyanide use in plating operations, 12 groundwater samples were collected from 11 monitoring wells located in the vicinity of former plating operations and analyzed for cyanide. Cyanide was detected in the November 2000 sample from TW-10 at 0.0112 mg/L. Cyanide was not detected above the reporting limit (0.01 mg/L) in

the 11 remaining samples, including the subsequent sample collected from TW-10 in December 2000. These results are presented in [Appendix 5-1](#).

5.4 DISTRIBUTION OF CHEMICALS IN STORM WATER

The following sections discuss the analytical results for storm water samples collected at the Site by chemical constituent group. The storm water collection system at the Site is illustrated in [Figure 2-2](#). Storm water sample locations are shown on [Figure 3-1](#). As described in [Section 2.5](#), storm water on the Facility property is currently collected in seven catch basins (SWD-1 through SWD-7). The catch basins direct water into a subsurface storm-drain line, which drains into the catch basin at SWD-7, and subsequently is discharged from the Facility into a City of Willits storm-drain line. After exiting the Facility, the storm-drain line crosses underneath Main Street, travels under the Safeway Shopping Center parking lot, is mixed with storm water collected from areas north and east of the Facility, and ultimately discharges into Baechtel Creek.

As discussed in earlier sections of this report, based on the concern of impacted groundwater entering the subsurface storm-drain system, the majority of the storm-drain line beneath the Facility was lined with HDPE in 1995 (see [Section 2.5.1](#)). Following the collection of a series of soil and groundwater samples along the storm-drain alignment, and samples of water entering the storm-drain system in the spring of 2000, HDPE lining of catch basins SWD-3, -4, and -5 was performed to further prevent groundwater from entering the storm-drain system.

The majority of the storm water samples, for which analytical results are included in this report, were collected from the storm-drain system by other parties prior to the Willits Trust. The Willits Trust has collected both storm water samples and storm water influent samples. Storm water influent samples are defined to include all water samples collected prior to entering the storm-drain system. Storm water samples have been collected from the seven catch basins on the Remco Facility, as well as from the outfall to Baechtel Creek.

Sample locations are presented in [Figure 3-1](#). A complete summary of the analytical results reported for the storm water samples is provided in [Appendix 5-1](#). The laboratory analytical

reports are provided in [Appendix 5-2](#), while a summary of the analytical detections for storm water samples is provided in [Tables 5-4-1a, 5-4-2a, 5-4-3a, 5-4-4a, and 5-4-5a](#). A summary of the analytical detections for storm water influent samples is provided in [Tables 5-4-1b, 5-4-2b, 5-4-3b, and 5-4-5b](#). [Table 5-1-3](#) presents a statistical analysis of constituents detected in storm water.⁵³ The distribution of the chemicals in storm water and storm water influent samples is presented and discussed by constituent group below.

5.4.1 Volatile Organic Compounds in Storm Water

As shown in [Table 5-1-3](#), up to 105 storm water samples have been collected and analyzed for VOCs. In addition, nine storm water influent samples have been collected and analyzed for VOCs. The storm water sampling locations include the seven catch basins (SWD-1 through SWD-7) located on the Facility, the off-Facility catch basin located on Main Street (SWD-8), and the outfall to Baechtel Creek (SWD-9). As indicated above, SWD-7 is the effluent location of storm water at the Facility and is also the most commonly sampled storm water location.

Summaries of the VOCs detected in the storm water and storm water influent samples are provided in [Tables 5-4-1a and 5-4-1b](#), respectively. A total of 16 individual VOCs have been detected above reporting limits in storm water since sampling began in June of 1991. Six additional VOCs were detected in storm water, but at concentrations below reporting limits. Based on a review of the historical detections, the most commonly detected VOCs include 1,1,1-TCA, PCE, and TCE and their associated breakdown products. Concentrations of three VOCs (PCE, TCE, and 1,1-DCE) have exceeded the preliminary screening criteria developed for storm water as shown in [Table 5-1-3](#). The preliminary screening criteria for PCE, TCE, and 1,1-DCE in storm water are 0.60, 0.34, and 0.26 µg/L, respectively

Storm water influent samples were collected in an effort to isolate the source of chemicals detected in the storm-drain system. Samples collected from roof drains (SWD-A, -B, and -C) indicated non-detectable concentrations of hexavalent chromium; these locations are shown on

⁵³ Storm water influent samples are not included in the statistical analysis.

Figure 3-1. Storm water influent samples were also collected from water entering catch basins from surface water runoff. These samples indicated non-detectable concentrations of hexavalent chromium and VOCs. Storm water influent samples collected from groundwater entering the storm-drain system at the junction between the HDPE liner and the concrete catch basin at SWD-3, indicated elevated concentrations of VOCs. The detected VOC constituents also exist in A-Zone groundwater along the northern Facility boundary adjacent to the storm-drain system. Based on these storm water influent samples, the VOCs detected in the storm-drain system were determined to be due to the infiltration of impacted groundwater into the storm-drain system.

During the summer of 2000, the catch basins at SWD-3, -4, and -5 were lined with HDPE. Subsequent to these improvements, there has been no evidence of any contaminated groundwater entering the storm-drain system.

Since the improvements to the storm-drain system, only low levels of VOCs have been detected in storm water samples as follows:

- 1,2,4-trimethylbenzene (“TMB”) and 1,3,5-TMB were detected at low levels (up to 1.34 µg/L) in samples collected during the first storm water sampling event after the storm-drain system improvements in 2000. These VOCs have not been detected in subsequent sampling events. It is believed that these detections may have been a vestige of the improvements completed, possibly being a temporary component of the caulking used to seal certain portions of the catch basin lining.
- Acetone and methylene chloride were detected at low levels during four storm water sampling events (October 1999, February 2000, October 2000, and November 2000). It is noted that these VOCs are common laboratory contaminants and have been detected in laboratory blanks prepared for the Remco project.
- PCE was detected at concentrations up to 4.36 µg/L in the October, November, and/or December 2000 sampling events in samples collected from SWD-1 through SWD-5.

VOCs have not been detected in storm water samples collected from SWD-7 (effluent from the Facility) since the above mentioned improvements have been completed, indicating that the improvements have been successful in preventing off-Facility migration of VOCs through storm water.

Storm water samples collected from the outfall into Baechtel Creek (SWD-9, also referred to as “outfall” in historical sampling) indicated maximum historical detections of VOCs in 1994. VOCs have not been detected in storm water samples collected from SWD-9 since the above-mentioned storm-drain system improvements were completed (Tables 5-4-1a and 5-4-1b).⁵⁴

5.4.2 Petroleum Hydrocarbons in Storm Water

Storm water samples collected during the RI activities along with historical samples have been analyzed for TPH-diesel on 33 occasions and TPH-motor oil on seven occasions (Table 5-1-3). These results are summarized on Table 5-4-2a. Storm water influent samples collected during the RI have been analyzed for TPH-diesel on eight occasions and TPH-motor oil on seven occasions (Table 5-4-2b).

A review of the analytical data indicates that TPH-diesel was detected in 25 out of 33 storm water samples. As shown on Table 5-1-3, the concentrations detected appear to be relatively minor, ranging from 0.0566 mg/L to 1.76 mg/L. In addition, the reported detections do not indicate any pattern, but are similar to TPH-diesel concentrations reported for all sampling location. TPH-diesel was detected in seven of the eight storm water influent samples at concentrations ranging from 0.517 to 0.205 mg/L. TPH-motor oil was detected in two of the eight storm water influent samples at concentrations ranging from 0.272 to 0.479 mg/L.

Storm water and storm water influent samples collected between October 2000 and April 2001 were noted to contain hydrocarbons that were not consistent with petroleum hydrocarbons. These data were qualified in accordance with the methods used to evaluate TPH data for the RI as summarized above in Section 5.2.2, and are further described in Appendix 5-3. In addition, the data collected from storm water locations in 1998 are also consistent in describing the detections of TPH as “unknown,” or characteristically not representative of TPH-diesel (Henshaw, 1998a). Based on these early detections of “unknown hydrocarbons” and the results

⁵⁴ Based on a December 2000 sampling event

of the later detailed evaluation of TPH data for the Site, it is likely that the TPH-diesel detections reported for the storm water influent and storm water samples collected during the January 1999 and October 2000 sampling events are also not representative of petroleum hydrocarbons.

5.4.3 Metals in Storm Water

Storm water samples collected during the RI activities, along with historical samples, have been analyzed for metals including chromium (hexavalent, dissolved and total), iron (dissolved and total), and dissolved arsenic, beryllium, copper, mercury, and zinc. Stormwater influent samples were analyzed for dissolved chromium, total chromium, and hexavalent chromium. [Table 5-1-3](#) illustrates that the most commonly analyzed metal in storm water has been hexavalent chromium (analyzed 105 times). Detected analyte results are summarized in [Tables 5-4-3b](#) for storm water influent and [5-4-3a](#) and [5-4-4a](#) for storm water samples. The sample locations include the seven catch basins (SWD-1 through SWD-7) located on the Facility, the catch basin located on Main Street (SWD-8), the outfall to Baechtel Creek (SWD-9), and three downspouts located on the north side of the building (SWD-A, -B, and -C). As indicated above, SWD-7 is the effluent location of the storm-drain system at the Remco Facility.

Hexavalent chromium exceeded the preliminary screening criteria (0.016 mg/L) in 24 storm water samples and has been historically detected at all storm water catch basins except SWD-1. The majority of the detections (25 of 38 detections) occurred before 1997, with a maximum detection of 0.66 mg/L reported for SWD-7 in March 1993. A sample collected on April 24, 1994 at the outfall to Baechtel Creek reported a detection of 0.13 mg/L of hexavalent chromium. Since August 1997, hexavalent chromium has been detected in storm water samples collected from SWD-7, but at concentrations below the preliminary screening criteria. The occurrence of dissolved chromium in storm water is generally similar to hexavalent chromium. Hexavalent chromium was not detected in any storm water influent samples.

Total chromium is commonly detected in storm water samples, with a maximum detection of 0.922 mg/L reported for a sample collected from SWD-6 on December 14, 2000. Total chromium was detected in five of the nine storm water influent samples at concentrations

ranging from 0.00661 to 0.402 mg/L. It should be noted that total chromium detected in storm water samples may represent the presence of naturally-occurring chromium contained in soil particles that may be collected along with the storm water, rather than contamination from the Facility.

Hexavalent chromium has not been detected in storm water exiting the Facility or in the outfall to Baechtel Creek (SWD-7 or SWD-9) since storm-drain improvements were completed by the Willits Trust in 2000. Storm water samples collected from locations upstream of the storm water effluent location (SWD-7) at the Facility (SWD-2, -3, -4, and -5) have reported hexavalent chromium concentrations below the preliminary screening criteria, with the sole exception of SWD-4 at 0.0222 mg/L. Based on the location (not contiguous to hexavalent chromium groundwater plume) and the low concentrations of these detections, they are not believed to be due to groundwater entering the storm-drain system.

A total of 13 storm water samples were analyzed for manganese, iron, and zinc from October 2000 through February 2001. These samples have been collected as a part of the chromium *in-situ* pilot study ([Appendix 3-8](#)) and are discussed here for completeness. Total iron and manganese were detected in all samples analyzed. Dissolved manganese was detected near the reporting limit (0.01 mg/L) in four out of eight samples. Dissolved zinc was tested for and detected once at 0.265 mg/L in SWD-7. These results are presented in [Table 5-4-4a](#).

5.4.4 Other Parameters in Storm Water

Storm water influent and storm water samples have also been analyzed for additional organic and inorganic parameters. For storm water influent samples, these parameters include TSS and TOC. For storm water samples, these parameters include alkalinity (total and bicarbonate), chloride, dissolved calcium, potassium, sodium, nitrate, pH, total dissolved solids (“TDS”), TSS, sulfate, sulfide, total calcium and sodium, and TOC. The analytical results are presented in [Table 5-4-5a](#) for storm water samples and [Table 5-4-5b](#) for storm water influent samples. Most of the parameters presented were analyzed as a part of the frequent storm water sampling during the chromium *in-situ* pilot study, as mentioned above. These samples were collected in the storm

drain adjacent to the chromium *in-situ* pilot study area in the three months (October through December 2000) following the injection event.

Storm water samples have also been analyzed for TSS and TOC, consistent with the SWPPP prepared for the Facility (Montgomery Watson, 2000b). The reported values are all consistent with the conditions of the General Permit, issued by the State Water Resources Control Board. The pH and TDS have been collected in the past in a manner consistent with previous RWQCB orders and are included here for completeness.

5.5 DISTRIBUTION OF CHEMICALS IN SURFACE WATER

A total of 23 surface water samples were collected from the South Drainage Ditch, Baechtel Creek, and Broaddus Creek. Sample locations are presented on [Figure 3-1](#). The distribution of the chemicals in surface water is presented and discussed by constituent group. A summary of analytical detections is presented in [Tables 5-5-1, 5-5-2, and 5-5-3](#). A complete tabulation of the analytical results is included in [Appendix 5-1](#).

5.5.1 Volatile Organic Compounds in Surface Water

Seventeen surface water samples were analyzed for VOCs. The locations of these samples are indicated on [Figure 3-1](#) and a summary of the detections is provided in [Table 5-5-1](#). VOCs detected in surface water were 1,1,1-TCA, 1,1-DCA, chloroform, cis-1,2-DCE, MTBE, PCE, and TCE. The maximum concentrations of the VOCs were all detected in the sample collected at SDD-2 (December 1997) located in Baechtel Creek, below the railroad trestle and upstream of the storm drain effluent from the Remco Facility. The PCE concentration of 0.84 µg/L was the only VOC detection above the preliminary screening criteria of 0.80 µg/L. MTBE was also detected in sample SW-03 at a concentration of 0.638 µg/L, below the preliminary screening criteria of 5 µg/L. Sample SW-03 was collected from Baechtel Creek immediately southeast of the Safeway building. It is likely that the detection of MTBE in surface water in Baechtel Creek is related to the documented petroleum releases from non-Remco related upstream locations

(Montgomery Watson, 2000d). No screening criterion was found to exist for MTBE in surface water.

5.5.2 Petroleum Hydrocarbons in Surface Water

Twenty surface water samples were analyzed for TPH-diesel. The detected results are summarized in [Table 5-5-2](#). The reported detections for all samples were consistently around 0.1 mg/L with the following exceptions. The surface water sample collected from SW-09, located in the south drainage ditch adjacent to Walnut Street, reported a maximum detection of 0.312 mg/L. The samples collected at SW-06 and SW-08 (collected within the South Drainage Ditch), S01W, S02W, SWBA-1, and SWBA-2 (collected in Baechtel Creek), and SWBR-1 and SWBR-2 (collected in Broaddus Creek), reported low concentrations, all below the laboratory quantitation limit of 0.05 mg/L. These surface water bodies receive urban runoff which typically include residual petroleum hydrocarbons. In addition, recent results of on-Facility storm water sampling (see [Section 5.3.2](#)) suggest that storm water runoff from the Facility is not impacted by TPH-diesel. Therefore, it is unlikely the reported TPH-diesel is related to the Remco Facility.

5.5.3 Metals in Surface Water

Eleven surface water samples were analyzed for total chromium, copper, lead, and zinc. Twelve additional surface water samples were analyzed only for total chromium. Twenty-four samples were analyzed for hexavalent chromium. The detected results are summarized in [Table 5-5-3](#). Hexavalent chromium was not detected in any surface water samples. Total chromium was detected in two of the 23 samples at concentrations of 0.0043 mg/L (S-09) and 0.0017 (S-10).⁵⁵

Total copper and zinc were detected in all samples at very similar concentrations. Total lead was detected at two locations, SW-03 and SW-08, at 0.0103 and 0.00477 mg/L, respectively. The remaining locations reported no detections of lead above the laboratory reporting limit of 0.075 mg/L. It is noted that the reporting limit for the non-detected samples is higher than the

⁵⁵ Screening criteria do not exist for total chromium in surface water.

positive detections for this constituent. No surface water criteria were available for lead, and the detected results for copper and zinc were well below their respective preliminary screening criteria for these metals (1.0 and 5.0 mg/L, respectively). These data suggest that there is currently no adverse impact by metals to the surface water associated with the Facility.

5.5.4 PAHs and PCBs in Surface Water

Eight of the surface water samples (SW-01 through SW-08) were analyzed for PAHs and PCBs. Since there were no detections of these constituents, a summary of detections table has not been created. A complete tabulation of these results is included in [Appendix 5-1](#).

5.6 DISTRIBUTION OF CHEMICALS IN SEDIMENT

The following sections discuss the analytical results of sediment samples. All of the sediment samples have been collected at off-Facility locations including the South Drainage Ditch, Broaddus Creek, and Baechtel Creek. Sample locations are presented in [Figure 3-1](#). The data from the various investigations is incorporated into the data set presented in [Tables 5-6-1](#) through [5-6-5](#). [Table 5-1-5](#) summarizes the number of detections and evaluates the data against preliminary screening criteria developed for sediments. The distribution of the chemicals in sediment are presented and discussed by constituent group below.

5.6.1 Volatile Organic Compounds in Sediment

A total of 18 sediment samples were analyzed for VOCs. Sediment sample locations are illustrated on [Figure 3-1](#). As illustrated in [Table 5-1-5](#), two VOCs were detected at concentrations greater than the reporting limit (acetone and toluene). Two other VOCs were detected at estimated concentrations below laboratory reporting limits (2-hexanone and methylene chloride). A summary of VOC detections in sediment is presented in [Table 5-6-1](#) with [Figure 5-1](#) illustrating the detected concentrations of VOCs in sediment samples. These data suggest no significant impact to sediments by VOCs in Baechtel Creek, Broaddus Creek, or the South Drainage Ditch.

5.6.2 Petroleum Hydrocarbons in Sediment

Sediment samples were analyzed for TPH at 28 sample locations. A summary of TPH detections in sediment is presented in [Table 5-6-2](#). TPH-diesel was detected at 12 locations above the laboratory reporting limit and five estimated detections below reporting limits. The only petroleum hydrocarbon constituents detected were TPH-diesel and extractable range organics. The maximum detected diesel concentration was 65.8 mg/kg at location BC-3 in Baechtel Creek. Based on the presence of other sources, such as urban runoff and documented releases from retail petroleum stations (see [Section 5.5.2](#)), it is unclear whether this detection has any relation to the Remco Facility.

5.6.3 Metals in Sediment

Sediment samples were analyzed for metals, including hexavalent chromium, at 16 locations. Eight additional locations were analyzed for hexavalent chromium only and 12 additional locations were analyzed for total and hexavalent chromium. As described below, metal concentrations generally only slightly exceed the preliminary screening criteria, and their distribution is not indicative of a release from the Facility ([Table 5-1-5](#)). A summary of metal detections in sediment is provided in [Table 5-6-3](#) for total chromium and hexavalent chromium, and [Table 5-6-4](#) for other metals. [Figure 5-5](#) illustrates the concentrations of total and hexavalent chromium in sediment samples while [Figure 5-8](#) illustrates the concentrations of metals in sediment samples.

Hexavalent chromium was detected above the laboratory reporting limit in only a single sediment sample (DD-2) collected by a third party in December 1998. This sample, collected at a depth of six inches from the South Drainage Ditch, reportedly contained 5.9 mg/kg of hexavalent chromium. Additional sampling events were conducted by the Willits Trust in an unsuccessful effort to reproduce this detection. Three sediment samples were collected in the South Drainage Ditch in November 1999 including a sample collected in the same area as DD-2. All verification samples indicated non-detectable concentrations of hexavalent chromium. Eight additional sediment samples were collected in the South Drainage Ditch during September 2000,

including two samples collected in the same location as DD-2-Sed. These sample results also reported non-detectable concentrations of hexavalent chromium. As such, the single 1997 result could not be verified and is not considered representative of sediments in the South Drainage Ditch.

Sediment samples SB-114 through SB-116 collected from Baechtel Creek did contain concentrations of hexavalent chromium below the reporting⁵⁶ limit (Figure 5-5), indicating a potential impact from historical releases to Baechtel Creek from the Remco Facility.

Other metals detected at concentrations exceeding preliminary screening criteria were total arsenic, chromium, copper, lead, mercury, nickel, and zinc. Total arsenic was detected in a single sediment sample (BC-4) at 10.3 mg/kg, in excess of the preliminary screening criteria of 8.2 mg/kg. Total chromium was detected in a single sediment sample (S-01) at 110 mg/kg, in excess of the preliminary screening criteria of 81 mg/kg. Total copper was detected in seven sediment samples at concentrations exceeding the preliminary screening criteria of 34 mg/kg; sample locations include BC-1, BC-2, BC-4, S-07, S-08, SDD-6, and SDD-8. With the exception of the detection at SDD-6 at 70.8 mg/kg, the detections of copper only slightly exceeded the preliminary screening criteria. Total lead was detected in a single sediment sample (SDD-6) at 84 mg/kg in excess of the preliminary screening criteria of 46.7 mg/kg. Total mercury was detected in two upstream sediment samples (BC-1 and BC-2) at concentrations of 0.179 and 0.195 mg/kg, slightly exceeding the preliminary screening criteria of 0.15 mg/kg. Total nickel was detected at concentrations exceeding the preliminary screening criteria in 16 sediments samples; concentrations ranged from 35.1 to 88.6 mg/kg, relative to the preliminary screening criteria of 20.9 mg/kg. While widespread, the distribution of nickel in sediment is not indicative of a release from the Facility, but of naturally occurring concentrations. Total zinc was detected in two sediment samples (BC-3 and SDD-6) at concentrations of 169 and 154 mg/kg, slightly exceeding the preliminary screening criteria (150 mg/kg).

⁵⁶ The estimated detection of hexavalent chromium is reported below the laboratory reporting limit and represents data that was not validated.

5.6.4 PAHs and PCBs in Sediment

A total of eight sediment samples were collected off-Facility and analyzed for PAHs. A summary of PAHs detected in sediment is provided in [Table 5-6-5](#). Two PAHs, fluoranthene and naphthalene, were detected above the laboratory reporting limit. Fluoranthene was detected at 223 µg/kg and naphthalene was detected at 2.98 µg/kg. Both of these detections are well below the preliminary screening criteria for fluoranthene of 600,000 µg/kg and naphthalene of 160,000 µg/kg. No PCBs were detected in sediment samples.

5.7 DISTRIBUTION OF CHEMICALS IN AIR

The following sections discuss the results of air sampling. The air sampling was conducted as part of the PEA (Henshaw, 2000). The data have been incorporated into the RI data set and presented in [Tables 5-7-1](#) and [5-7-2](#). Additional air sampling may be conducted as part of the Risk Assessment. The results of any such sampling will be published as part of the Risk Assessment report.

5.7.1 Volatile Organic Compounds in Air

Three indoor air samples (AS-01, AS-02 and AS-03) were collected from the main building of the Remco Facility ([Figure 3-3](#)) using evacuated stainless steel sample containers ("Summa" canisters). The air samples were sent to Air Toxics of Folsom, California for analysis of 60 different VOCs by USEPA Method TO-14, an extremely sensitive ambient air monitoring method capable of detecting VOC concentrations well below *de minimus* risk levels. The results of the laboratory analyses are summarized in [Table 5-7-1](#) for the 18 VOCs that were detected in the building. Four outdoor air samples (AS-11, AS-12, AS-13 and AS-14) were collected with Summa canisters from locations on the Facility at or near the north, west, south and southeast property boundaries ([Figure 3-5](#)).

A total of eight air samples were collected from off-Facility locations using pre-evacuated Summa canisters for VOC analysis (USEPA Method TO-14). In addition, three samples were

collected from off-Facility locations using personal sampling methods and analyzed by NIOSH Method 7600 for hexavalent chromium. Four Summa canister air samples were collected from inside residences immediately north of the Remco Facility (sample locations AS-04, AS-05, and AS-06), and two Summa canister air samples were collected from inside buildings at the Baechtel Grove Middle School (AS-07 and AS-08), south of the Facility ([Figure 3-5](#)).

Two outdoor air samples were collected with Summa canisters from locations in the City of Willits far enough away from the Site to be unaffected by chemicals at the Site. One sample from the west side of City Hall (AS-09), and the other from the corner of Poplar and Holly Streets south of the Facility (AS-10). The results from these two outdoor air samples are considered representative of background ambient air concentrations for VOCs in Willits. The indoor air samples were grab samples, collected over a short period of time, while the outdoor air samples were collected over approximately four-hour periods using a flow regulator. [Table 5-7-1](#) presents the results for positively detected VOCs in the air samples.

The following VOCs were detected in the background air samples: 1,2,4-TMB, MEK, 2-propanol, acetone, benzene, carbon disulfide, carbon tetrachloride, chloromethane, dichlorodifluoromethane, ethanol, ethylbenzene, hexane, m,p-xylene, MTBE, methylene chloride, o-xylene, toluene, and trichlorofluoromethane. Of the VOCs detected in background samples, 1,2,4-TMB, hexane, MTBE, and o-xylene were detected only in the background samples. The other VOCs were also detected in air samples other than the background samples.

VOCs detected only in non-background samples were: 1,1,1-TCA, 1,1-DCA, 1,1-DCE, 1,2,4-TCB, 1,4-dioxane, chloroform, cis-1,2-DCE, PCE, and tetrahydrofuran. At least one of the chlorinated VOCs (1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, or PCE) were detected in the following air samples: AS-01, AS-02, and AS-03 collected inside the main building of the Facility; AS-04 collected from a residence immediately north of the Facility; and AS-11 and AS-13 collected outside at the Facility.

5.7.2 Chromium in Air

Henshaw conducted air monitoring for total and hexavalent chromium during the sump, pit, trench, and tank closure activities in November 1998 (PEL-3 and PEL-4), and during quarterly monitoring activities in December 1998 (PEL-1 and PEL-2). Air monitoring for hexavalent chromium was also conducted in October 1999, during Montgomery Watson's Site investigation (drilling) activities. Three samples were collected during mobilization and drilling of SB-43 (PB-1021-01, PB-1021-02, and PB-1021-04). All samples were collected over time (approximately eight-hour work periods) using personal sampling equipment attached to Site workers with the highest expected exposure during Site activities. The resulting air monitoring data is shown on [Table 5-7-2](#).

The first round of total and hexavalent chromium air monitoring was conducted in association with the potential dust-raising activities of sump, pit, trench, and tank closure, as described in the *Summary Report - Interim Remedial Action (IRA) Sump, Pit, Trench, and Tank Closure Activities* (Henshaw, 1999a). The hexavalent chromium analytical result for PEL-3 ($548 \mu\text{g}/\text{m}^3$) was elevated. However, Henshaw reported that the hexavalent chromium personal sampling equipment was accidentally dropped into a bin containing hazardous substances, including debris from removal of a horizontal chromium plating tank, for an extended period of time. As a result, the hexavalent chromium analytical result from this device was 10 times higher than the action level of $50 \mu\text{g}/\text{M}^3$ outlined in the RI/FS Work Plan. This sample is not representative of Facility conditions and was not used in assessment of risk due to airborne hexavalent chromium in the PEA. Henshaw did use the more representative PEL-4 results for total chromium and made a conservative assumption that all of the detected chromium ($16.46 \mu\text{g}/\text{m}^3$) was hexavalent chromium.

Henshaw completed additional personal air sampling for two field employees during the fourth quarter monitoring activities on December 18, 1998. The total chromium analytical result (PEL-2) was lower than the OSHA Time Weighted Average ("TWA"), and the hexavalent chromium result (PEL-1) was lower than the adopted action level.

CIH Services conducted personal breathing-space air sampling for hexavalent chromium during Montgomery Watson's October 1999 drilling operations as discussed above. Hexavalent chromium was not detected in the samples collected during the approximately eight-hour monitoring period. It is noted that the detection level was 500 to 1000 times lower than the OSHA TWA concentration, indicating that any airborne concentrations of hexavalent chromium, which may exist, remain at very safe levels, even in proximity to exposed soil during drilling activities.

In addition, indoor air sample AS-06 (Luna Apartments) was analyzed for total and hexavalent chromium, and AS-07 and AS-08 (Baechtel Grove School) were analyzed for hexavalent chromium. No total or hexavalent chromium was detected in any of these off-Facility samples.

5.8 DISTRIBUTION OF CHEMICALS DETECTED ON BUILDING SURFACES

Building surfaces were analyzed during the PEA by collecting samples of actual building materials (ceiling and floor tiles) and by collecting wipe samples from Remco Facility building surfaces and pavement, as well as from off-Facility building surfaces. These samples were analyzed for metals (including chromium and lead) and asbestos. The following sections present the data collected.

5.8.1 Metals Detected in Building Wipe Samples

Nineteen building wipe samples were collected from the Remco Facility as part of the PEA (Henshaw, 2000). These samples were analyzed for chromium (total and hexavalent) and lead. The sampling locations are indicated on [Figure 3-5](#). The results of the sampling are presented in [Table 5-8-1](#). The detections of chromium (hexavalent and total) and lead indicate that these metals exist on surfaces at the Facility. As shown in [Table 5-8-1](#), the maximum concentrations occur in the former chrome plating area (BW-06, BW-07 and BW-08) with decreasing concentrations in locations farther away from this source area.

Hexavalent chromium was not detected in three wipe samples collected from the pavement in the east parking lot in front of the Facility or in two wipe samples collected off the Facility at the Baechtel Grove Middle School ([Table 5-8-1](#)). Total chromium was detected in all wipe samples (WS-1 through WS-4) collected from surface areas on the outside perimeter of the Remco Facility.

5.8.2 Asbestos on Facility Surfaces

On August 13, 1999, Henshaw, as part of the PEA, sampled building surfaces potentially containing asbestos. A total of eight samples were collected as indicated on [Figure 3-5](#). The samples collected consisted of various types of existing ceiling tiles and floor tiles. All ceiling tile samples were reported to contain no asbestos. Two floor tiles (ASB-5 and ASB-6) reported from 5 to 10 percent asbestos (chrysotile).

6.0 CONTAMINANT FATE AND TRANSPORT

The fate and transport of contaminants in the environment depends on the nature of the release, the properties of the particular chemical released, and the physical, chemical, and biological properties of the environment into which the chemicals have been released. To aid in understanding this large amount of information, a conceptual site model (“CSM”) has been developed. The CSM is a tool used in remedial investigations to summarize information on chemical sources, routes of migration, and potential exposure pathways for specific human and/or ecological receptors.⁵⁷

The CSM presented in this section consolidates and summarizes the current Site knowledge of the factors controlling PCOC migration. The CSM will be further developed and used in the Risk Assessment to evaluate potential human and ecological exposure pathways for the chemicals of concern at the Site. It will also be used during the development of remedial alternatives in the Feasibility Study.

The major elements of the CSM are shown schematically in [Figure 6-1](#). This CSM is based on information and data collected during the RI and builds on the initial conceptual model presented in the RI/FS Work Plan (Henshaw, 1998d).

The individual elements of the CSM are discussed in detail in the following sections:

- [Section 6.1](#) describes the known and suspected sources of chemicals based on the Site history ([Section 2.2](#)) and the nature and extent of environmental impact ([Section 5.0](#)).
- [Section 6.2](#) contains a discussion of the routes of chemical migration (or transport) from the source areas to the currently observed extent in the environment.
- [Section 6.3](#) describes the processes controlling fate of the PCOCs at the Site.
- [Section 6.4](#) describes the fate and transport of PCOCs at the Site.
- [Section 6.5](#) summarizes the CSM at this point in time.

⁵⁷ The CSM is a dynamic tool that will be tested and refined throughout the life of the project.

6.1 SOURCES OF CONTAMINATION

This section describes the known and suspected Facility sources for PCOCs at the Site. Based on the collected data and a review of Facility operations, the following primary potential sources of contamination were investigated at the Facility:

- Dust control with oils
- Chrome plating operations
- Other metal plating operations
- Paint shops and degreasers in central and western areas of the Main Building
- Hazardous Material Storage Area in the central area of the Main Building
- Hazardous Material Storage Area and ASTs and in the western area of the Facility
- Metal machining
- Former diesel fuel line and 7,500 gallon diesel UST along northern property line

These potential sources are indicated on the CSM (Figure 6-1) and included in the simplified schematic of the Conceptual Site Model (Figure 6-2). In addition, chemicals may have been discharged to the storm-drain and sanitary sewer systems. Subsequent potential leaks from these systems constitute additional potential sources of subsurface contamination. Table 6-1 presents a summary of chemicals detected at concentrations above the preliminary screening criteria organized by Facility location and environmental media. Data are referenced that illustrate how, and to what degree, these Facility operations may have resulted in the observed PCOCs at the Site or alternatively, how a potential source does not appear to have significantly impacted the Site. These sources are described in the following sections.

6.1.1 Dust Control with Oils

As discussed in Section 2.3.5, dust control reportedly was occasionally conducted in unpaved areas surrounding the Main Building prior to paving such areas. Although there is no supporting written documentation, fluids for dust control may have included machine oil, machine coolant, and oil from company trucks (Wisdom, 1997 and 1998). Possible constituents of these oils may

have included metals, PAHs, and PCBs. Soil samples for analysis of these PCOCs were collected from Facility locations in areas that were reportedly historically sprayed with oil for dust suppression purposes.

Although TPH was detected in most areas of the Facility, the data discussed in [Section 5.0](#) provide no evidence that dust control was a mechanism that resulted in any significant impacts at the Facility. The highest concentrations of TPH were detected in areas more likely attributable to fuel storage and metal machining as discussed below. Although PCBs were detected in soil near a former cutting oil sump, the impact is not likely attributable to dust control activities, as the detections are limited to a specific area as opposed to being widespread across the Facility. Similarly, PAHs were not detected in surface soil samples. PAHs were only detected in two deep soil samples. Given the depth of detections, the PAHs are not consistent with the shallow impacts associated with dust control operations.

A review of the metal data for surface soil does not indicate elevated concentrations of metals that are coincident with areas of elevated TPH concentrations. As such, dust control activities do not appear to have caused significant environmental impact at the Site, and based on the data collected it does not appear likely that metal-, PCB-, or PAH-containing oils were used for dust suppression.

6.1.2 Chrome Plating Operations

The past chrome plating operations in the central area of the Main Building are described in detail in [Section 2.3.1](#). These operations included the use of the following structures, which are shown on [Figure 2-4](#).

- Original above-ground chrome plating tank in Building 1945
- Two above ground horizontal chrome plating tanks (Nos. 1 and 2) in Building 1964
- Five vertical chrome plating tanks (Nos. 3 through 7) and two associated underground tanks in Building 1973

- Outside chrome sump north of Building 1974, four sumps in Building 1973, and boiler blow down sump
- Piping connecting chrome plating tanks

Releases from some of the above listed structures, including spills of plating solutions while the Facility was in operation, appear to be responsible for the observed extent of hexavalent chromium detected in soil and groundwater at and in the nearby vicinity of the Facility. [Figures 5-5](#) through [5-7](#) and [Figures 5-30](#) and [5-31](#) illustrate the extent of hexavalent chromium in soil and shallow (A-Zone) groundwater, respectively. The only other location where hexavalent chromium was detected in soil away from the Facility plating operations area was in the southwest area of the Facility (SS-31 and SB-026). However, the impact in this area is relatively minor in terms of extent and relative to the preliminary screening criteria of 0.02 mg/kg. Further, no groundwater impact was observed in the southwest area. The highest concentrations of hexavalent chromium in soil and shallow groundwater are detected near, and immediately downgradient of, the horizontal chrome plating tanks and the old chrome sump, indicating that these units are the primary sources of the observed hexavalent chromium plume in A-Zone groundwater. Lesser amounts of hexavalent chromium were detected in A-Zone groundwater east of Highway 101, as is further discussed in [Section 6.2.8](#). The vertical chrome plating tanks appear responsible for the more localized occurrence of hexavalent chromium in deeper B-Zone and C-Zone groundwater, as illustrated on [Figures 5-32](#) through [5-35](#).

Cyanide, a known chemical used in plating operations, was not detected in soil or groundwater samples collected in the vicinity of the former plating operations.

In addition to hexavalent chromium, chlorinated hydrocarbons were used in the chrome plating area to clean parts. Numerous chlorinated VOCs were detected in A-Zone groundwater at concentrations exceeding preliminary screening criteria in the former chrome plating area (Buildings 1945, 1964, and 1973). Chlorinated VOCs were also detected above screening criteria in B-Zone and C-Zone groundwater beneath Buildings 1964 and 1973. The solvent stabilizer 1,4-dioxane was also detected above preliminary screening criteria in A-, B-, and C-Zone groundwater beneath Buildings 1964 and 1973 and in A-Zone groundwater beneath Building 1945.

Petroleum hydrocarbons, primarily extractable range hydrocarbons, including TPH-diesel, were also detected at elevated concentrations in A-Zone groundwater beneath Building 1964 and in soil and A-Zone groundwater beneath Building 1973.

Based on the IRA closure activities taken by the Willits Trust, no operational sources remain in the former chrome plating area that would represent a continued threat to the environment. However, elevated residual concentrations of hexavalent chromium and VOCs in soil and groundwater in this area may represent a continuing source to groundwater contamination at the Site. As discussed in [Section 3.7.1](#), the Willits Trust is conducting a pilot study that has resulted in reduced concentrations of hexavalent chromium in the former chrome plating source area. The fate of hexavalent chromium and the potential for future migration is discussed further in [Sections 6.3](#) and [6.4](#).

6.1.3 Other Metal Plating Operations

As described in [Section 2.3.2](#), other plating operations of a smaller scale than the chrome plating operations were conducted at the Facility. These operations included cadmium, phosphate, manganese, and zinc plating within the same area that chrome plating operation occurred (Building 1964). In addition, aluminum coatings were reportedly applied to metal surfaces in Building 1968 (Wisdom, 2001).

[Figures 5-8](#) and [5-9](#) present the detected concentrations in soil of the other metals used in plating operations. As discussed in [Section 5.2.5](#), the vast majority of cadmium concentrations are evenly distributed laterally and vertically in soil, which is indicative of natural conditions. However, a single elevated concentration of cadmium (relative to the preliminary screening criteria of 0.9 mg/kg), was detected immediately north of the reported cadmium plating operations (33.8 mg/kg of cadmium at 2 feet bgs at SB-134). The remaining six soil samples where cadmium was detected at concentrations exceeding the preliminary screening criteria were also in shallow soil but at relatively lower concentrations (1.92 to 6.91 mg/kg).

Dissolved cadmium was not detected in background samples and was detected at a low frequency in the groundwater samples. The preliminary screening criteria for cadmium (0.0005 mg/L) is based on the detection limit for cadmium in groundwater. As such, all detected concentrations of dissolved cadmium exceed the preliminary screening criteria. However, the detected concentrations of dissolved cadmium are sporadic and similar to the general distribution of cadmium in soil and do not display a pattern indicative of a release from the Facility.

While zinc was detected in every soil sample analyzed for metals, it was not detected at concentrations exceeding the preliminary screening criteria, indicating Facility operations had no adverse effect on the concentration of zinc in soils at the Site. Dissolved zinc was detected in A-Zone groundwater at concentrations exceeding background concentration (0.125 mg/L), but not at concentrations exceeding the preliminary screening criteria (2.1 mg/L) ([Figure 5-36](#)).

None of the other PCOCs associated with the lesser plating operations appear to be detected at concentrations indicative of a source of contamination. As mentioned, no operational sources remain in the former chrome plating area that represent a continued threat to the environment. Based on the soil and groundwater data, other metal plating operations do not appear to have resulted in significant impacts to soil and groundwater at the Facility. The Risk Assessment will further evaluate and address the concentrations of cadmium in soil and groundwater.

6.1.4 Paint Shops and Degreasers in Central and Western Areas of the Main Building

Solvents were reportedly used in the four paint shops which existed at the Facility, at various times, in Buildings 1962, 1967, 1968, and 1979, as discussed in [Section 2.3.4](#). The reported locations of six parts degreasers (one in Building 1945, one in Building 1965, one in Building 1962, one in Building 1967, and two in Building 1979), apparently utilizing chlorinated hydrocarbons, are shown in [Figures 2-3 and 2-5](#) and described in [Sections 2.2.3 and 2.3.1.2](#). In addition, solvents were used to clean the large machines as well as large manufactured parts throughout the Facility. Spills may have occurred during Facility operations based on the manner in which solvents were reportedly transported and utilized within the Facility. For

example, solvents were reportedly transported in small containers to perform machine degreasing in several areas of the Facility.

Specific source investigations were performed as part of the RI in an attempt to better define the source of the VOCs, which have been observed in relatively elevated concentrations in former paint shop areas. These investigations identified the paint shop areas in Buildings 1979 and 1967 as significant VOC source areas at the Facility.

Concentrations of 1,1,1-TCA, 1,1-DCA, and 1,1-DCE are present above the respective preliminary screening criteria in shallow soils underlying the Building 1979 Paint Shop. Concentrations of 1,1-DCE are also present above the preliminary screening criteria in deeper soil beneath the Paint Shops in Buildings 1967 and 1979. The distribution of chlorinated VOCs in A-Zone groundwater more clearly shows the Building 1979 Paint Shop as a source area, with seven chlorinated VOCs detected above preliminary screening criteria. The A-Zone groundwater data also identify the Building 1967 Paint Shop as a chlorinated VOC source area at the Facility. In addition, the solvent stabilizer 1,4-dioxane was detected above the preliminary screening criteria in A-Zone groundwater beneath Building 1967. Chlorinated VOCs are also present above preliminary screening criteria in B-Zone and C-Zone groundwater beneath Building 1979.

The paint shop areas located in Building 1968 and in the northeast corner of Building 1962 do not appear to be source areas. Soils underlying the two buildings did not contain chlorinated VOCs above the screening criteria. A-Zone groundwater containing elevated chlorinated VOC and 1,4-dioxane concentrations is present beneath the western portion (as opposed to the former paint shop area in the northeast corner) of Building 1962. A-Zone groundwater beneath Building 1968 did not contain elevated concentrations of VOCs. [Figures 5-1 and 5-2](#) and [Figures 5-10 through 5-23](#) show the concentration of VOCs in soil and groundwater.

Although no operational sources of VOCs remain at the Facility, elevated concentrations of VOCs in shallow soil and groundwater in the Building 1967 and 1979 paint shop areas may represent a source of continued groundwater contamination as discussed in [Sections 6.3 and 6.4](#).

6.1.5 Hazardous Material Storage Areas in the Central Area of the Main Building, Western Area of the Facility, and 103B Franklin Avenue

While wastes from past operations were stored at the Facility at a number of different locations during the 50-year period of operation, two main areas reportedly were used for waste storage:

- The south central portion of the main building (specifically in Building 1967 where painting activities also took place), and
- The Hazardous Materials Storage Building at the northwestern corner of the Facility.

These areas are both shown on [Figure 2-5](#). VOCs, potentially associated with the Building 1967 storage area, were detected in soil and groundwater near SB-019 in the south-central area of the Main Building, as illustrated in [Figures 5-2](#) and [5-11](#). Concentrations of 1,1-DCE exceeded the preliminary screening criteria in deeper soil (13 feet bgs). Concentrations of 1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, vinyl chloride, and 1,4-dioxane were detected at concentrations exceeding their respective preliminary screening criteria in grab groundwater. Elevated concentrations of TPH-diesel were also detected in deeper soil and A-Zone groundwater in this area of Building 1967. In addition, similar chlorinated VOCs have also been detected at concentrations exceeding the preliminary screening criteria in shallow groundwater near the former waste storage area in the northwestern corner of Facility (grab groundwater at SB-032). Releases, including spills, during the Facility operations may have resulted in the observed concentrations.

As discussed in [Section 2.3.4](#), Remco utilized the property located at 103B Franklin Avenue (immediately west of the Remco Facility) for the storage of materials, including 55-gallon drums. It is unknown what material, if any, the 55-gallon drums contained. In addition, it is unknown if any wastes were stored on the property. Soil borings were completed on this property (SB-129 and SB-130) to determine if the storage activities had any adverse effect on this property. Soil and grab groundwater samples were collected in the A- and B-Zones and analyzed for VOCs, metals (including hexavalent chromium) and TPH.

No VOCs were detected above the preliminary screening criteria in soils or groundwater at this property. However, low concentrations of MEK and acetone were detected in the shallow soils (2 feet bgs). Also, low concentrations of 1,1-DCE and xylene were detected in the A-Zone groundwater and a detection of acetone was reported in the B-Zone. Elevated concentrations of TPH-diesel were detected in the deeper soils (9 feet bgs) at SB-129 with relatively minor impact reported in the A- and B-Zone groundwater in this area. No metals were detected above their respective preliminary screening criteria in soils or groundwater. However, dissolved chromium was detected at SB-130 (33 feet bgs) at a concentration of 0.0185 mg/L below the preliminary screening criteria of 0.0605 mg/L. The minimal impact observed in this area is likely attributable in part to the historical use of this property, including the storage of materials by Remco.

During the IRA conducted by the Willits Trust in 1998, hazardous materials and wastes from with the former Facility operations, which were left on the Facility when operations ceased, were removed (Henshaw, 1999a), leaving no remaining operational sources. However, elevated concentrations of VOCs in soil and groundwater may represent a continuing source to groundwater, as described in [Sections 6.3 and 6.4](#).

6.1.6 Metal Machining

Prior to the IRAs conducted by the Willits Trust, many of the areas within the main building contained concrete-lined trenches and sumps due to the extensive machining operations conducted at the Facility ([Section 2.3.3](#)). These trenches and sumps provided secondary containment of cooling oils in the event of leakage or spills. A complete history of the nature and duration of use of each trench and sump is not available.

Past subsurface leakage from the cutting oil sump which was located in Building 1962 (shown in [Figure 2-3](#)) is likely the source of elevated concentrations of petroleum hydrocarbons and the PCBs Aroclor 1242 and Aroclor 1016 found in subsurface soil and groundwater. Separate-phase petroleum product appears to exist in this area, based on visual observation of soil samples with oily water, and strong hydrocarbon odors at SB-163, where a grab groundwater sample was

collected and found to contain PCBs and TPH at elevated concentrations. Separate-phase petroleum product represents a continuing source of these chemicals to groundwater through dissolution. However as discussed in [Section 6.3.2.4](#), PCB solubilities are so low that significant PCB contamination to groundwater is not expected. As discussed in [Section 5.0](#), other locations where samples were collected and analyzed for PCBs did not result in detections.

6.1.7 Former Diesel Fuel Line and 7,500 Gallon UST Along Northern Property Line

As discussed in [Section 2.4](#), a former diesel fuel line existed below grade along the northern Facility property line and a 7,500-gallon diesel UST was located in the area immediately north of Building 1964. This UST was removed in the mid- to late-1970s and relocated to an aboveground location in the northwestern area of the Facility.

Releases from the diesel fuel line and/or spills or leaks from the UST appear to be responsible for the TPH concentrations exceeding preliminary screening criteria north of Building 1964 (in the vicinity of SB-20) and north of Building 1979. North of Building 1964, separate-phase petroleum product has been observed in soils and shallow groundwater. [Figure 5-27](#) illustrates the extent of TPH-diesel in A-Zone groundwater.

In addition to the noted TPH impacts, the PAHs benzo(a)anthracene and indeno(1,2,3-cd)pyrene have been detected at concentrations exceeding the preliminary screening criteria in deeper soil north of Building 1964 (SB-020) and in the northern portion of Building 1979 (SB-044), respectively. PAHs have also been detected at concentrations exceeding preliminary screening criteria in A-Zone grab groundwater samples collected at SB-20, as well as at SB-18, SB-50, SB-62, and SB-66, which are located immediately downgradient of SB-20. The PAH naphthalene was detected above the preliminary screening criteria in A-Zone grab water in the northern portion of Building 1979 (SB-126). [Figures 5-4](#) and [5-28](#) illustrate the extent of PAHs detected in this area in soil and A-Zone groundwater. The PAH detections are consistent with a release of diesel fuel.

Based on the interim remedial actions taken for the diesel tank and fuel line, as described in [Section 2.4](#), no continued source of petroleum hydrocarbons remains. However, separate-phase petroleum product associated with past Facility operations, represents a continuing potential source of PCOCs.

6.1.8 Former Unlined Drainage Ditch Along the Northern Property Line and Facility Storm-Drain System

As discussed in [Section 2.5.1](#), an unlined drainage ditch existed along the northern property boundary until approximately 1975. The drainage ditch carried surface water runoff from the Facility property and neighboring upstream properties within the catchment area of the ditch. Any spills or surface releases of chemicals in areas of the Facility that were exposed to rainwater runoff may have resulted in chemicals being discharged into the ditch. In addition, it has been reported that direct discharges to this drainage ditch of plating solutions, boiler blowdown water, and other wastes may have occurred. Chemicals entering the ditch could potentially have been transported off the Site in storm water runoff, and/or infiltrated into the underlying soils and shallow groundwater. In 1974, a subsurface storm-drain system was installed at the same location as the unlined drainage ditch, as discussed in [Section 2.5.1](#). This storm-drain system currently consists of seven catch basins attached to underground piping.

The soils and shallow groundwater immediately underlying portions of the storm-drain system exhibit some of the highest concentrations of chlorinated VOCs on the Facility. [Figures 5-2, 5-10, and 5-11](#) illustrate the extent of chlorinated VOCs detected in soil and A-Zone groundwater along the storm-drain system alignment. In particular, the maximum detected concentrations of PCE and TCE in soil and A-Zone groundwater were noted along the central portions of the storm-drain system. Chlorinated VOCs were also detected above the preliminary screening criteria in B-Zone and C-Zone groundwater along the storm-drain system alignment. In addition to chlorinated VOCs, the solvent stabilizer 1,4-dioxane is present in A-Zone and B-Zone groundwater in this area.

Hexavalent chromium is also present at concentrations above the preliminary screening criteria in deeper soils and A-Zone and B-Zone groundwater ([Figures 5-7, 5-30, and 5-32](#)) along the

storm-drain system alignment. TPH-diesel and TPH-motor oil are present in shallow and deep soils and TPH-diesel is present in A-Zone groundwater along the storm-drain system north of Buildings 1973 and 1964 ([Figures 5-3 and 5-27](#)).

VOCs and chromium have been historically detected in stormwater samples as a result of impacted groundwater entering the storm-drain system during the wet season, when the water table elevations rise above the storm drain invert. Storm water samples collected from the outfall into Baechtel Creek (SWD-9, also referred to as “outfall” in historical sampling) have historically contained low levels of VOCs including PCE, 1,1,1-TCA, and 1,1-DCA. Based on these detections, the culvert was lined with HDPE in the mid-1990s to prevent groundwater infiltration. Although this lining significantly reduced the volume of groundwater entering the storm-drain system, VOCs continued to be detected at low levels in storm water samples collected at SWD-9.

In 1998 and 1999, the Willits Trust installed a storm-drain backfill pump-and-treat system designed to extract shallow groundwater so as to prevent it from discharging to the ground surface or the storm drain system ([Section 2.8.1.2](#)). The extracted water is treated in the on-Facility treatment system and then discharged to the City of Willits sanitary sewer under a discharge permit. The system is monitored regularly to assure its effectiveness.

In 2000, as an interim remedial action, the Willits Trust took additional actions to reduce remaining groundwater infiltration by lining catch basins with HDPE and welding catch basin linings to the HDPE storm drain liner to create an impervious seal, as discussed in [Section 2.5.1](#). No VOCs have been detected in storm-water samples collected from SWD-7 (effluent from the Facility) since the above-mentioned improvements were completed, indicating that the improvements have been successful in preventing off-Facility migration of VOCs through storm water. Further, no VOCs have been detected in storm water samples collected from the discharge point into Baechtel Creek (SWD-9) since the above mentioned improvements have been completed. However, the storm-drain liner system must be maintained to prevent future impacts.

Elevated concentrations of VOCs and hexavalent chromium in the subsurface in the vicinity of the storm-drain system may represent a continuing source to groundwater through migration. [Sections 6.3](#) and [6.4](#) discuss the fate and potential migration of VOCs and hexavalent chromium in groundwater.

6.1.9 Summary of Sources of PCOCs

In summary, the soil and groundwater data indicate that former dust control with oil and other metal plating operations have not significantly affected soil or groundwater at the Site. However, the data indicate that the following sources have likely resulted in impact to soil and groundwater as indicated below:

- Chrome Plating Operations - hexavalent chromium in soil and A-Zone, B-Zone, and C-Zone groundwater in the central area of the main building (Buildings 1964, 1973, and 1945); chlorinated VOCs, and 1,4-dioxane in A-Zone, B-Zone, and C-Zone groundwater;
- Paint Shops and Degreasers - chlorinated VOCs in shallow soil and groundwater in Buildings 1962 and 1979
- Hazardous Material Storage Areas - chlorinated VOCs and 1,4-dioxane in deeper soil and/or A-Zone groundwater in the south central area of the main building (Building 1967) and northwestern corner of Facility, TPH-diesel in deeper soil and A-Zone groundwater at Building 1967
- Metal Machining - PCBs and TPH in soil and A-Zone groundwater in Building 1962
- Former Diesel Fuel Line and 7,500 Gallon UST Along Northern Property Line - TPH-diesel and PAHs in soil and A-Zone groundwater
- Former Unlined Drainage Ditch Along Northern Property Line - hexavalent chromium, chlorinated VOCs, and TPH in soil and A-Zone groundwater

6.2 ROUTES OF MIGRATION

Based on the physical Site setting described in [Section 4.0](#), the nature and extent of environmental impacts to the investigated media as described in [Section 5.0](#), and the past operational sources identified above, the likely routes of PCOC migration are presented in this section. The focus of this section is to describe the migration of PCOCs from the identified Facility sources to their present extent within the environment.

Potential routes of migration identified at the Site were identified as either primary or secondary routes. Primary routes of migration are the initial release mechanisms, such as spills to surface soil or a release from a UST to the subsurface. Secondary routes of migration are those that occur after the initial release, such as infiltration of PCOCs through surface soil to groundwater or downgradient migration of impacted groundwater. Potential release mechanisms and secondary routes of chemical migration and the potentially impacted media at the Site are shown on [Figure 6-1](#) and include the following:

- Surface spills and/or subsurface releases affecting soils
- Migration of PCOCs from soil into shallow groundwater
- Direct impact of groundwater from subsurface releases
- Migration of PCOCs in groundwater
- Surface runoff carrying PCOCs to the storm-drain system
- Infiltration of impacted groundwater into the storm-drain system
- Off-Facility flow of storm water impacting sediments and/or surface water
- Off-Facility flow of storm water impacting groundwater
- Off-Facility migration of dust and vapors

These release mechanisms and routes of migration are described below. The secondary routes of migration are those that relate to contaminant migration in the environment beyond the initially (primary) affected media. In many cases, they represent both existing migration routes (e.g., migration of PCOCs in groundwater) and routes of potential future migration (e.g., dust generating construction activities). As stated above, potential future migration of PCOCs is discussed in [Section 6.4](#).

6.2.1 Surface Spills and/or Subsurface Releases Impacting Soils

The detections of multiple PCOCs, most notably VOCs, in near-surface soils at the Site indicate that surface or near surface spills and other releases have occurred as a result of Facility operations. [Figures 5-1, 5-3, 5-5, 5-6, and 5-8](#) present detections of VOCs, TPH, chromium (hexavalent and total), and other metals in surface and near-surface soil. VOC detections in

deeper soil (greater than 3 feet bgs), as shown in [Figure 5-2](#), correlate with detections in shallow soils, but the concentrations and number of detections generally diminish with depth, particularly in samples collected below the A-Zone. A similar trend is observed for TPH in soil (results for all sample depths for TPH are illustrated on [Figure 5-3](#)). The distribution of total chromium and hexavalent chromium in soil indicate that surface spills occurred in the vicinity of the horizontal aboveground chrome plating tanks and that subsurface releases occurred from the vertical underground chrome plating tanks. [Figure 5-7](#) illustrates the hexavalent chromium detections in soil below 3 feet in depth.

Although some concentrations of other metals, such as lead and cadmium, exceed preliminary screening criteria in shallow soils, the potential release mechanism for these metals is not clear. Detections of these other metals are generally sporadic and may represent isolated or incidental releases. However, it is also possible that some of these detections are not related to Facility operations. Nonetheless, all detections will be considered during the risk assessment.

6.2.2 Migration of PCOCs in Soil to Shallow Groundwater

The distribution of chlorinated VOC contamination in A-Zone groundwater, particularly PCE, is consistent with that observed in shallow soil, indicating PCOCs in soil migrated to shallow groundwater. The highest PCE concentrations in A-Zone groundwater and soil were noted along the storm-drain system north of the Facility, around the paint shop area in Building 1979, and east of the chrome plating area in Building 1945. [Figures 5-1](#), [5-2](#), and [5-17](#) present PCE concentrations in soil and A-Zone groundwater. A review of VOC concentrations north of the Facility shows somewhat elevated levels of VOCs in the vicinity of W-18A, which coincides with the location of the sanitary sewer line in the area. This could indicate some small preferential groundwater flow along the line of the disturbed earth in the line's trench.

As discussed in [Section 4.0](#), the nature of building sub-base materials underlying the Facility varies considerably. However, in the event that building sub-base materials do provide preferential migration pathways in certain areas beneath Facility buildings, it is important to note that the sub-base material does not extend to off-Facility areas and would not constitute an

off-Facility migration pathway. In addition, the backfill material along the northern storm-drain system does not appear to be permeable, and thus is not expected to constitute a preferential pathway for PCOCs.

6.2.3 Direct Impact of Groundwater from Subsurface Releases

Deeper impacts to groundwater as a result of subsurface releases of PCOCs are believed to have occurred in the area immediately surrounding the vertical chrome plating tanks. The hexavalent chromium concentrations observed in A-, B-, and C-Zone groundwater are likely due to releases from the plating tanks, which were up to 70 feet deep ([Table 2-2](#)). Furthermore, subsurface releases from the former 7,500-gallon diesel UST and diesel fuel line appear to be responsible for TPH-diesel and PAHs in deeper soil and A-Zone groundwater (discussed in [Section 6.1.7](#)).

6.2.4 Migration of PCOCs in Groundwater

Groundwater flow has resulted in lateral spreading of PCOCs, primarily within the A-Zone groundwater. The PCOCs that have migrated the greatest distance in groundwater are VOCs, having been detected at low concentrations as far downgradient as Highway 20 (approximately 380 feet north of the northern Facility property line) as shown in [Figures 5-10 and 5-11](#). In contrast, hexavalent chromium has only migrated less than 100 feet downgradient of the northern Facility property line in A-Zone groundwater, as shown in [Figure 5-31](#). As discussed in [Section 4.0](#), the coarser-grained more permeable deposits of the A-Zone are not laterally continuous, which is interpreted to have played a role in limiting the downgradient extent of PCOC migration within the A-Zone. In addition, the coarser-grained deposits of the A-Zone are significantly thinner beneath Franklin Avenue than thicknesses observed beneath the central and northern portions of the Facility. Further, only low concentrations of VOCs are noted in groundwater beyond Franklin Avenue. Although this thinning of the more permeable horizons may act to retard northward migration of contaminants from the Facility, it does not act as a barrier to northward migration of the PCOCs.

The small horizontal extent of hexavalent chromium in A-Zone groundwater relative to VOCs is likely the result of the limited number of hexavalent chromium sources versus the more widespread use of VOCs and the lower mobility of hexavalent chromium, as discussed in [Section 6.4](#). The data indicate that the natural ability of the hydrogeologic system to reduce hexavalent chromium to trivalent chromium has acted to limit the horizontal and vertical extent of hexavalent chromium in groundwater. The fate and relative migration rates of VOCs and hexavalent chromium are discussed further in [Sections 6.3 and 6.4](#).

In addition to contaminant migration in groundwater flow from the primary source areas (in the vicinity of the Main Building) which have been discussed thus far, there is also the secondary area of contamination east of Highway 101. It appears that the impacts east of Highway 101 are limited in extent. The marked decrease of contaminants of hexavalent chromium and VOCs in groundwater downgradient of W41A may be due to: 1) a smaller mass of contaminants released from the storm drain in the vicinity; 2) the release of only dilute aqueous-phase releases of VOCs; and 3) the presence of TPH from the adjacent service station providing more favorable conditions for VOC degradation. The limited vertical extent of this contamination will be confirmed by the collection of additional groundwater samples from a deep boring as discussed in [Section 7.0](#).

Vertical migration of contaminated A-Zone groundwater is not a significant migration route at the Site. Although potentiometric data indicate a seasonally variable downward vertical gradient (see [Table 4-4](#)), the low vertical permeability and lack of direct hydraulic connection between coarser-grained deposits of the A-, B-, and C-Zones ([Section 4.5.2.1](#)) have resulted in the absence of significant observed downward transport of PCOCs from the A-Zone, with one exception. The A/B-Aquitard and B/C-Aquitard⁵⁶ are thinnest in the area of well cluster W29A1/W29B1/W29B2 located in the northwestern area of the Site. As such, the A-, B- and C-Zone permeable deposits are more closely connected in this area ([Figures 4-7 and 4-10](#)). The other area of observed VOC impact in the deeper zones is in the vicinity of the vertical chrome plating tanks.

⁵⁶ The B/C-Aquitard thins considerably in this area and may be absent.

The total concentration of VOCs in B- and C-Zone groundwater is significantly less than those detected in A-Zone groundwater. In addition, the lateral extent of B-Zone and C-Zone groundwater affected by VOCs is much less than that in A-Zone groundwater, as illustrated by [Figures 5-14](#) through 5-16. Hexavalent chromium concentrations in B-Zone and C-Zone groundwater appear to be due primarily to subsurface releases associated with the vertical chrome plating tanks.

There also exists the potential that monitoring wells installed at the Site prior to the Willits Trust that are screened through multiple water-bearing zones may also serve as potential conduits for A-Zone groundwater contaminant migration to B-Zone and C-Zone groundwater. As an example, monitoring well B2 located in the southwest corner of the Facility contains low level concentrations of chlorinated solvents ([Figure 5-12](#)). This well is screened from the deeper portion of the A-Zone to the C-Zone. Monitoring well B2, as well as monitoring wells B1 and B5, are recommended for abandonment, as discussed in [Section 7.0](#).

6.2.5 Surface Runoff Carrying PCOCs to the Storm-Drain System

Low levels of hexavalent chromium and chlorinated VOCs historically detected in storm water were potentially due to runoff across contaminated surfaces at the Facility, in addition to infiltration of contaminated groundwater into the storm-drain system. Since the noted improvements to the storm-drain system, detections of hexavalent chromium and VOCs in stormwater samples have been relatively minor. As discussed in [Section 5.4](#), the detections of hexavalent chromium do not appear to be due to groundwater entering the storm-drain system, given the location and the low concentrations of these detections. However, any affect on storm water from runoff across impacted surfaces is considered minor because storm water samples collected at SWD-7 (the effluent location of storm water at the Facility) have not contained detectable levels of VOCs or hexavalent chromium since completion of improvements to the storm-drain system.

6.2.6 Infiltration of Impacted Groundwater into the Storm-Drain System

As discussed in [Section 6.2.5](#), low levels of hexavalent chromium and chlorinated VOCs have been detected historically in storm water sampled from the storm-drain system. However, since completion of improvement to the storm-drain system, storm water samples collected from the effluent location of storm water at the Facility (SWD-7), have not contained detectable VOCs or hexavalent chromium. Thus, data collected subsequent to the storm-drain system improvements indicate that this migration route has been eliminated, provided the integrity of the storm-drain lining system is maintained. Continued storm water sampling and analysis will monitor the effectiveness of the continuous HDPE liner and HDPE catch basin inserts at SWD-3, SWD-4, and SWD-5 prior to implementation of the final remedy.

6.2.7 Off-Facility Flow of Storm Water Potentially Impacting Sediments and/or Surface Water

The data indicate that surface water and sediment in the Facility vicinity are not adversely affected by the Facility ([Sections 5.5](#) and [5.6](#)). As indicated in [Section 6.2.6](#), the potential for off-Facility migration of Facility related PCOCs through the storm-drain system has been mitigated by interim remedial actions. The effectiveness of these actions will be monitored through ongoing storm water sampling conducted at the Facility in accordance with the SWPPP (Montgomery Watson, 2000b).

6.2.8 Off-Facility Flow of PCOCs in Storm Water to Groundwater

Past off-Facility flow of PCOCs in storm water appears to have impacted A-Zone groundwater east of Highway 101, between the former Chevron Station and Safeway Shopping Center. VOCs and hexavalent chromium were detected in groundwater samples collected from monitoring well W41A, east of Highway 101 in a location where a catch basin and sharp bend in the City's storm-drain system exists. [Figures 5-14](#) and [5-31](#) present total VOC and hexavalent chromium concentrations in A-Zone groundwater. This is also the location of an abandoned connection to the former drainage ditch that flowed to Baechtel Creek located beneath the present Safeway Shopping Center.

As discussed in [Section 3.2](#), grab groundwater samples were collected along the City's current storm-drain alignment as well as the historical drainage-ditch alignment. Grab groundwater samples indicated the presence of chlorinated VOCs and hexavalent chromium over a limited area in A-Zone groundwater immediately east of Highway 101 near the intersection of the current and historical storm-drain system. This contamination does not extend appreciably to the south or east away from the current or former storm drain alignments ([Figures 5-1 and 5-31](#)). Further east, along the historical storm-drain alignment (SB-138 and SB-139), other VOCs (oxygenates rather than chlorinated aliphatics) have been detected. These oxygenate detections do not appear to be associated with Facility operations, releases of PCOCs to the storm-drain system, or migration of PCOCs off-Facility.

6.2.9 Off-Facility Migration of Dust and Vapors

Metal plating activities generated dusts and/or mists that were deposited on building surfaces. The data indicate that the interior surfaces of some Facility building materials contain hexavalent chromium, total chromium, and lead ([Section 5.8](#)). The highest chromium and lead concentrations were detected in building wipe samples collected from interior walls in the chromium plating source area. Floor tiles and mastic in the office areas contained non-friable asbestos.

The Willits Trust also collected off-Facility building surface samples and surface soil samples in areas likely to have been impacted by direct releases to soils or groundwater, in an effort to identify any residual impact from past potential airborne transport of emissions from the Facility. No residual evidence of such airborne transport was identified.

Air sampling conducted during the PEA evaluated the potential for migration of VOC vapors. Although VOCs were detected in air samples both on the Facility and in off-Facility locations, the PEA concluded that the results appeared to be unrelated to the Facility. Volatilization of VOCs from soil and groundwater and subsequent migration to ambient air soil will be addressed in the Risk Assessment.

6.2.10 Summary of Routes of Migration

This data is summarized in the table below by zone and PCOC.

Summary Of PCOC Migration			
	A-Zone	B-Zone	C-Zone
VOCs	Introduced from various sources	Smaller amounts introduced potentially via vertical tanks and downward water migration in western area	Minor amounts introduced potentially via vertical tank and downward groundwater migration in western area
Chromium	Introduced in plating operations	Introduced via vertical tanks	Introduced via vertical tanks
Other metals	Sporadic detections do not point to a significant identifiable source	N/A	N/A
TPH	Introduced from diesel sources	N/A	N/A
PCBs	Introduced from cutting oil	N/A	N/A
PAH	Introduced from diesel sources	N/A	N/A

N/A = not applicable

6.3 FATE OF PCOCs

The fate of PCOCs in the environment depends on the properties of the specific chemical and the environment in which it exists. An evaluation of chemical fate at the Remco Facility was conducted to assess how long Facility-related chemicals may exist in the environment before naturally degrading and/or attenuating. As discussed in [Section 5.0](#), the classes of known or potential Site-related chemicals include inorganic chemicals such as metals, and organic chemicals such as VOCs and petroleum hydrocarbons. Inorganic elements, such as metals, do not degrade, per se, but are affected by precipitation-dissolution reactions, sorption-desorption, and ion exchange reactions, which may alter the valence state of the elements, and alter the mobility and/or toxicity of the elements. Organic chemicals may degrade by either biotic or abiotic processes. The natural *in-situ* processes of biodegradation, dispersion, dilution, sorption,

volatilization, and chemical or biological stabilization, transformation, or destruction are collectively referred to as natural attenuation processes.

This section discusses the chemical and biological mechanisms that affect the fate of the Facility-related PCOCs.

6.3.1 Fate of Inorganic Chemicals

Inorganic chemicals do not degrade per se; however, inorganic chemicals migrating through the soil column or within the groundwater system do geochemically interact with the soil matrix and may change valence state. These processes can lead to the partial or total immobilization of PCOCs in the soil, which can reduce or eliminate the potential impact to groundwater.

The following inorganic chemicals have been detected at the Site:

- Chromium (both hexavalent and trivalent)
- Arsenic
- Antimony
- Lead
- Cadmium

Other metals were detected at the Site but are not discussed below, because their distribution was sporadic or did not appear related to Facility activities.

Soils have the capability to attenuate metals under specific chemical conditions through processes including precipitation (fixation), specific adsorption, covalent bonding, chelation, and oxidation/reduction (transformation). The primary factors controlling attenuation are dissolved metal chemistry and soil characteristics. These factors, along with some secondary attenuation factors, are described in this section with reference to data collected during the RI.

6.3.1.1 Dissolved Metals Chemistry

In the environment, metals generally exist as ions, or charged species. Most metals are ions with a positive charge (cations), while other metal species form complexes or compounds with other elements (such as oxygen) or compounds and have an overall negative charge (anions). The primary inorganic chemicals at the Facility exist both as cations (e.g., trivalent chromium, lead, and cadmium) and as anionic complexes (e.g., hexavalent chromium and arsenic). Ions, especially anions, may be mobile and can be transported with groundwater when they exist either as a free ion or complexed to a ligand, or they may form insoluble, immobile precipitates by reacting with other ions. Each of the processes involved is an equilibrium reaction and may be reversible under specific altered conditions.

6.3.1.2 Soil Characteristics

In addition to dissolved metal chemistry, soil characteristics are also primary attenuation factors. These soil characteristics include pH, surface charge, CEC, soil texture, organic matter content, and specific surface area. The following provides a brief description of the primary soil characteristics influencing solubility and mobility [Groundwater Remediation Technologies Analysis Center (“GWRTAC”), 1997; Sparks, 1995] along with a brief summary of data obtained to date for the Remco Facility.

6.3.1.2.1 Soil pH

In general, soil pH ranges from approximately 4 to 8.5 in most natural systems, with surface soil tending to have lower pH than deeper geologic media. Metal cations are considered most mobile under acidic conditions while anions tend to sorb to oxide minerals in this pH range (Dzombak and Morel, 1987). At high pH, cations precipitate or adsorb to mineral surfaces and metal anions are mobilized. Sorption of metal cations onto hydrous oxides generally increases sharply with pH and is most significant at pH values above the neutral range. Sorption of metal anions is greatest at low pH and decreases as pH increases, but is also controlled by the Eh (oxidation/reduction) conditions of the soil.

The pH analyses performed on 34 soil samples from the Facility indicate a pH range of 4.61 to 8.09, with an average value of 7.2 (Table 5-2-7). Most of the soils collected at the Facility

indicated a soil pH that was relatively neutral, similar to the observed groundwater pH. The samples from the 1-foot depth at SB-150 and SB-153 exhibited the lowest pH values of 4.61 and 5.7; these two samples were the only soil samples with pH less than 6.0. The lack of elevated cationic metals (e.g., cadmium, lead, and zinc) in groundwater at the Facility is consistent with the primarily neutral soil pH, suggesting that these metals species are relatively immobile at the Site, as discussed further in [Section 6.3.1.4](#).

6.3.1.2.2 Surface Charge

The surface charge measurements taken at the Site indicate an affinity of Site soils to sorb and retain metal cations, thus reducing their mobility. Soils throughout California commonly have a net negative charge due to carbonate rich soils and relatively dry climate conditions. “Net negative” describes the condition that the negative surface sites outnumber positively charged sites. The CEC of the soil indicates the concentration of readily exchangeable cations and indicates the affinity of soils to sorb and retain metal cations. A clay soil will have a larger CEC than a sandy soil. Clay minerals, such as kaolinite and vermiculite, provide important ion exchange sites for metals. CEC values generally range from 20 to 180 meq/kg for sandy textured soils, from 90 to 270 meq/kg for silt loams, and greater than 200 meq/kg for heavy clay and highly organic soils (USEPA, 2000).

Ten samples at the Facility have been analyzed for CEC. These samples indicate CEC ranging from 24.1 to 671 meq/kg of soil ([Table 5-2-7](#)). Five samples each were collected from SB-043 and SB-049. CEC values in SB-043 soil samples were greater than 200 meq/kg, while CEC values in SB-049 soil samples ranged from 24.1 to 191 meq/kg. Soil types logged for SB-043 samples were silty sand, low plasticity clay, and poorly sorted sand (fine). Soil types logged for SB-049 samples were silty sand, clayey sand, and low plasticity clay. Despite similar soil types in the two borings, soils at SB-043 have larger CEC values than SB-049, indicating a greater affinity to sorb and retain metal cations.

6.3.1.2.3 Soil Texture and Specific Surface Area

As described in [Section 4.5](#), the native shallow soils at the Site are predominantly clays and silts. Clays and silts have proportionately greater interstitial surface areas per volume than sandy soils

because of the finer particle size. The greater specific surface area translates to increased sorption sites for chemicals in soil. Thus, soil textures at the Site may also contribute to low metal mobility.

6.3.1.3 Secondary Attenuation Factors

The secondary attenuation factors include mineralogy, the presence of organic matter, the presence of counter-ions that compete for sorption sites, oxidation-reduction potential of the soil and the presence of sulfate-reducing bacteria (“SRB”), as well as the characteristics of the solute, such as molecular size and charge density.

Soil samples representing various lithologies from the Facility were analyzed for the following geochemical parameters:

- Ferrous and manganese hydrous oxides
- TOC
- Calcium, magnesium, potassium, sodium
- SRB

The following provides a brief description of some of the secondary factors influencing solubility of PCOCs at the Site (GWRTAC, 1997; Sparks, 1995), along with a brief summary of data obtained to date for the Facility.

6.3.1.3.1 Mineralogy – Oxide Minerals

Iron and manganese oxides play an important role in ion exchange sites. They have the ability to remove both cations and anions from the soil solution through ion exchange, specific adsorption, and surface precipitation. Cation sorption to oxide minerals is dominant at near neutral pH, which is the condition of most soils at the Site. On the other hand, anion sorption to oxide minerals decreases with increasing pH and is commonly more effective at lower pH.

Ferrous iron was detected (greater than the detection limit of 1 mg/kg) in 2 of 26 soil samples collected in and around the chromium plating area at 1.39 and 2.22 mg/kg in samples collected

from SB-038 (19.5 feet bgs) and W21A (10.5 feet bgs), respectively. The 10.5 feet bgs sample at W21A contained 118 mg/kg of hexavalent chromium, whereas the 19.5 feet bgs samples at SB-038 contained less than 0.1 mg/kg of hexavalent chromium. The detection of the ferrous iron (the reduced form of iron) co-located with hexavalent chromium (the oxidized form of chromium) is generally not expected.

Ten soil samples were analyzed for hydrous iron oxides and hydrous manganese oxides. [Table 5-2-7](#) presents the hydrous iron and manganese oxides results. Hydrous iron oxides ranged from 1.662 percent to 3.191 percent, with an average value of 2.539 percent. The maximum hydrous iron oxide concentration was detected at SB-49, 42.5 feet bgs. Hydrous manganese oxides ranged from 0.044 percent to 0.857 percent, with an average value of 0.155 percent. The maximum hydrous manganese oxide concentration was detected in a soil sample collected at 26 feet bgs from SB-43. These data indicate that the soils at the Site may still actively adsorb dissolved inorganics.

6.3.1.3.2 Organic Matter

The presence of organic matter in soil enhances the sorption of metal ions to mineral surfaces. The results of the TOC analyses performed on 22 samples indicate that TOC ranges from 690 to 7,320 mg/kg, with an average value of 2,700 mg/kg ([Table 5-2-7](#)). TOC values show two trends: 1) TOC values are greater in samples collected from the A/B- and B/C-Aquitard than from the A-, B-, and C-zones, likely due to increased clay content; and 2) TOC values increase with depth from A-Zone, to B-Zone, to C-Zone and from A/B-Aquitard to B/C-Aquitard. TOC values in the A-Zone ranged from 690 to 3,530 mg/kg, with an average of 1,671 mg/kg. TOC values in the A/B-Aquitard ranged from 2,640 to 3,630, with an average of 3,130 mg/kg. TOC values in the B-Zone ranged from 1,690 to 3,840 mg/kg, with an average of 2,580 mg/kg. TOC values in the B/C-Aquitard ranged from 2,290 to 7,320 mg/kg, with an average value of 5,040 mg/kg. TOC values in the C-Zone ranged from 3,050 to 4,340 mg/kg, with an average value of 3,670 mg/kg.

6.3.1.3.3 Counter-Ions

Inorganic anions such as carbonate, phosphate, and sulfide form insoluble complexes with metal cations and can cause metals to precipitate in their presence. Soil and groundwater samples from

the Facility have been analyzed for inorganic anions and cations to provide information on the geochemical reactions occurring in the subsurface soils and groundwater. A discussion of these ions is included in the One-Year Pilot Study Report, attached to this RI Report as [Appendix 3-8](#).

6.3.1.3.4 Oxidation-Reduction Potential

Remedial investigation activities at the Site have documented both geochemically oxidized and reduced zones in the subsurface based on visual observation of soil cuttings, as described in [Section 4.5.2.2](#). Based on visual observations during drilling, the near surface soils appear to be moderately oxidized, while deeper soils appear to exhibit reduced conditions. The transition zone from oxidized to reduced conditions is illustrated on the geologic cross sections ([Figures 4-6 through 4-11](#)). These environmental conditions are the result of natural depositional processes, and are not related to Facility operations. However, these conditions result in complex and varied geochemical effects on the observed PCOCs. The most beneficial effect noted has been the natural attenuation of hexavalent chromium via reduction, which appears to be a major factor contributing to the limited lateral and vertical migration of this PCOC at the Site compared to VOCs.

Field and laboratory ORP measurements of groundwater have been performed as part of the pilot study activities. [Table 5-3b-5](#) presents the results of field and laboratory ORP measurements. The presence of hexavalent chromium in groundwater correlates with ORP readings in the range of 95 to 549 millivolts (“MV”) prior to the pilot study. These readings are indicative of oxidized conditions.

It should be noted that although shallow (principally A-Zone) soils were observed to be oxidized, this should not be interpreted to mean that no further reduction could occur in this zone. In fact, natural reduction of hexavalent chromium in the A-Zone has been documented at the Site. The more reduced conditions of the deeper soils are expected to increase the natural attenuation of chromium.

6.3.1.3.5 Sulfate Reducing Bacteria

Ten soil samples were analyzed for SRB prior to pilot testing activities (Table 5-2-7). The reduction mechanism associated with molasses and calcium polysulfide injection is in part related to the generation of hydrogen sulfide by growth of SRB, with a subsequent reaction between the hydrogen sulfide and hexavalent chromium. Two of the ten soil samples contained SRB at concentrations of 24 and 26 organisms per 100 gram. These two samples were collected at SB-43 at 13 and 26 feet bgs. The remaining eight samples did not contain SRB, with detection limits ranging from 22 to 29 organisms per 100 gram. These SRB counts are quite low, suggesting that the presence of elevated levels of hexavalent chromium in the subsurface is a limiting factor to naturally occurring SRB.

Groundwater samples were analyzed for SRB after injection of molasses and calcium polysulfide. The SRB data for groundwater showed greatly increased concentrations of SRB in most of the test area, with a more modest increase in SRB within the area of highest hexavalent chromium concentrations. The increased SRB population counts as a result of the injections were temporary, and the SRB data are discussed further in the pilot test reports.

The natural attenuation processes discussed above have limited capacity to fully address the observed metal impacts at the Site and for that reason, enhancements to these natural processes are being investigated by the Willits Trust as potential interim or final remedial actions at the Site. The pilot test of *in-situ* reduction that was recently conducted serves as a field evaluation of two methods of enhancement to natural attenuation. The resulting data will be used during the feasibility study of these and other potential remedial actions for the Site. The various geochemical reactions of the known or potential Facility-related chemicals are further discussed below.

6.3.1.4 Attenuation of Individual Metals

The Facility-related metals of potential interest are split into two general groups (cationic and anionic metals). The solubility, and therefore the attenuation, of cationic metals are dependent primarily on groundwater pH. Cationic metals are expected to be soluble and therefore more mobile at low pH (i.e., pH lower than approximately 4.5). At neutral pH, these metals will be

retained on soil particles through the natural attenuation processes described above. Most cationic metals are also mobile under alkaline conditions at pH values above approximately 10, a behavior known as amphoterism. Thirty-five groundwater samples were analyzed for pH at the Site. The pH values range from 5.7 to 7.2, indicating neutral pH groundwater conditions (Table 5-3b-5). The solubility of anionic metals is more complex and cannot be attributed to one dominant soil or groundwater condition. Therefore, these metals are considered separately in the following sections.

Because groundwater at the Site rises to very near the surface during winter, the shallow groundwater is occasionally in direct contact with PCOCs in shallow and surface soils. For this reason, it is assumed that all PCOCs in soil may potentially impact groundwater. Therefore, all PCOCs in soil have been included in the following discussion regarding groundwater. The following sections describe attenuation processes for cationic and anionic metals.

6.3.1.4.1 Cationic Metals

Cationic metals consist of the metals whose solubility is primarily pH dependent. These are metals that exist as cationic (positively charged) species, which are attracted to negatively charged soil surfaces and form insoluble precipitates with hydroxides and carbonates at neutral and above-neutral pH. Cationic metals include aluminum, cadmium, trivalent chromium, lead, inorganic mercury, and zinc. In general, the mobility of cationic metals increases as pH moves away from near-neutral conditions. Therefore, these metals would not be expected to be transported in the relatively neutral pH groundwater found at the Site. The primary cationic metal of interest (trivalent chromium) is described in detail below, as are cadmium, lead, and zinc.

Trivalent Chromium. Trivalent chromium is naturally occurring in soil and is the most common oxidation state of chromium. Trivalent chromium dominates over hexavalent chromium under reducing conditions. Trivalent chromium has a very low mobility due to adsorption to clay minerals and oxides at low pH and due to the formation of $\text{Cr}(\text{OH})_3$ (s) at neutral and high pH (GWRTAC, 1997). The reduction of hexavalent chromium to trivalent chromium and the resultant sorption to soil is the primary mechanism that has limited the extent

of both the trivalent and hexavalent chromium plumes in groundwater. Hexavalent chromium is discussed further under the anionic metals discussion.

Lead. The most common oxidation states of lead (Pb) include 0 and +II. Lead solubility decreases through complexation with inorganic and organic ligands. Under reducing conditions at high sulfide concentrations, lead sulfide in the subsurface is a very stable (and immobile) solid. Various processes, including adsorption, ion exchange, precipitation, and complexation, limit the amount of lead that will be transported into and within groundwater. Lead is considered a potential Facility-related metal based on concentrations detected in surface soil samples exceeding the preliminary screening criteria value of 40 mg/kg. However, lead was not known to be utilized as part of Facility operations. Lead concentrations in surface soil samples at the Site range from 19.9 to 542 mg/kg. Nine surface soil samples contained lead concentrations exceeding the preliminary screening criteria whereas six of 106 soil samples collected below the surface contained lead at concentrations above the preliminary screening criteria. Only one of 93 monitoring well groundwater samples and two of 63 grab groundwater samples contained lead at concentrations above preliminary screening criteria.

Zinc. Zinc was not detected in surface soil, soil, or groundwater samples at concentrations exceeding the screening criteria of 2,300 mg/kg for soil or 1.1 mg/L for groundwater. However, zinc is a metal known to have been used in plating operations at the Facility. Zinc most commonly occurs in the +II oxidation state, forming complexes with a number of anions. Zinc is one of the most mobile metals in groundwater because, unlike other cationic metals, it is present as soluble complexes at neutral and acidic pH. At higher pH, zinc will precipitate as hydroxide and carbonate complexes. Sorption to sediments or suspended solids increases as pH increases and salinity decreases (GWRTAC, 1997).

Cadmium. Cadmium is a metal known to have been used in plating operations at the Facility. However, with the possible exception of a single shallow soil sample from SB-134 located north of the plating operations area, the distribution of cadmium in soil and groundwater at the Site is not indicative of a release from Facility operations. Cadmium has geochemical behavior that is virtually identical to zinc. Cadmium was detected in only two of 11 surface soil samples and

five of 106 soil samples at concentrations exceeding the preliminary screening criteria of 0.9 mg/kg. Dissolved cadmium was not detected in groundwater in background samples and was detected at a low frequency in monitoring well groundwater samples.

6.3.1.4.2 Anionic Metals

The principal Facility-related anionic metal is hexavalent chromium. Arsenic is also an anionic metal that was detected at the Site in concentrations exceeding preliminary screening criteria in soil and groundwater in a few locations. However, the distribution of the five detected concentrations of arsenic in both soil and groundwater exceeding the preliminary screening criteria is not indicative of a release from the Facility.

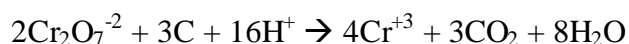
Although arsenic and hexavalent chromium have positive charges, the complexes formed by these metals have overall negative charges, and that is why they are referred to as anionic metals. Because the retardation dynamics affecting these anionic metals are more complex, estimating the range of anionic metal transport cannot be accomplished by simply looking at pH (as for the cationic metals). Instead, literature values for metal-specific distribution coefficients can be used to roughly estimate PCOC transport properties. The following paragraphs describe the attenuation of each of these metals at the Site.

Arsenic. Arsenic (“As”) is a semi-metallic element or metalloid that occurs in a variety of minerals and exhibits complex chemistry. Arsenic can be naturally present in the subsurface in several oxidation states. In aerobic environments, As(V) is the most common oxidation state, existing in the form of arsenate (AsO_4^{3-}), commonly as a precipitate with ferric ion. Under reducing conditions, the most common oxidation state is As(III), existing as arsenite (AsO_3^{3-}). Arsenic is often present in anionic form. Unlike cationic metals, arsenic mobility increases as pH increases, and anionic forms of arsenic are least mobile under acidic conditions. Arsenic compounds typically sorb strongly to soils, including hydrous iron oxides, significantly limiting its mobility. However, As(V) can be mobilized under reducing, alkaline, or saline conditions, in the presence of competing anions, and in the presence of organic compounds that form complexes with arsenic (GWRTAC, 1997).

Concentrations of arsenic in soil and groundwater at the Facility are shown in [Figures 5-8 and 5-9](#) and [Figures 5-36 through 5-38](#). As stated above, the distribution of arsenic in soil and groundwater is not indicative of releases from the Facility, but is more likely related to naturally-occurring conditions.

Hexavalent Chromium. Hexavalent chromium is more mobile and toxic than trivalent chromium. Under anaerobic conditions, hexavalent chromium can be reduced to trivalent chromium. The major species of hexavalent chromium, chromate (CrO_4^{2-}) and dichromate ($\text{Cr}_2\text{O}_7^{2-}$) precipitate in the presence of metal cations and adsorb onto soil surfaces including iron and aluminum oxides. Like arsenic, the mobility of hexavalent chromium increases as pH increases (GWRTAC, 1997). The natural attenuation of hexavalent chromium is discussed in detail in the USEPA document, *Natural Attenuation of Hexavalent Chromium in Ground Water and Soils*, prepared by Carl D. Palmer and Robert W. Puls and is summarized below (USEPA, 1994).

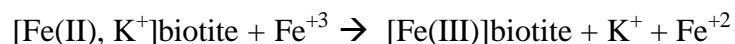
Hexavalent chromium is a strong oxidant, and can be reduced to the trivalent form by many electron donors such as carbonaceous matter, ferrous iron minerals, and reduced sulfur. Soil containing carbonaceous matter can reduce hexavalent chromium by the reaction:



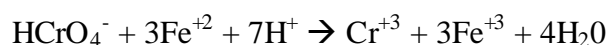
The trivalent chromium forms chromium hydroxide, which binds to soils. The reduction is facilitated by sulfate reducing anaerobic microorganisms, which utilize sulfate and carbon as a part of their life system, producing HS^- ion, which also reduces hexavalent chromium to the trivalent form.

Hexavalent chromium can be reduced to the trivalent form by ferrous iron, either in solution or in various ferrous-bearing silicates such as olivene, amphibolites, micas, biotites, and chlorites. The soils in the area of the Remco Facility contain numerous reduced silicates such as those listed above associated with the parent (source) rock of the Coast Ranges Geologic Province.

The reaction for the reduction of hexavalent chromium by ferrous biotite is given by Palmer and Puls (USEPA, 1994) as:



The resultant ferrous ions in solution slowly react with hexavalent chromium (in chromate ion) according to:



The trivalent chromium and iron forms oxyhydroxides, which sorb to the soil particles.

The reactions presented above for reduction of hexavalent chromium take place using native electron donors. Enhancements to natural attenuation of chromium have been field demonstrated repeatedly at the Site and elsewhere through the addition of reduced sulfur compounds subsurface for use as electron donors, such as calcium polysulfide.

Experience has shown that once reduced to the trivalent form, chromium no longer represents a continued threat to groundwater resources. Although reoxidation of chromium to the hexavalent form is theoretically possible under unusual conditions (as described in USEPA, 1994), this has not been observed, nor would be expected, at sites with typical background geochemical conditions such as at the Remco Site. Such conditions clearly favor the trivalent form of chromium. Only under specific conditions, such as extremely low or high pH (i.e. <5 or > 12), which are not found at the Site, would trivalent chromium be soluble such that dissolved chromium would be a concern in groundwater.

6.3.2 Fate of Organic Chemicals

The organic constituents detected at the Facility can be divided into the following classes of contaminants for a discussion of chemical fate:

- Petroleum hydrocarbons
- PAHs
- VOCs including chlorinated aliphatics, ketones, aromatics, chlorofluorohydrocarbons, organosulfur compounds, and ethers
- PCBs

Physical and chemical properties of the organic chemicals of interest are presented in [Table 6-2](#).

6.3.2.1 Petroleum Hydrocarbons

The petroleum hydrocarbons detected at the Site have been predominantly characterized as extractable range hydrocarbons, which include diesel. Natural attenuation of petroleum hydrocarbons occurs to varying degrees under both aerobic and anaerobic environments. However, the most rapid degradation occurs in aerobic (oxygenated) conditions through biological processes. With sufficient petroleum product in the subsurface, aerobic biological processes generally result in increasingly anaerobic conditions over time through the consumption of oxygen. Petroleum hydrocarbons are also consumed as food sources for bacteria in the process of degrading other organic chemicals such as chlorinated volatile organics, discussed further below.

TPH-diesel is noted to be present across the Site, with significantly higher concentrations in areas where fuels and oils were stored and used, along with areas where releases have been documented. Elevated concentrations of TPH-diesel were primarily detected in soil in the following areas:

- In and around Building 1964 (plating area and former location of a 7,500-gallon diesel UST and associated piping)
- Near the location of a cutting oil sump in Building 1962
- Along the path of the former underground diesel fuel line north of Building 1973
- Near the location of former sub-grade trenches at Building 1973
- Near the location of a 1981 release from the diesel fuel line north of Building 1979

The distribution of TPH-diesel in A-Zone groundwater is consistent with that for soil. The presence of separate-phase petroleum product at the Facility is discussed in [Section 6.4.2](#). TPH-diesel has been reported only sporadically at low levels in historical samples in B- and C-Zone groundwater. The characteristic of this TPH was found to be inconsistent with TPH-diesel, as discussed in [Section 5.3.2](#).

6.3.2.2 Polynuclear Aromatic Hydrocarbons

The PAHs benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were detected at concentrations exceeding preliminary screening criteria in grab groundwater samples. The PAHs were primarily detected near SB-20 where free diesel product was noted during drilling and elevated concentrations of TPH-diesel have been documented. These PAHs are constituent products of diesel and the localized detections of PAHs are consistent with the release of diesel fuel to the subsurface.

The organic carbon partition coefficient (“ K_{oc} ”) values for PAHs indicate that they adsorb readily to organic materials found in sediments and soil. PAHs have extremely low vapor pressures and thus are not likely to volatilize into the atmosphere from dry surface soils or paved surfaces. The very low Henry’s Law constants of PAHs suggest that volatilization from most soils would also be very slow. The low solubility of PAHs and high K_{oc} values suggest that PAHs will tend to remain sorbed to soil, rather than leach into groundwater. This is consistent with the limited detection of PAHs in groundwater in the areas of the historical diesel fuel line releases. PAHs have not been detected in either the B-Zone or C-Zone.

6.3.2.3 Volatile Organic Compounds

The VOCs detected at the Site include the following:

- Chlorinated aliphatics (TCE, PCE, and 1,1,1-TCA and their associated degradation products such as 1,1-DCE and cis-1,2-DCE)
- Ethers (1,4-dioxane and MTBE)
- Chlorofluorohydrocarbons (Freon 113)
- Ketones (MEK)

This section discusses the physical, chemical and biological processes that affect the fate of these VOCs in the environment. Other VOCs were detected at the Site but are not discussed below because their distribution was sporadic or did not appear related to Facility activities.

6.3.2.3.1 Chlorinated Aliphatics and Associated Degradation Products

The processes that affect the fate of chlorinated aliphatics and their degradation products include volatilization, sorption, abiotic and biotic transformations, oxidation, and reduction. Natural attenuation of these chemicals occurs most readily in reducing/anaerobic environments where conditions more favorable for degradation through reductive dechlorination occur. Under reducing conditions, degradation of other organics such as petroleum hydrocarbons are expected to occur as the bacteria use these compounds as food sources.

Volatilization. VOCs may diffuse directly from liquid to vapor phase according to their air/water partitioning coefficients (Henry's Law constants). VOCs possessing low molecular weight, high vapor pressures and low aqueous solubilities are particularly susceptible to volatilization. [Table 6-2](#) summarizes the properties of the VOCs found at the Site. In groundwater systems, volatilization occurs at the top of the capillary fringe, and within vadose-zone soil near the water table.

Volatilization at the Site would only occur within the A-Zone. The rate of volatilization from groundwater, under natural conditions, would be limited by the rate of diffusion upward through the vadose zone from the top of the capillary fringe to the land surface. Volatilization would not occur naturally within the deeper water-bearing zones. Although the highest concentrations of VOCs are found in A-Zone groundwater, volatilization is not expected to play a significant role in removal of VOC mass from the soil and groundwater due to the highly saturated state of fine-grained soils in the shallow vadose zone, which greatly limits upward diffusion rates. However, volatilization of VOCs from shallow groundwater to air will be further evaluated as a potential exposure pathway during the Risk Assessment.

Chemical Transformations. As constituents in soil and groundwater, chlorinated aliphatics are subject to both abiotic and biotic transformations, leading to eventual degradation to carbon

dioxide, ethene/ethane, and methane. [Figure 6-2](#) presents the common degradation pathways for chlorinated aliphatics. The type and extent of degradation is based upon the type of chlorinated compound present, as well as various environmental conditions such as groundwater pH, temperature, oxidation/reduction potential, microbial population, and presence of other chemical species, particularly chemicals that serve as primary food source for microbes. Degradation may occur both abiotically and biotically, as discussed below.

Abiotic Transformation. In general, abiotic transformations (such as elimination and hydrolysis) are slow and involve only alkanes, such as TCA, while biotic transformations proceed more rapidly and involve both alkanes and alkenes (e.g., TCE). Abiotic degradation can occur via two pathways, substitution and dehydrohalogenation. With substitution, a chlorine atom is replaced with another negatively charged species such as a hydroxide ion (hydrolysis). The products of the hydrolysis reaction are an alcohol and hydrogen chloride. Substitution occurs most rapidly for monochlorinated compounds, and the reaction rate decreases significantly as the degree of chlorination increases. Dehydrohalogenation occurs when an alkane loses both a chlorine atom from one carbon atom and a hydrogen atom from an adjacent carbon atom, thus creating an alkene. The rate of dehydrohalogenation increases with increasing degree of chlorination.

Of the common chlorinated aliphatic compounds typically released to the environment, only TCA has been shown to undergo abiotic transformation under natural groundwater conditions (McCarty, 1994). TCA can degrade abiotically to 1,1-DCE (via elimination) or to acetic acid (via hydrolysis). Chloroethane, a daughter product of biotic TCA transformation, can degrade abiotically (via hydrolysis) to ethanol ([Figure 6-2](#)).

Biotic Transformation. Microbial activity can result in biotic transformation of chlorinated aliphatic compounds in soil and groundwater. Microbial growth is promoted by consistent groundwater flow, minimal fluctuations in water table level and groundwater flow direction, a neutral pH of between 6 and 8, adequate pH buffering to counter the acidification resulting from microbial activity, and moderate groundwater temperature. Also required are a carbon source and nutrients (nitrogen, phosphorus, and miscellaneous trace metals) for microbial growth, and

electron donors and electron acceptors for energy production. Organic compounds, including organic contaminants, can be utilized both as a carbon source and as an electron donor.

Microorganisms derive energy by oxidizing reduced compounds, a process which transfers electrons from an electron donor (reduced compound) to an electron acceptor (oxidized compound). Electron acceptors are utilized based upon their oxidation/reduction potential. The highest energy is derived from oxygen, followed in decreasing order by nitrate, manganese (IV), iron III, sulfate and carbon dioxide. Consequently, microbial processes are expected to evolve over time as electron acceptors are depleted. An aerobic environment is expected initially, but oxygen concentrations decrease as microbial activity depletes the high-energy oxygen. Once oxygen is depleted, nitrate becomes the preferred electron acceptor, resulting in a denitrification environment. As nitrate concentrations decrease, manganese IV, iron III, sulfate and carbon dioxide are progressively utilized and depleted by the microorganisms. Correspondingly, increased concentrations of reduced manganese and iron (manganese II and iron II), hydrogen sulfide and methane are expected.

The highest energy electron acceptor available to a microbial population dictates the mechanism for biotic transformation of chlorinated VOCs in a contaminant plume. Under aerobic conditions, chlorinated compounds function as electron donors and are oxidized. In the absence of oxygen (i.e., anaerobic conditions), a reducing environment prevails and chlorinated compounds function as electron acceptors. These mechanisms are further described below.

Oxidation. Microbial oxidation of chlorinated VOCs occurs under aerobic conditions, with the chlorinated compound functioning as an electron donor. Compounds with a high degree of chlorination are least susceptible to aerobic oxidation. For example, vinyl chloride and chloroform are readily oxidized, while aerobic transformation of PCE is not significant (Long, et al., 1993). Aerobic transformation typically requires the presence of a secondary electron donor and source of organic carbon such as toluene, phenol (Hopkins, et al., 1993), petroleum hydrocarbons, molasses, or ketones, since most microorganisms cannot utilize chlorinated compounds as their sole source of carbon.

Typical transformation pathways include: 1) formation of an alcohol by the addition of a hydroxide ion, followed by formation of an aldehyde by loss of a hydrogen and chlorine atom, and 2) formation of an epoxide by oxidation of an alkene, followed by formation of a carboxylic acid by further oxidation. Aerobic transformation is difficult to document under field conditions because transformation products are unstable and difficult to measure analytically.

Reduction. Microbial reduction of chlorinated VOCs occurs under anaerobic, highly reduced conditions, with the chlorinated compound functioning as an electron acceptor. Both oxygen and nitrate are stronger electron acceptors than chlorinated compounds; consequently, reduction of chlorinated compounds does not occur in the presence of either oxygen or nitrate. Anaerobic transformation can occur under sulfate-reducing, methanogenic and possibly iron-reducing conditions. Microbial reduction favors highly oxidized compounds such as those compounds with a high degree of chlorination. Typically, anaerobic processes are the most important in transformation of aliphatic chlorinated compounds.

The mechanism for anaerobic transformation is reductive dehalogenation, a process that involves the sequential removal of chlorine atoms. Because the chlorinated compound functions as an electron acceptor, a complementary electron donor must also be present. Thus, the presence of co-contaminants such as petroleum hydrocarbons provides an environment conducive to anaerobic transformation. PCE is sequentially transformed to TCE, cis-, trans-, or 1,1-DCE, vinyl chloride and, finally, ethene, the terminal dehalogenation product.

Data collected to date at the Site indicate reductive dechlorination of VOCs has occurred given the presence of higher concentrations of degradation products as compared to the source solvents (TCE and PCE) in many locations ([Figure 5-10](#)). For example, 1,1-DCA, 1,1-DCE and cis-1,2-DCE were detected, but neither PCE nor TCE were detected in the February 2001 groundwater sample collected at monitoring well W23A. The analytical data at this monitoring well is representative of natural conditions, as it is located upgradient of the pilot test areas, and

indicates that reductive dechlorination is occurring naturally in the subsurface. Reductive dechlorination of VOCs has been enhanced significantly in the pilot study area through the injection of molasses, as discussed in the One-Year Post-Injection Report ([Appendix 3-8](#)). The results for dissolved carbon dioxide, dissolved oxygen, and dissolved methane in groundwater are consistent with the occurrence of natural attenuation processes for the organics detected in groundwater.

The *in-situ* reduction pilot test being performed at the Site was designed to evaluate the effect that the enhancement of reducing conditions has on expediting reductive dechlorination of VOCs. While the injection of calcium polysulfide appears to have had little effect on VOC concentrations, the injection of molasses has resulted in significant decreases in PCE and TCE concentrations in certain wells in the molasses injection area. The presence of increasing concentrations of intermediate transformation products, such as cis-1,2-DCE, provides strong evidence that reductive transformations are taking place in the molasses injection area ([Appendix 3-8](#)).

As discussed above, the bacteria responsible for the biological processes require carbon food sources. Based on the naturally high TOC content in the clayey soils at the Site, the availability of TOC is not expected to be biologically limiting. However, the pilot test also includes evaluation of the addition of the simple carbon source molasses as a means of increasing biological activity.

6.3.2.3.2 Ethers (1,4-dioxane and MTBE)

1,4-dioxane is used as a solvent stabilizer in several chlorinated solvents, including chloroform, 1,1,1-TCA, and TCE. 1,4-dioxane is used as an additive in the solvent manufacturing process, principally for 1,1,1-TCA, where it comprises approximately two to four percent of TCA solvent. It also has been generally used in industry as a paint, lacquer, and varnish-removing solvent (Mohr, 2001).

The low K_{oc} values (3.5 to 11 cm³/gm) ([Table 6-2](#)) suggests that 1,4-dioxane should readily leach to groundwater. The very low Henry's Law constant of 4.88×10^{-6} atm-m³/mole suggests that

volatilization from most soils will be very slow. However, based on its vapor pressure, volatilization from dry surface soils or paved surfaces should be fast. 1,4-dioxane in water is not expected to hydrolyze significantly and volatilization from water would probably be slow given its miscibility and low Henry's Law constant. Given 1,4-dioxane's low K_{oc} value, it is not expected to significantly adsorb to suspended sediments. 1,4-dioxane has been found to be resistant to biodegradation and has been classified as relatively undegradable. (Howard 1990).

Elevated concentrations of 1,4-dioxane were detected in A-Zone groundwater primarily near the chrome plating area, the paint shop in Building 1967, and immediately north of Facility along the storm-drain system. These areas coincide with areas where chlorinated solvents were also detected. The extent of 1,4-dioxane in A-Zone groundwater is illustrated in [Figure 5-24](#). Based on the low detection level sampling event in July-August 2001, the observed downgradient extent of 1,4-dioxane in groundwater extends to the wells located along Highway 20.

MTBE is an oxygenated fuel additive that has been used as a gasoline octane enhancer since 1979. With its high solubility and low K_{oc} , MTBE leaches readily to groundwater and is highly mobile in groundwater. Like 1,4-dioxane (discussed in [Section 6.3.2.3.4](#)), MTBE has a very low Henry's constant and is not expected to volatilize once dissolved in soil water or groundwater.

MTBE was detected in groundwater at the Facility at concentrations exceeding the preliminary screening criteria (5 $\mu\text{g/L}$), but below the MCL. The pattern of low level detections is widespread throughout the Facility, but clustered in the central portion of the main building and along the former unlined drainage ditch at the northern property line; MTBE concentrations in these two areas ranged up to 6.74 $\mu\text{g/L}$. The highest concentrations of MTBE were detected north and west of the Facility, along Franklin Avenue (44.2 $\mu\text{g/L}$), and at the former Chevron station (279 $\mu\text{g/L}$), and are not associated with Facility operations.

6.3.2.3.3 Chlorofluorocarbons (Freon 113)

Freon 113 was detected in soil and A-Zone groundwater samples primarily collected adjacent to the storm-drain system along the northern Facility boundary and south and east of the Building 1964 Plating Department. Detections of Freon 113 in soil are shown on [Figures 5-1](#) and [5-2](#).

The extent of Freon 113 in A-Zone groundwater is illustrated in [Figure 5-24](#). Concentrations of Freon 113 exceeded the preliminary screening criteria (1,200 µg/L; California MCL) in two A-Zone grab groundwater samples and one A-Zone monitoring well, and one B-Zone monitoring well.⁵⁸ Freon 113 has not been detected in C-Zone groundwater.

If released to soil, Freon 113 would rapidly volatilize or leach to groundwater (HSDB, 1994). The literature values for K_{oc} for Freon 113 ([Table 6-2](#)) indicate that it would be moderately mobile in soil and that moderate adsorption to soils and sediments would occur. Based on the Henry's law constant, Freon 113 would rapidly volatilize from soil surfaces (Howard, 1990). Freon, which includes fluorene in addition to chlorine, initially degrades to 1,2-dichloro-1,2,2-trifluoroethane and 1,1,2 trichloro-1,2-difluoroethane. If complete mineralization occurs, the result will be the generation of fluoride ion in addition to chloride ion, carbon dioxide, and water.

6.3.2.3.4 Ketones (MEK)

MEK, also known as 2-butanone, is commonly used as a solvent, particularly in the coatings industry. If MEK is released to soil, it will partially evaporate into the atmosphere from near-surface soil. In soil, MEK is highly mobile and may be leached from the soil by water, and has been shown to be degraded by cultures of soil bacteria (Howard, 1990; USEPA, 1985). MEK's relatively high vapor pressure indicates that it can volatilize from dry surface soil or open paved surfaces (HSDB 1994). On the other hand, MEK is highly soluble and has a very low Henry's constant, which greatly limits volatilization losses once it has migrated into the subsurface. MEK degrades relatively quickly in aerobic environments and may biodegrade slowly in groundwater under anaerobic conditions after a long acclimation period.

MEK was detected in shallow soil in Building 1967, within the chromium *in-situ* pilot study area, west of Building 1979, and west of the main Facility building. MEK was only detected in deeper soil samples collected off-Facility in the Safeway Shopping Center parking lot. MEK was detected at concentrations in excess of the preliminary screening criteria only within the

⁵⁸ Freon 113 was detected in a sample reportedly collected from B-Zone monitoring well (W17B on February 22, 2001). Based on a review of analytical results prior to and after February 22, 2001, it appears that the February 22, 2001 results for W17A and W17B were switched.

A-Zone in the molasses injection portion of the chromium *in-situ* pilot study test area. MEK was generated in groundwater in the molasses injection pilot study area due to a process called Jones Oxidation. MEK concentrations rapidly degraded as discussed in [Section 5.3.1.1](#) and in [Appendix 3-8](#). As such, the presence of MEK in A-Zone groundwater at the Facility was transitory and not indicative of a release from Facility operations.

6.3.2.4 PCBs

Physical, chemical, and biological processes influence the fate and transport of PCBs in the environment. The tendencies and rate at which these processes occur depend on the physical and chemical properties of individual PCBs, their mixtures, and site-specific environmental conditions.

PCBs are relatively insoluble in water, and congeners with higher chlorine content tend to be more insoluble (USEPA, 1996). The K_{oc} values for PCBs indicate that they adsorb readily to organic materials in sediments and soil, with adsorption increasing with the chlorine content of the mixture and the organic content of the environmental media. Although PCBs have relatively low vapor pressures, they are likely to volatilize into the atmosphere, particularly from water; congeners with lower chlorine content are more volatile (USEPA, 1996). Biodegradation (i.e., dechlorination) is slow, as are other breakdown processes such as photolysis and chemical degradation. As an example, the half-life of PCBs in soil is several years. Transformation processes in water and air range from < 1 day to 210 days, depending on the chlorine substitution pattern and the environmental conditions (ATSDR, 1996).

As discussed in [Section 5.0](#), the distribution of PCBs in soil and groundwater is limited to the area surrounding the cutting oil sump in Building 1962 in the AZone. The limited extent is consistent with the limited mobility of PCBs.

6.4 FATE AND TRANSPORT OF PCOCS AT THE SITE

The extent of PCOC migration to date is described in [Section 5.0](#) and the routes of migration are described in [Section 6.2](#). As discussed in [Section 6.1](#), potential primary surface sources of

PCOCs have been eliminated from the Facility. However, residual subsurface concentrations of Facility-related chemicals could represent a continuing threat of future PCOC migration. This issue is particularly important to consider with respect to the development of interim or final remedial actions.

As described in [Section 6.3](#) above, several factors affect the fate of Facility-related chemicals. The processes that attenuate concentrations also serve to reduce both the rate and extent of migration of PCOCs in the environment. The primary routes for potential continued and/or future migration in the absence of remedial action(s) include:

- Migration of soil PCOCs to shallow groundwater
- Dissolution of PCOCs to groundwater from separate-phase product
- Fugitive dust during future Facility demolition
- Downgradient migration of PCOCs in groundwater

Other routes of historical migration are not considered here due to the actions already taken at the Facility, including closure of Facility operations and interim remedial actions by the Willits Trust and others to eliminate certain potential routes of migration (e.g., lining and sealing the storm-drain system to eliminate contaminated groundwater infiltration, and the decontamination and removal of sumps, tanks, pits, and trenches).

The routes of potential continued contaminant migration relate principally to additional effects on groundwater and further migration of PCOCs in groundwater. These potential routes of further migration are discussed below.

6.4.1 Migration of PCOCs in Soil to Groundwater

Elevated concentrations of PCOCs in soil may represent a continued threat to groundwater contamination, through downward migration to groundwater. Because the groundwater level at the Site rises to very near the surface during winter, the shallow groundwater is often in direct contact with PCOCs in soil. For this reason, it is assumed that all soluble contaminants in soil

may potentially impact groundwater. The degree of impact depends on the solubility of the particular PCOC.

6.4.2 Dissolution of PCOCs from Separate-Phase Product

As discussed in [Section 6.1](#), separate-phase petroleum product exists as a result of release from the diesel fuel line and/or a former diesel UST in the north central area of the Facility. Dissolution of PCOCs from the diesel product represent potential threats to groundwater quality. PAHs have also been detected in this area, although due to their low mobility they are not considered a significant threat to groundwater away from the source. In addition, separate-phase petroleum product containing PCBs appears to exist in the immediate vicinity of the cutting oil sump in Building 1962. As discussed above in [Section 6.3.2.4](#), PCBs themselves are not mobile. However, PCBs can be mobile if dissolved in a mobile petroleum hydrocarbon base. At the Site, petroleum hydrocarbons do not appear to form a mobile separate phase in this area and thus PCBs are not considered a threat to groundwater.

The elevated PCE concentrations in groundwater adjacent to the storm-drain system indicate the likely presence of PCE as DNAPL in the A-Zone. The elevated PCE concentrations in the area west of the Paint Shop and east of the Plating area also indicate the possible presence of DNAPL. The possible presence of PCE as DNAPL in these areas represents a long-term threat of continued dissolution of PCE into A-Zone groundwater from these source areas.

6.4.3 Fugitive Dust from Future Facility Demolition Activities

Future land use at the Facility may result in demolition of the existing buildings. In the absence of proper dust and asbestos control measures, dust containing hexavalent chromium, lead, and asbestos could be released into the air during demolition. Therefore, proper decontamination and handling procedures are needed during any future demolition activities.

6.4.4 PCOC Migration in Groundwater

The primary route of migration having the potential to result in impacts to presently unaffected areas is through PCOC migration in groundwater. PCOCs have the potential to migrate in groundwater, but several factors influence the speed of chemical migration. These factors include the rate of groundwater flow and the rate of the various physical and chemical attenuation mechanisms. When water containing various chemical constituents moves through soil or groundwater, subsurface physical and chemical attenuation mechanisms, as discussed in [Section 6.3](#), play a large role in the fate and migration of chemicals. The concentrations of chemicals in the subsurface will change in composition in a manner that depends on the processes acting on the chemicals in the soil or groundwater.

The transport processes of advection, mechanical dispersion and, molecular diffusion, in combination with the chemical reactions and exchange processes, physical adsorption, and biological activity discussed in [Section 6.3](#), can all cause changes in the composition of water flowing through groundwater. A summary of these processes, with respect to the potential for continued migration of PCOCs in groundwater, is provided below. This section discusses the physical processes that affect chemical migration in groundwater.

Advection. Advective transport is defined as the movement of a solute with the groundwater flow. If advection were the only transport process, solutes would migrate at a rate equal to the average linear velocity of the water (Freeze and Cherry, 1979). In reality, differential average velocities through various matrices result in some portions of the introduced chemical moving through the matrix faster than other portions. This results in a dilution process referred to as dispersion as discussed below.

Dispersion. The tendency of a solute to spread out and mix as it moves through the groundwater is termed dispersion. Dispersion is caused by both microscopic processes (mixing in pores, friction of water moving around individual grains) and macroscale processes (variations in K, stratigraphy, tortuosity of flow paths). Dispersion will cause some of the PCOCs to move faster and some to move slower than predicted by the average linear velocity. Mixing can occur both

parallel to the groundwater flow direction (longitudinal dispersion) and perpendicular to the flow path (transverse dispersion). Longitudinal dispersion will result in a contaminant arriving at a location somewhat ahead of that predicted by the average linear velocity, but at lower concentrations. Transverse dispersion will result in the spreading of chemicals, both horizontally and vertically, as the solute moves through the groundwater. Although the total mass of the solute in the groundwater would theoretically remain the same (in the absence of degradation), the solute mass occupies an increasingly larger volume of the groundwater during transport, and the maximum concentration of the chemical in the groundwater decreases with time if the source is being depleted. Mechanical dispersion can be expressed in terms of a dispersivity coefficient [length("L")] multiplied by the average linear velocity (length/time) and therefore has units of L^2/time .

Diffusion. Diffusion refers to the movement of a solute from regions of high concentrations to areas with lower concentrations. Diffusion is independent of fluid flow and is mainly a function of concentration gradients. At low groundwater flow velocities, diffusion is a more important contributor than mechanical dispersion for spreading chemical mass, whereas at higher velocities, dispersion becomes dominant. In situations where the water-bearing zone is fractured, diffusion may occur near the leading edge of a plume as contaminant mass moves from the more permeable zones into the surrounding matrix. This will result in the apparent loss of contaminant mass from the permeable flow regime. Likewise, if higher concentrations of contaminants are located in the fine-grained sediments compared to the permeable stringers (as may occur during pump and treat remediation), diffusion will result in contaminant mass transfer back from the fine-grained sediments to the more-permeable flow system. Often this effect is observed at the latter stages of remediation as a tailing effect, when removal concentrations reach asymptotic levels.

Retardation Process. Both inorganic and organic contaminants tend to move slower than the groundwater seepage velocity due to natural attenuation. As discussed in [Section 6.3](#), natural attenuation refers to a range of physical and biological processes that reduce the concentration, toxicity, or mobility of chemical contaminants.

The average migration rate of a non-degrading contaminant can be estimated using the following equation, which accounts for simple reversible sorption (Fetter, 1993):

$$V_c = \frac{V}{RF}$$

where:

V_c = average migration rate of non-degrading contaminant (length/time)

V = seepage velocity of groundwater (length/time)

RF = retardation factor (unitless)

The retardation factor (“ RF ”) is defined as follows (Fetter, 1993):

$$RF = 1 + \frac{K_d * \rho_b}{n_e}$$

where:

RF = retardation factor (unitless)

K_d = distribution coefficient of constituent (length³/mass)

ρ_b = bulk density of soil (mass/length³)

n_e = effective porosity of soil (unitless)

The sorption processes discussed in this section simply slow chemical migration, whereas chemical or biological reactions work to breakdown or degrade chemical mass. Such degradation can contribute to an apparent reduction in the chemical migration rates, but the chemical is actually being destroyed or converted. The conversion of hexavalent chromium to trivalent chromium by reduction is an example of a reaction that reduces the apparent migration rates.

Calculation of groundwater seepage velocity was addressed in [Section 4.5.4.2](#). Soil bulk density and distribution coefficients are discussed below.

Soil Bulk Density. Soil bulk density describes the mass per unit volume of the soil media. Bulk density measure the total mass of a dried soil sample per total volume, and can be obtained through laboratory studies.

At the Site, soil bulk density was evaluated in the laboratory for three soil samples. The data is summarized in [Table 4-2](#). Two bulk density samples collected from the A/B-Aquitard indicated values of 102.38 and 102.88 pounds/cubic foot (1.64 and 1.65 g/cm³). One bulk density sample collected from the B-Zone indicated a value of 124 pounds/cubic foot (1.99 g/cm³). In the absence of bulk density data for the A-Zone, the B-Zone value was used for the A-Zone as well as the B-Zone for calculation of RF values.

Distribution Coefficient. The distribution coefficient (“K_d”) is a site-specific and constituent-specific parameter that indicates the proportion of a constituent which is expected to exist primarily in solution versus that which is expected to be sorbed onto soil particles. The K_d can be estimated using published values or experimentally defined using a laboratory leachate test with soil and groundwater taken from the Site. For organic chemicals, K_d is typically estimated as the K_{oc} of a specific chemical multiplied by the soil fraction organic carbon content ([Section 6.3.1.3](#)). For inorganic species, such as hexavalent or trivalent chromium, sorption is more complex and is strongly influenced by other factors in addition to the soil organic carbon content. A summary of literature values for K_{oc} for the organic constituents detected in groundwater at the Site are presented in [Table 6-2](#) K_{oc} (and or K_d) for inorganic constituents vary widely in the literature and are generally not reliable in developing Site-specific estimates of retardation.

At the Site, retardation likely plays a significant role in limiting horizontal migration of chemicals in groundwater. [Table 6-3](#) presents estimated RFs for the organic constituents detected in groundwater at the Site.

6.4.5 Estimated Migration Rates

The rates of PCOC migration can be estimated based on the observed extent of PCOCs and estimated dates PCOC releases to groundwater. The Remco Facility began operations in 1945 as a metal machining and repair facility. The manufacturing of hydraulic cylinders began at the Facility in approximately 1959 with chrome plating of hydraulic cylinders beginning in approximately 1963. The exact period of use of different VOCs at the Facility are unknown. Following is a summary of PCOCs and the approximate periods of PCOC use at the Remco Facility.

PCOC Group	PCOC	Approximate Period of PCOC Usage
Metals	Arsenic	Unknown
	Cadmium	1972 – 1991
	Lead	Unknown (no known Facility use)
	Hexavalent Chromium	1963 – 1996
Chlorinated aliphatics	1,1,1-TCA	1974 1992 (possibly earlier)
	PCE	Unknown
	TCE	Unknown
Ethers	1,4-dioxane	See 1,1,1-TCA (1,4-dioxane is commonly an additive in 1,1,1-TCA)
	MTBE	Used as an octane enhancer since 1979 (this usage is not specific to the Remco Facility)
Chlorofluorohydrocarbons	Freon 113	Unknown
Ketones	MEK	For a period of less than 1 year in 1976 or 1977 and from 1992 to 1996 to clean machines; in the 1980s and 1990s as a paint thinner

Based on these estimated periods of use, observed extent of PCOCs in groundwater, and potential source areas, the following table presents the estimated migration rates for select PCOCs at the Site (calculated as estimated travel distance ÷ time since earliest use).

Observed PCOC Migration Rates

PCOC	Source	Time Since Earliest Facility Use (years)	Estimated Travel Distance (ft)	Estimated Migration Rate (ft/yr)
Hexavalent Chromium	Chrome Plating Area	38	120	3.2
1,1,1-TCA	1979 Paint Shop	22	100	~6.5
	Facility	≥27	~350	≤13
PCE	1979 Paint Shop	22	<100	~4.5
	Facility	<56	~150	>2.7
TCE	1979 Paint Shop	22	<100	~4.5
	Facility	<56	~150	>2.7
1,4-dioxane	Storm Drain	27	≥400	≥15

Based on these estimated migration rates, approximate relative rates of PCOC migration (V_{PCOC}) can be summarized as follows:

$$V_{1,4\text{-dioxane}} > V_{TCA} > V_{PCE} \cong V_{TCE} > V_{Cr+6}$$

Where

$$V_{1,4\text{-dioxane}} \cong 2 V_{TCA}$$

$$V_{1,4\text{-dioxane}} \cong 3.5 V_{PCE}$$

$$V_{1,4\text{-dioxane}} \cong 3.5 V_{TCE}$$

$$V_{1,4\text{-dioxane}} \cong 5 V_{Cr+6}$$

As discussed in [Section 4.5.4.2.4](#), the estimated average groundwater flow rate in the A-Zone ranges from 15 to 145 ft/year. Based on these estimated groundwater flow rates, the estimated migration rate attenuation factor (“AF”), due to factors such as retardation and degradation, can be calculated as follows:

$$AF_{1,4\text{-dioxane}} \cong 1\text{-}10$$

$$AF_{PCE} = AF_{TCE} \cong 3.3\text{-}33$$

$$AF_{TCA} \cong 2.2\text{-}22$$

$$AF_{Cr+6} \cong 4.8\text{-}48$$

As discussed in [Section 6.3.2.3.2](#), 1,4-dioxane is relative resistant to biodegradation and does not adsorb significantly to sediments. As summarized in [Table 6-3](#), the estimated retardation factor for 1,4-dioxane is 1.05 to 1.15, which is consistent with the low end of the estimated Site migration-rate attenuation factor for 1,4-dioxane. This supports the conclusion that the average groundwater flow rate in the A-Zone would be expected to be approximately 15 ft/yr, at the low end of the estimated average flow rates calculated.

6.4.6 Migration in B-Zone and C-Zone Groundwater

A review of B-Zone migration distances shows that there has been comparatively minor migration for most PCOCs in this zone. Chemicals were likely introduced to the deeper layers later than introduction to the shallow groundwater. Chemicals that may have migrated downward through the groundwater from the A-Zone would have taken much longer to reach the deeper zones due to the time to migrate downward through the groundwater system. Chemicals that may have migrated from the vertical tanks could not have been introduced until after the tanks were constructed beginning in 1968.

However, in the western portion of the Facility, 1,1,1 TCA has migrated approximately 150 feet downgradient in the vicinity of Well 29B1 ([Figure 5-15](#)). This corresponds with the estimated extent of 1,1,1-TCA in the A-Zone in this area.

Contaminant migration rates were not calculated for the C-zone due to the minor amounts of contamination present and the small areal extent of impacted water. Significant migration does not appear to be occurring in the C-Zone. This will be confirmed through ongoing monitoring of the groundwater and will be reviewed during development of the Feasibility Study.

6.5 SUMMARY OF THE CONCEPTUAL SITE MODEL

Based on the information collected and evaluated, a CSM has been developed which provides a summary of the source(s), extent, nature and migration of contaminants at the Site.

The key features of the CSM are summarized as follows:

- The majority of past VOC and chromium releases were at or near the surface within and adjacent to the main building, where they migrated down into the soil and shallow groundwater. Limited quantities of PCE were likely released in separate-phase form to the historical unlined drainage ditch/storm-drain system which allowed them to migrate downward through the shallow groundwater due to their density. The presence of low permeability sediments within and below the A-Zone have acted to limit downward migration of the contaminants. This explains why the largest contaminant mass and extent of impacted groundwater are found in the shallowest zone at the Site, with significantly less impact found in deeper zones.
- A significant additional pathway was transport of impacted shallow water via the former drainage ditch and/or storm drain system. This helps explain the elongated (east-west) geometry of the groundwater plume, and the impacts found east of Highway 101 beneath the Safeway Shopping Center parking lot.
- Another pathway involved releases from the vertical chrome plating tanks, which introduced limited quantities of chromium and VOCs into the groundwater system at depths up to 70 feet. In addition, the limited occurrence of fine-grained sediments at the western end of the Facility have allowed deeper migration of VOCs in groundwater. These pathways largely explain the presence of lower concentrations of chromium and VOCs at depth.
- Other PCOCs such as TPH, PAH, PCBs and other metals appear to have resulted from Facility activities, but they have been attenuated sharply at shallow depth due to their chemical properties and the relatively small amounts released into the environment.
- Groundwater flow at the Site is generally to the northeast and has shaped the plume geometry accordingly. The fluvial environment at the Site resulted in the deposition of discontinuous water-bearing zones of varying permeability. These sediments vary in physical properties both laterally and vertically over very short distances. These variations have acted to reduce the rate of groundwater flow and downgradient contaminant transport. They also provide for greater lateral dispersion of contaminants.
- The geochemical environment also impacts the PCOC fate and transport. The near surface soils (A-Zone) appear to be moderately oxidized while the deeper soils (B- and C-Zones) have been observed to exhibit reduced conditions. These conditions result in complex and varied geochemical effects on the observed PCOCs including the natural attenuation of hexavalent chromium via reduction. Reduction of chromium in deeper soil appears to be a major factor contributing to the limited lateral and vertical migration of this PCOC at the Site compared to VOCs.
- Most VOCs and chromium have migrated a relatively short distance from their sources, compared to what would be expected under the hypothetical conditions of unretarded groundwater transport.

- Interim Remedial Actions performed to date (removal of wastes, storm drain lining, facility surface runoff management, pump and-treat to prevent groundwater from entering the storm drain) were performed in order to remove contaminant sources and limit routes of migration. The original surface sources of contamination have been cut off by the shutdown of the Facility and the closure of sumps, tanks, pits and trenches within the Facility.

The CSM will be expanded in the Risk Assessment to include potential receptors, and will be updated and refined to ultimately guide the selection of an appropriate remedy for cleanup of the Remco Site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This section provides a summary of the findings and conclusions of the Remedial Investigation. The conclusions that have been reached, based on the investigations that have been performed by the Willits Trust as well as by other parties, are summarized in [Section 7.1](#). Recommendations for further Site evaluation and actions are provided in [Section 7.2](#).

7.1 CONCLUSIONS

As described in [Section 5.0](#), the nature and extent of chemicals in the environment that has resulted from former Facility operations, have been defined and the data are suitable to proceed with the Risk Assessment and Feasibility Study. These conclusions are based on sampling and analyses of soil, groundwater, surface water, sediment, air, and building surfaces as follows:

- 415 subsurface soil samples
- 42 surface soil samples
- 289 grab groundwater samples
- Groundwater samples from 74 groundwater monitoring wells and 11 temporary wells
- Groundwater samples from 24 private wells in the Site vicinity
- Storm water samples from 20 locations
- 12 storm water influent samples (sources of inflow into the storm-drain system)
- 23 surface water samples from Baechtel Creek, Broaddus Creek, and the South Drainage Ditch
- 36 sediment samples from Baechtel Creek, Broaddus Creek, and the South Drainage Ditch
- 21 air samples from both on-Facility and off-Facility locations
- Eight samples of building materials and 20 wipe samples to evaluate building and paved surfaces

In addition to the environmental samples collected, additional investigations have been performed as described in [Section 3.0](#) to evaluate Site history, chemical sources, utilities, potential routes of chemical migration, and the geophysical, lithologic, and hydraulic properties

of the subsurface. The results of the above samples and investigations are described in this report in [Sections 4.0 through 6.0](#).

7.1.1 Sources, Nature, and Extent of Chemicals at the Remco Site

Based on the results of the comprehensive investigations completed to date, soil and groundwater are the primary media that have been impacted by past Facility operations. Recent surface water sampling suggests no present impact to this media in the Site vicinity that is attributable to Remco Facility operations. The majority of the impacted areas, and especially the areas containing the highest concentration of PCOCs appear to be centered within the boundaries of the Remco Facility. The nature and extent of soil and groundwater contamination is presented in [Section 5.0](#) and summarized below. Results suggest that historically, storm water runoff containing VOCs and chromium appears to have occurred, either through releases directly into the storm-drain system or via contaminated water entering the storm water system. As illustrated in the CSM in [Section 6.0](#), contaminated storm water runoff may have, in turn, affected off-Facility soil, groundwater, surface water, and sediment. However, improvements to the storm-drain system by the Willits Trust appear to have eliminated contaminated storm water runoff as a current concern, provided the integrity of the storm water drain system is maintained. Low levels of PCOCs detected in sediments in Baechtel Creek may be related to historical Facility operations, but with the exception of hexavalent chromium, other sources for the observed detections are also possible. The significance of these detections will be further evaluated in the Risk Assessment.

The principal sources and observed Site impacts that have been documented based on the results of the RI include the following Facility operations/areas. [Figure 7-1](#) shows the locations of the principal source areas. [Table 6-1](#) summarizes the PCOCs detected in each of these source areas:

- Chrome plating operations: hexavalent chromium and VOCs in soil and A-Zone, B-Zone, and C-Zone groundwater in and around the former plating tanks in Building 1964
- Chrome plating operations: VOCs in A-Zone groundwater and hexavalent chromium in A-and B-Zone groundwater in Building 1945

- Chrome plating operations: VOCs in A-, B-, and C-Zone groundwater, hexavalent chromium in B-and C-Zone groundwater, and TPH in soil and A-Zone groundwater in Building 1973
- Paint Shops and degreasers: VOCs in shallow soil and/or groundwater in Buildings 1962 and 1979 and extending off the Facility in groundwater
- Hazardous Material Storage Areas: TPH and VOCs in soil and/or groundwater in Building 1967 and northwestern corner of Facility near Building 1985, and extending in groundwater downgradient
- Metal machining: PCBs and TPH in soil and A-Zone groundwater in Building 1962
- Former diesel fuel line and 7,500 gallon UST along northern property line: TPH-diesel and PAHs in soil and A-Zone groundwater
- Former unlined drainage ditch along northern property line: VOCs, hexavalent chromium, and TPH in soil and A-Zone groundwater.

The following sections summarize the key conclusions with regard to the extent of impacts to the media investigated that have resulted from the above sources, as well as other important findings.

7.1.1.1 Surface Soil

Hexavalent chromium, copper, lead, and cadmium were identified during the RI to be preliminary PCOCs for surface soil (0 to <0.5 feet bgs), based on the preliminary screening process performed. TPH was also detected in surface soil, but does not have preliminary screening criteria.

7.1.1.1.1 Hexavalent Chromium

Hexavalent chromium was detected above the laboratory method detection limit in only one surface soil sample, which was collected on the Remco Facility. The single detection was below the recommended maximum level for hexavalent chromium in residential soils (residential PRGs).

7.1.1.1.2 Other Metals

Copper, lead, and cadmium were detected in a few surface soil sample locations exceeding the preliminary screening criteria. Only one detection of copper exceeding the preliminary

screening criteria was observed in surface soil south of Building 1962. Lead was detected in three locations, all on the Facility, at concentrations that slightly exceed the recommended maximum level in residential soils. The potential Facility source of lead, except for potential use of lead based paints, is unclear, but the data do not suggest significant impacts. Cadmium was detected at two on-Facility locations adjacent to the northern storm-drain system and south of Building 1967 at levels below the recommended maximum levels for cadmium in residential soils (California Modified PRG).

7.1.1.1.3 TPH

TPH-diesel was detected at concentrations ranging from 25.1 to 220 mg/kg in surface soil samples on the Facility property, although the highest detection (SS-36 at 0 feet bgs) was located immediately below the asphalt paved surface in the front parking lot on the Facility. This detection may be related to the asphalt pavement. TPH is not considered to be a PCOC for surface soil.

No other chemicals have been identified as PCOCs in surface soil.

7.1.1.2 Shallow Soil

The preliminary chemicals of concern in shallow soils (greater than or equal to 0.5 feet bgs to 3 feet bgs) include hexavalent chromium, arsenic, cadmium, lead, VOCs, TPH, and PCBs.

7.1.1.2.1 Hexavalent Chromium

Hexavalent chromium was detected in shallow soils surrounding the former chrome plating tanks and along the northern Facility boundary. The detections along the former unlined drainage ditch may be related to past discharges and/or the migration of impacted groundwater and the rising of the groundwater during the wet season. The highest concentration of hexavalent chromium in soil between 0.5 and 3 feet bgs was found immediately north of the vertical plating tanks area at SB-58 (69.8 mg/kg at 2 feet bgs). Isolated lower concentrations above the laboratory method detection limit were detected in shallow soil south of the main building and in one sample collected on the Luna Apartments property.

7.1.1.2.2 Other Metals

Arsenic, cadmium, antimony, copper, and lead were identified as exceeding preliminary screening criteria in a few locations for shallow soils. Arsenic was detected in one shallow soil sample exceeding the Site background concentrations (8.26 mg/kg) and the residential soil PRG (0.39 mg/kg). This sample was located east of the former plating operations area near the storm-drain system along the northern property boundary. Cadmium exceeded the preliminary screening criteria (10 percent of the Residential PRG) in five shallow soil samples. However, only one sample collected (2 feet bgs) immediately north of the plating area actually exceeded the residential soil PRG. Two shallow soil samples exceeded preliminary screening criteria for antimony and one exceeded the preliminary screening criteria for copper. Only one shallow soil sample exceeded the residential soil PRG for lead. This sample was collected adjacent to the former horizontal chrome plating tanks at 1 foot bgs and is not associated with any of the surface soil samples in which lead was detected above the preliminary screening criteria.

7.1.1.2.3 VOCs

The VOCs detected at concentrations exceeding the preliminary screening criteria (ten percent of the residential soil PRGs) in shallow soil are the following: 1,1,1-TCA, 1,1-DCA, and 1,1-DCE. None of these VOCs were detected at concentrations that exceeded the residential soil PRG. VOCs were not detected in excess of the preliminary screening criteria in any off-Facility soils, or in any on-Facility soils deeper than 16 feet bgs. Elevated concentrations of VOCs in shallow soil may represent a continuing threat to groundwater quality. The following areas were identified as potential VOC source areas, based on the detection of VOCs in shallow soil samples exceeding preliminary screening criteria:

- Building 1979 Paint Shop
- Building 1964 Plating Operations

The distribution of VOCs in shallow soil on the remainder of the Facility property is more sporadic (consistent with smaller sources of VOCs beneath floors, sumps, or trenches). Other areas where VOCs have been detected in shallow soils include:

- The northern Facility storm-drain system
- Former subgrade trenches in Building 1973
- North-central portion of Building 1962
- Immediately north of the Building 1964 plating area
- Northwestern portion of Building 1975

7.1.1.2.4 TPH

TPH-diesel was detected in numerous shallow soil samples collected at the Facility. No established soil screening criteria exist for TPH. However, according to RWQCB scoring analysis (using information for soil conditions at the Site), concentrations less than 10 mg/kg and 100 mg/kg, respectively for TPH-gasoline and TPH-diesel will not likely cause a threat to groundwater. The following areas contained TPH-diesel concentrations in shallow soil above 100 mg/kg:

- Building 1964 plating area near the former location of a 7,500-gallon diesel UST
- North of Buildings 1964, 1973 and 1979 along the path of the former underground diesel fuel line
- Building 1962 near the location of a cutting oil sump and Building 1968 hydraulic lifts

TPH-motor oil and TPH-gasoline were detected less frequently than diesel fuel. TPH-motor oil was detected at concentrations exceeding 100 mg/kg in Building 1962 near the cutting oil sump, in the southwest corner of Building 1973, and near the former UST and along the former fuel line north of Building 1964. TPH-gasoline was detected in shallow soil above 10 mg/kg in only two locations, one north of Building 1945 at a depth of three feet and one in the north central portion of Building 1962 at a depth of two feet.

7.1.1.2.5 PCBs

PCBs were detected in shallow soil in four soil borings in a relatively localized area in the vicinity of Building 1962, near the location of a cutting oil sump. Samples collected between 2 to 6 feet bgs, co-located with petroleum hydrocarbons, were impacted at concentrations that exceeded the preliminary screening criteria.

7.1.1.3 Deeper Soil

The PCOCs in deeper soils (greater than 3 feet bgs) include hexavalent chromium, arsenic, VOCs, TPH, PAHs, and PCBs.

7.1.1.3.1 Hexavalent Chromium

Hexavalent chromium was detected in soils in, and surrounding, the former chrome plating area and along the northern Facility boundary at depths up to 67 feet bgs (SB-43). Detections along the former unlined drainage ditch may be associated with historical discharges. The deeper hexavalent chromium detections are most likely related to the vertical chrome plating tanks. The highest concentration of hexavalent chromium in soil was found east of the horizontal chrome plating tanks at SB-56 (158 mg/kg) at a depth of 11 feet bgs.

7.1.1.3.2 Other Metals

Arsenic was detected at concentrations exceeding preliminary screening criteria at four locations in deeper soil on the Facility property. However, the detections are sporadic and could not be correlated to Facility operations. Total chromium also exceeded preliminary screening criteria in deeper soils underlying Building 1964.

7.1.1.3.3 VOCs

VOCs were not detected at concentrations exceeding the preliminary screening criteria in soil samples collected in off-Facility locations or at depths greater than 16 feet bgs. Chlorinated solvents, and their associated breakdown products, exceeding preliminary screening criteria in deeper soils between 3 and 16 feet were detected in the following areas:

- Building 1979 Paint Shop
- Building 1967 Hazardous Waste Storage Area and Paint Shop
- Building 1973
- Along the northern storm-drain system

The concentrations and number of VOCs in soil exceeding the respective preliminary screening criteria generally decrease with depth.

7.1.1.3.4 TPH

TPH-diesel was detected at concentrations exceeding the RWQCB guidance value of 100 mg/kg in the same areas noted above for shallow soil, as follows:

- Building 1964 plating area near the former location of a 7,500-gallon diesel UST
- North of Buildings 1964, 1973, and 1979 along the path of the former underground diesel fuel line
- Building 1962 near the location of a cutting oil sump and Building 1968 hydraulic lifts

One additional location exhibited TPH-diesel in deeper soils exceeding 100 mg/kg. This location is in the northeast corner of Building 1967 at a depth of seven feet. In the locations where both shallow and deeper soils are impacted by TPH, concentrations generally decrease with depth. The one exception to this trend is in the vicinity of Building 1979, near the location of a 1981 diesel fuel release from the former fuel line. At this location, the highest concentrations are found at depths of 9 to 10 feet bgs.

TPH-motor oil in deeper soils exceeding the RWQCB guidance value of 100 mg/kg were detected in Building 1962 near the cutting oil sump and near the former UST north of Building 1964.

7.1.1.3.5 PAHs

Two PAHs, (benzo(a)anthracene and indeno(1,2,3-cd) pyrene), were detected in two deeper soil samples at the Facility in the area of the former underground diesel fuel tanks and along the former diesel fuel line. The detections are consistent with co-located TPH-diesel detections, at approximately 10 feet, in two borings in Building 1945 and north of Building 1964.

7.1.1.3.6 PCBs

PCBs were detected in four soil borings (SB-163, SB-187, SB-189, and SB-190) in a relatively localized area in Building 1962. PCBs were detected at a depth of 6 feet bgs near a cutting oil sump.

7.1.1.4 A-Zone Groundwater

A-Zone groundwater has been impacted by former Facility operations, resulting in defined plumes of VOCs and hexavalent chromium. A-Zone groundwater also appears to have been impacted by other metals, but the locations of these potentially elevated concentrations are within the hexavalent chromium plume. Other lesser detections of metals do not appear to represent major impacts and are within the lateral and vertical extent of the VOCs and hexavalent chromium impacts. PAHs and isolated PCBs (associated with diesel fuel) are also limited in occurrence and are within the lateral and vertical extent of the VOCs and hexavalent chromium plumes. These chemicals pose no significant threat to groundwater downgradient of the sources. This conclusion is based on the limited mobility of these chemicals in the environment.

7.1.1.4.1 Hexavalent Chromium

In contrast to VOCs in groundwater, the extent of hexavalent chromium is both significantly smaller and confined to an area surrounding and immediately downgradient of the central area of the Main Building where chrome plating operations took place. The maximum extent of hexavalent chromium in A-Zone groundwater extends onto the Luna Apartments property (Figure 5-31). The highest concentrations in groundwater exceed 300 mg/L, centered immediately east of the horizontal chrome plating tanks in Building 1964.

7.1.1.4.2 Other Metals

Antimony, arsenic, beryllium, cadmium, iron, and nickel have been detected at levels exceeding preliminary screening criteria in the A-Zone. These detections are sporadic and within the overall area impacted by VOCs and hexavalent chromium.

7.1.1.4.3 VOCs

The highest concentrations of VOCs in shallow groundwater appear coincident with the detection in soils, principally along the storm-drain system along the northern boundary of the Facility, around the paint shop in the northwestern portion of the Main Building (Building 1979), and east of the chrome plating area. Twenty-one VOCs were detected at concentrations

exceeding the preliminary screening criteria. However, the most consistently detected chemicals are 1,1,1-TCA, 1,1-DCA, 1,4-dioxane, 1,1-DCE, 1,2-DCE, PCE, and TCE.

In many cases, concentrations of parent solvents (PCE, TCE, and 1,1,1-TCA) are lower than their degradation breakdown products (1,1-DCE, 1,2-DCE, and 1,1-DCA), indicating natural degradation of VOCs is occurring at the Site. However, in the identified source areas (including the paint shops and along the former unlined drainage ditch) elevated concentrations of the parent solvents remain. The data suggests the presence of PCE as DNAPL in the A-Zone within a limited area underlying the on-Facility storm-drain system and possibly at the Building 1979 Paint Shop. [Figure 5-14](#) illustrates the overall extent of the primary VOCs in A-Zone groundwater. VOCs in groundwater have been detected in the low part per billion level as far downgradient as Highway 20. [Figure 5-14](#) also shows that VOCs exceeding California MCLs for individual VOCs extends across most of the northern half of the Facility property and as far north as Franklin Avenue.

7.1.1.4.4 TPH

TPH in A-Zone groundwater exceeds 0.5 mg/L in the same areas that shallow and deeper soils were noted to be impacted with TPH-diesel above 100 mg/kg. These areas include the former diesel UST location north of Building 1964, near the northwest corner of Building 1979 along the former diesel fuel line, and in the Building 1962 cutting oil sump location.

7.1.1.4.5 PAHs

The PAHs detected at the Remco Facility are constituents of diesel fuel and the localized detections of PAHs are consistent with the release of diesel fuel to the subsurface. PAHs were detected at concentrations exceeding preliminary screening criteria in A-Zone grab groundwater samples collected at and near SB-20 where separate-phase diesel was noted during drilling and elevated concentrations of TPH-diesel have been documented. The PAH naphthalene was detected above the preliminary screening criteria in A-Zone grab water in the northwest corner of Building 1979 and in an A-Zone monitoring well along the northern storm-drain system north of Building 1964.

7.1.1.4.6 PCBs

PCBs were only detected in one out of 11 grab groundwater samples collected at the Facility. PCBs are generally not expected to be present in groundwater samples given their very low solubility. The detection of Aroclor 1016 in the sample from SB-163 may be associated with sediment in the sample. PCBs were detected in the equivalent soil sample at this location. One groundwater sample from well W7 indicated Aroclor 1016, but subsequent sampling of this well did not confirm this result.

7.1.1.5 B-Zone and C-Zone Groundwater

Groundwater in the B-Zone and C-Zone is significantly less impacted than the overlying A-Zone, both in numbers of PCOCs, and in magnitude and lateral extent, indicating that vertical migration of contaminated A-Zone groundwater has not been a significant migration route to date. The concentrations of VOCs in B-Zone and C-Zone groundwater is significantly less than those detected in A-Zone groundwater, which is consistent with the estimated low rate of vertical groundwater movement and the presence of the intervening aquitards in most locations. Although potentiometric data often indicate a seasonally variable downward vertical gradient, the low vertical permeability between coarser-grained deposits of the A-, B- and C-Zones have resulted in the absence of significant observed downward transport of Facility chemicals, with the exception of one area. The A/B-Aquitard is thinnest in the area of well cluster W29A1/B1/B2 located in the northwestern corner of Building 1979. As a result, the A-Zone and B-Zone water-bearing materials (sands) are more directly connected in this area.

Hexavalent chromium in B-Zone and C-Zone groundwater is detected only in the immediate vicinity of the vertical chrome plating tanks and appears to be due to subsurface releases from the vertical chrome plating tanks. VOCs in the B-Zone and C-Zone are primarily found in this area and near the northwestern corner of Building 1979. In the northwestern corner of the Facility, the presence of thicker sands in the B-Zone and C-Zone, as well as the lack of well defined A/B and B/C-Aquitards, may have contributed to deeper migration of VOCs. Downgradient grab groundwater samples collected in the B-Zone and C-Zone show only minor detections of VOCs in the B-Zone and no detection of VOCs in the C-Zone along Franklin Avenue.

7.1.1.6 Storm Water

Currently, there is no observable impact to storm water from the Remco Facility. Removal of wastes from the Remco Facility has eliminated potential surface sources of chemicals to Facility storm water. Additional improvements to the storm-drain system have also eliminated contaminated groundwater from entering the storm-drain system. However, Site data indicates that there were historical releases of chemicals to the storm-drain system. These releases are believed to be the source of low concentrations of VOCs and hexavalent chromium detected in groundwater near the bend in the storm-drain line east of Highway 101.

7.1.1.7 Surface Water

There is no currently observable impact to surface water from current or past Remco Facility operations. Removal of wastes from the Remco Facility has eliminated potential surface sources of chemicals to Facility storm water, thus eliminating impacts to surface water. Additional improvements to the storm-drain system have also eliminated contaminated groundwater from entering the storm-drain system, which discharges into Baechtel Creek.

7.1.1.8 Sediment

Hexavalent chromium was detected in three sediment samples in Baechtel Creek at estimated concentrations below laboratory method detection limits. Low-level detections of other metals, PAHs, TPH, and VOCs have not been directly correlated to sources at the Facility. Although the past discharges of affected storm water may be responsible for the detections of TPH and VOCs in sediments, other sources are possible, including urban runoff, current and former gasoline stations in the Site vicinity. The significance of these detections will be further evaluated in the Risk Assessment.

Removal of wastes from the Remco Facility has eliminated potential sources of PCOCs to storm water, which could have then impacted surface water and sediments. Additional improvements to the storm-drain system have also eliminated the potential for contaminated groundwater to enter the storm-drain system, which discharges into Baechtel Creek, thereby eliminating the threat to sediments of Baechtel and Broaddus Creeks and the South Drainage Ditch.

7.1.1.9 Air

Hexavalent chromium was not detected in off-Facility air samples. However, additional evaluation of air samples may be conducted for the Risk Assessment. Air sampling within the Facility did not indicate that hexavalent chromium in air is a hazard to Site workers. However, the presence of hexavalent chromium in dust on building surfaces (as discussed below) represents a possible threat if this material is disturbed.

Although VOCs were detected in air samples both on the Facility property and in off-Facility locations, the PEA concluded that the results appeared to be unrelated to the Facility. Concentrations detected in on-Facility and off-Facility locations were often similar to and sometimes less than background concentrations. The potential volatilization to air from VOCs in shallow soil and groundwater will be further addressed as part of the Risk Assessment.

7.1.1.10 Building Surfaces

Pavement outside the Main Building did not exhibit detectable concentrations of hexavalent chromium. Building materials within the Main Building have been impacted by both hexavalent chromium and lead. Floor tiles in the office area contain non-friable asbestos. The observed affected building surfaces and materials pose no threat unless these materials are disturbed. Site workers perform activities following a Site-specific health and safety plan, which outlines proper precautions for working within the Facility.

7.1.2 Chemical Fate and Transport

[Section 5.0](#) describes the present extent of chemicals in the environment and [Section 6.4.4](#) addresses the potential for future migration of chemicals in groundwater. VOCs are the most mobile of the Site contaminants. Metals have been observed to migrate at lower rates than VOCs at the Site, with an effective migration rate for hexavalent chromium, of approximately three feet per year.

As discussed above, operational sources of contamination have been eliminated by removal actions of the Willits Trust, and natural attenuation of VOCs and hexavalent chromium has been

observed. However, elevated residual concentrations of VOCs and hexavalent chromium in soil and shallow groundwater represent a potential continued source of PCOCs to groundwater.

7.1.3 Summary of the Conceptual Site Model

As shown in this report, there is a significant complexity to the site conceptual model. In general, the majority of past VOC and chromium releases were at or near the land surface within and adjacent to the main building, where they migrated down into the soil and shallow groundwater.

Interim Remedial Actions (removal of wastes, storm drain lining, facility surface runoff management, pump-and-treat to prevent groundwater from entering the storm drain) were performed in order to remove contaminant sources and limit routes of migration. The original surface sources of contamination have been cut off by the shutdown of the Facility and the closure of sumps, tanks, pits and trenches within the Facility.

VOCs and chromium have migrated in groundwater to the northeast. The rate of chemical transport in groundwater is less than the groundwater transport rate due to natural attenuation processes. Other PCOCs such as TPH, PAH, PCBs and other metals appear to have resulted from Facility activities, but they have been attenuated sharply at shallow depth due to their chemical properties and the relatively small amounts released into the environment.

7.2 RECOMMENDATIONS

Based on the results of the Remedial Investigation, it is recommended that the Risk Assessment process commence to evaluate the risks to human and ecological receptors. The data collected as part of the RI will be used to conduct an NCP-consistent Risk Assessment and Feasibility Study.

In addition the following additional recommendations for further action are made:

- Evaluate the potential existence of a former stream channel in the area immediately west of Luna Apartments.
- Abandon five monitoring wells that have screens and/or sand packs that intercept two water-bearing zones
- Install three additional A-Zone monitoring wells and four additional B-Zone monitoring wells to improve the groundwater monitoring well network for continued groundwater monitoring
- Drill two soil borings and collect grab groundwater samples east of Highway 101 to investigate the A/B-Aquitard and B-Zone lithology and to evaluate the vertical extent of contaminants found in the A-Zone.
- Continue to routinely sample and analyze groundwater monitoring wells to monitor the extent and migration of Facility-related chemicals at the Remco Site

[Table 7-1](#) summarizes the wells to be abandoned and/or replaced. [Table 7-2](#) summarizes the recommendations for further action. These recommended modifications to the groundwater monitoring well field and areas for additional investigation are illustrated on [Figure 7-2](#).

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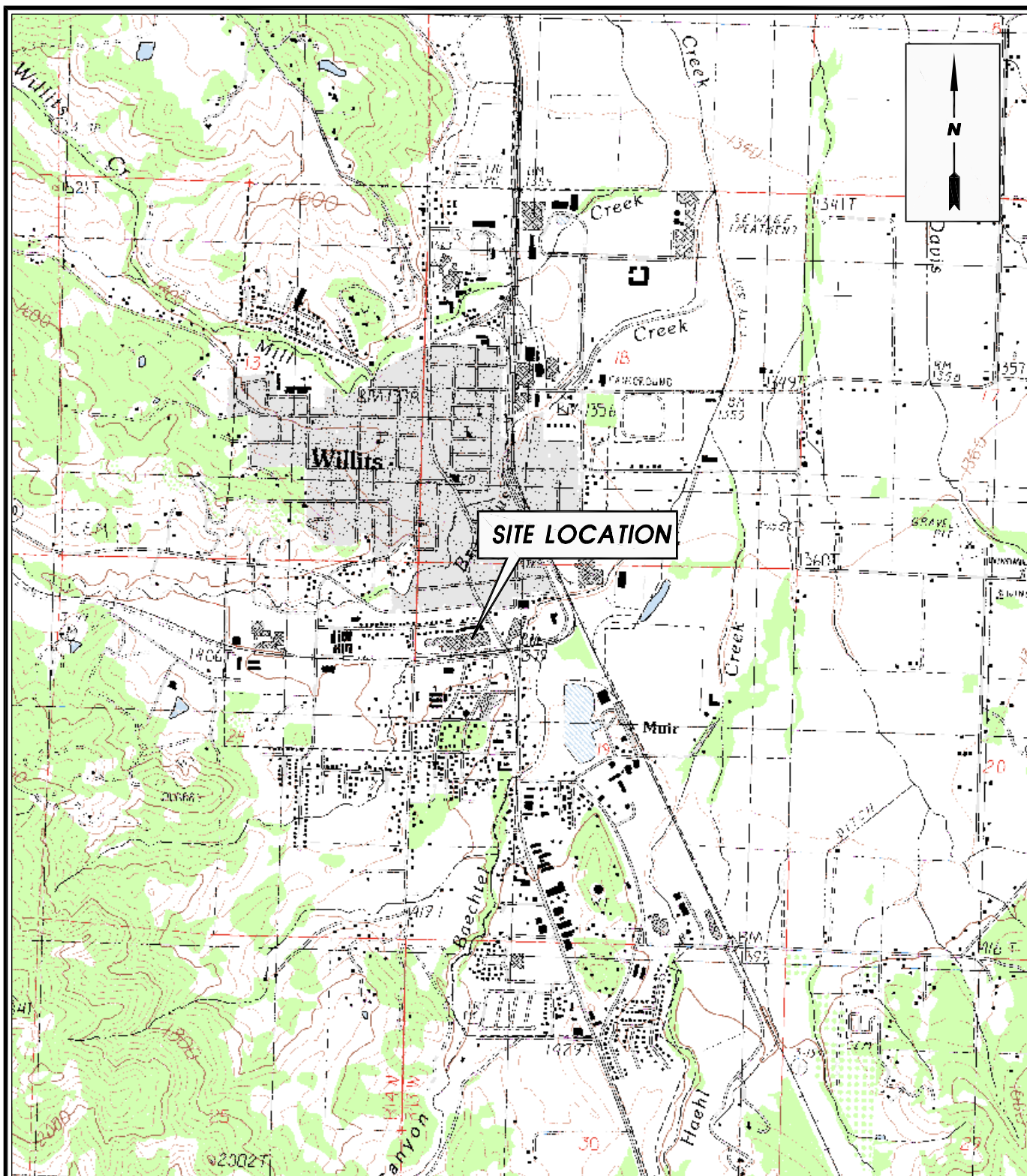
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MWH
MONTGOMERY WATSON HARZA

SOURCE: U.S.G.S. 7.5' QUAD SHEET
WILLITS, CALIFORNIA
PHOTOREVISED 1993

SCALE:

0 FEET 2000

SITE LOCATION MAP

CLIENT:

WILLITS ENVIRONMENTAL
REMEDATION TRUST

DATE:

12/14/01

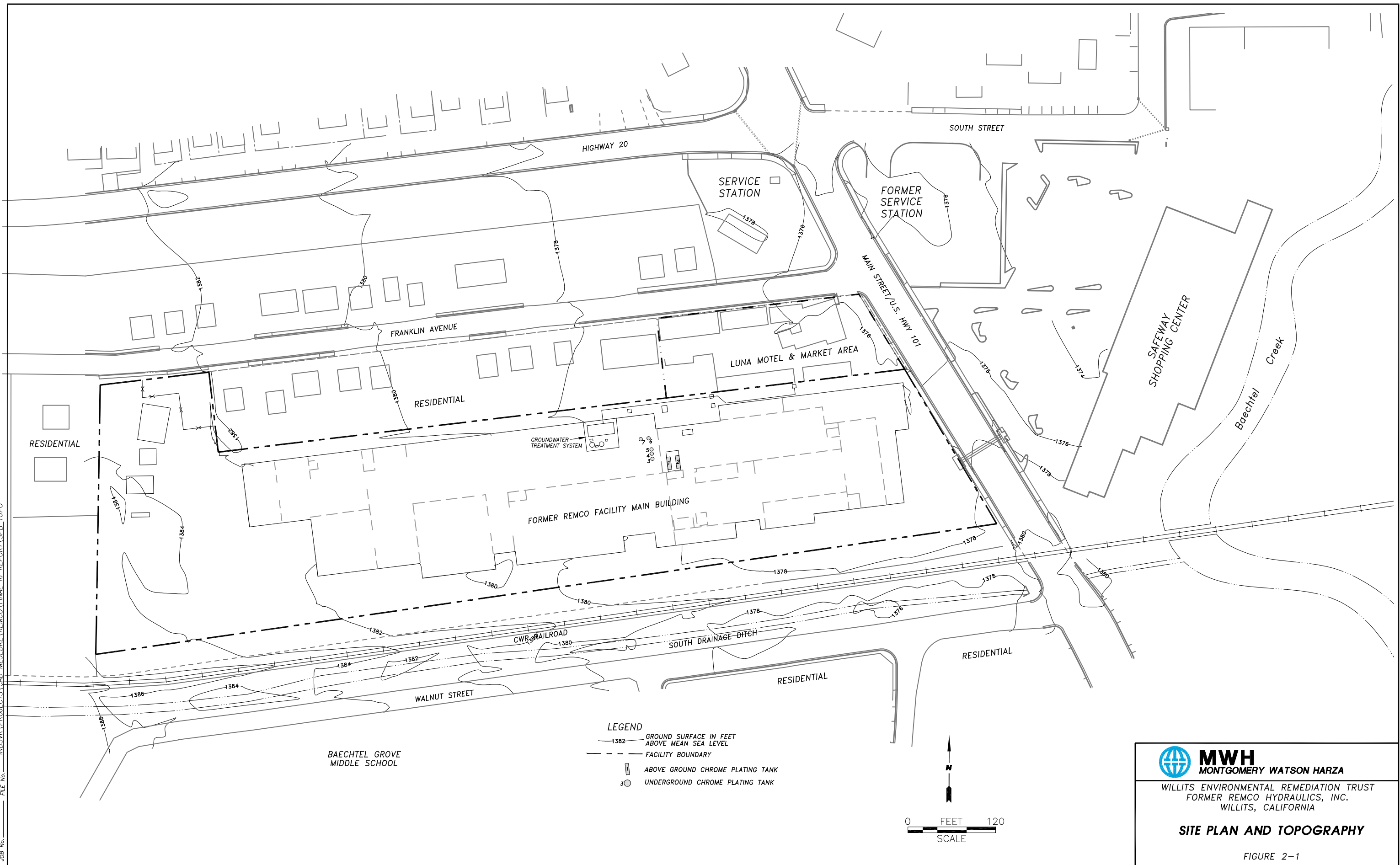
LOCATION:

FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

FIGURE:

1-1

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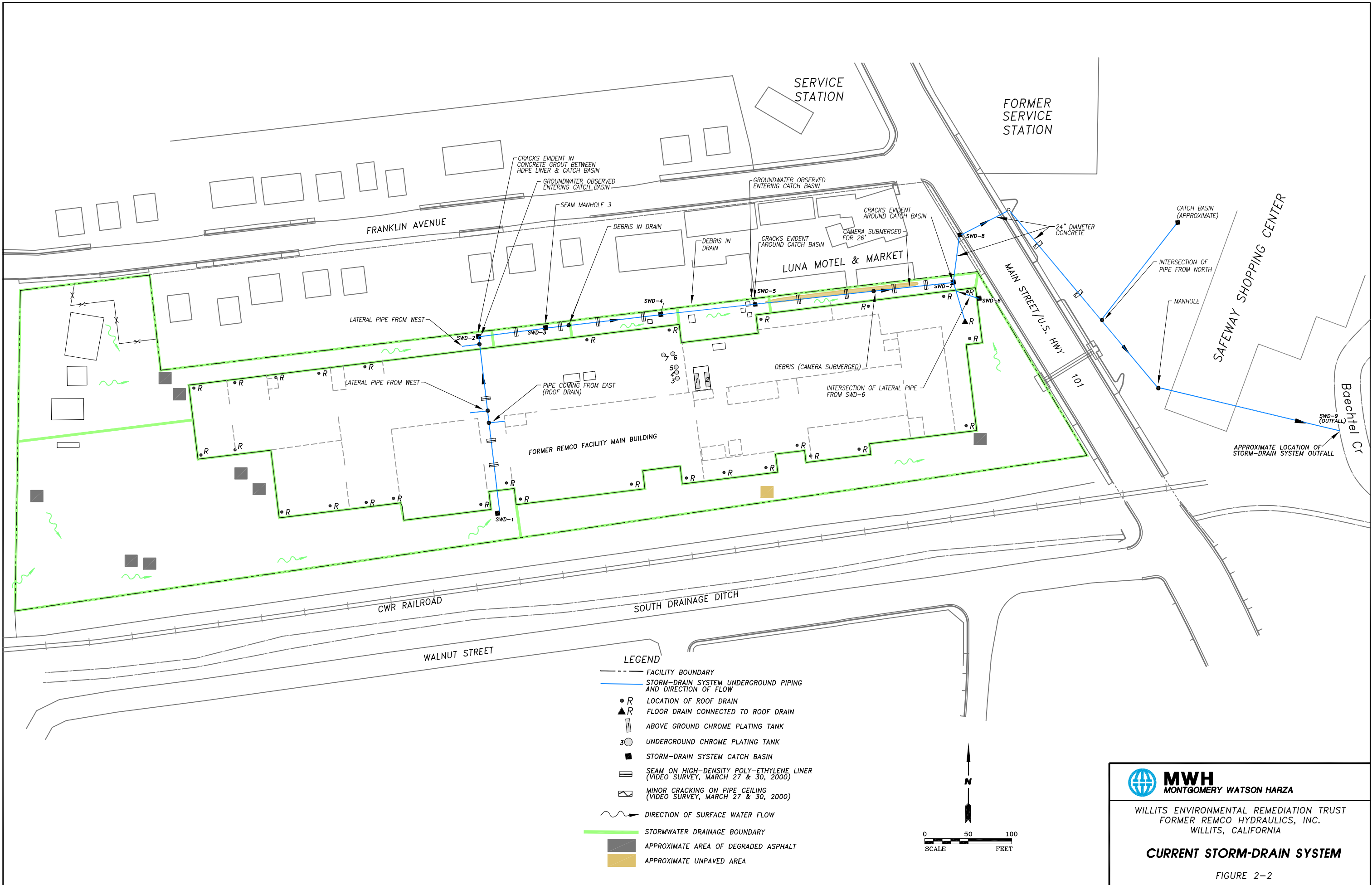


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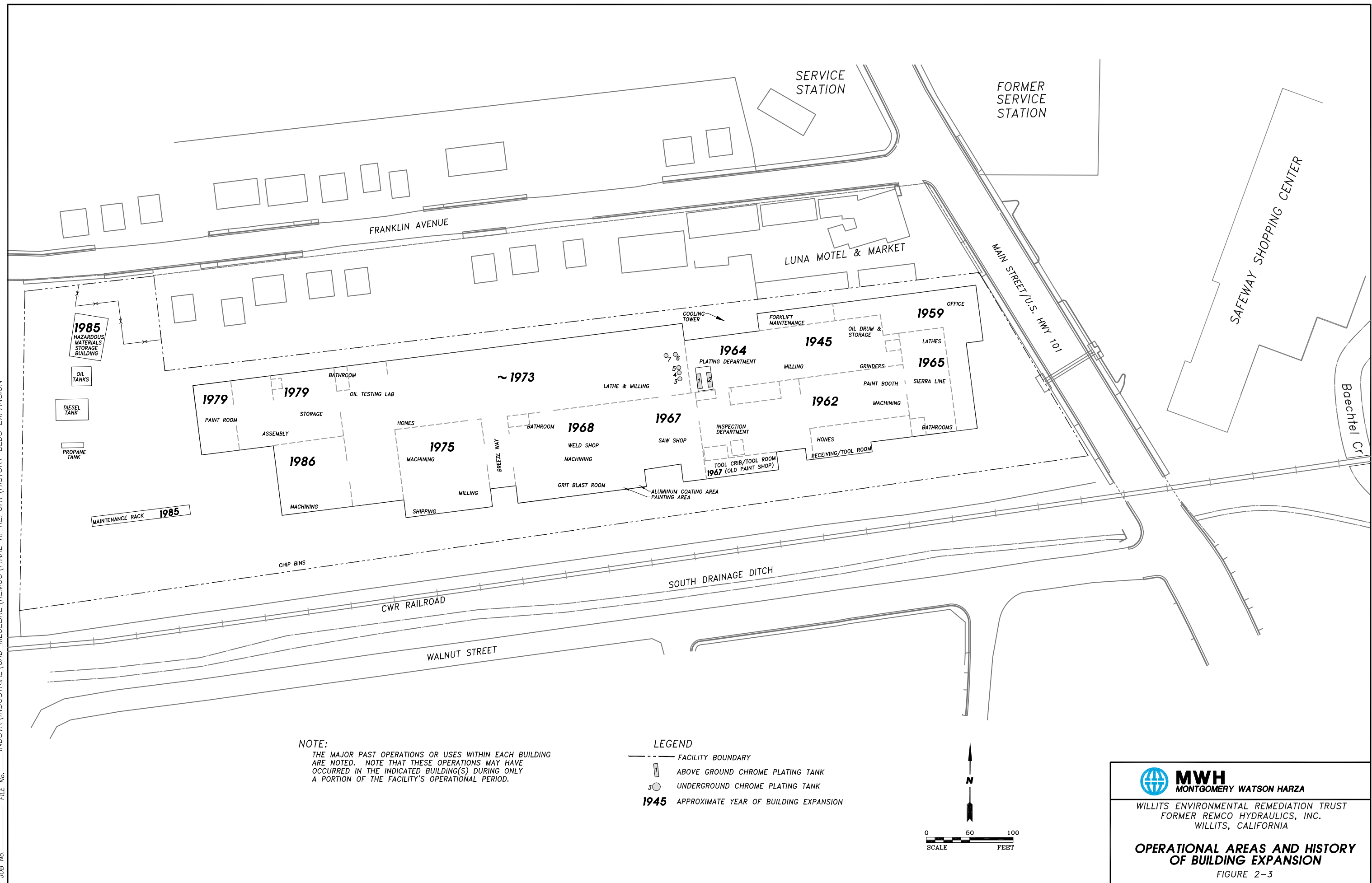
WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

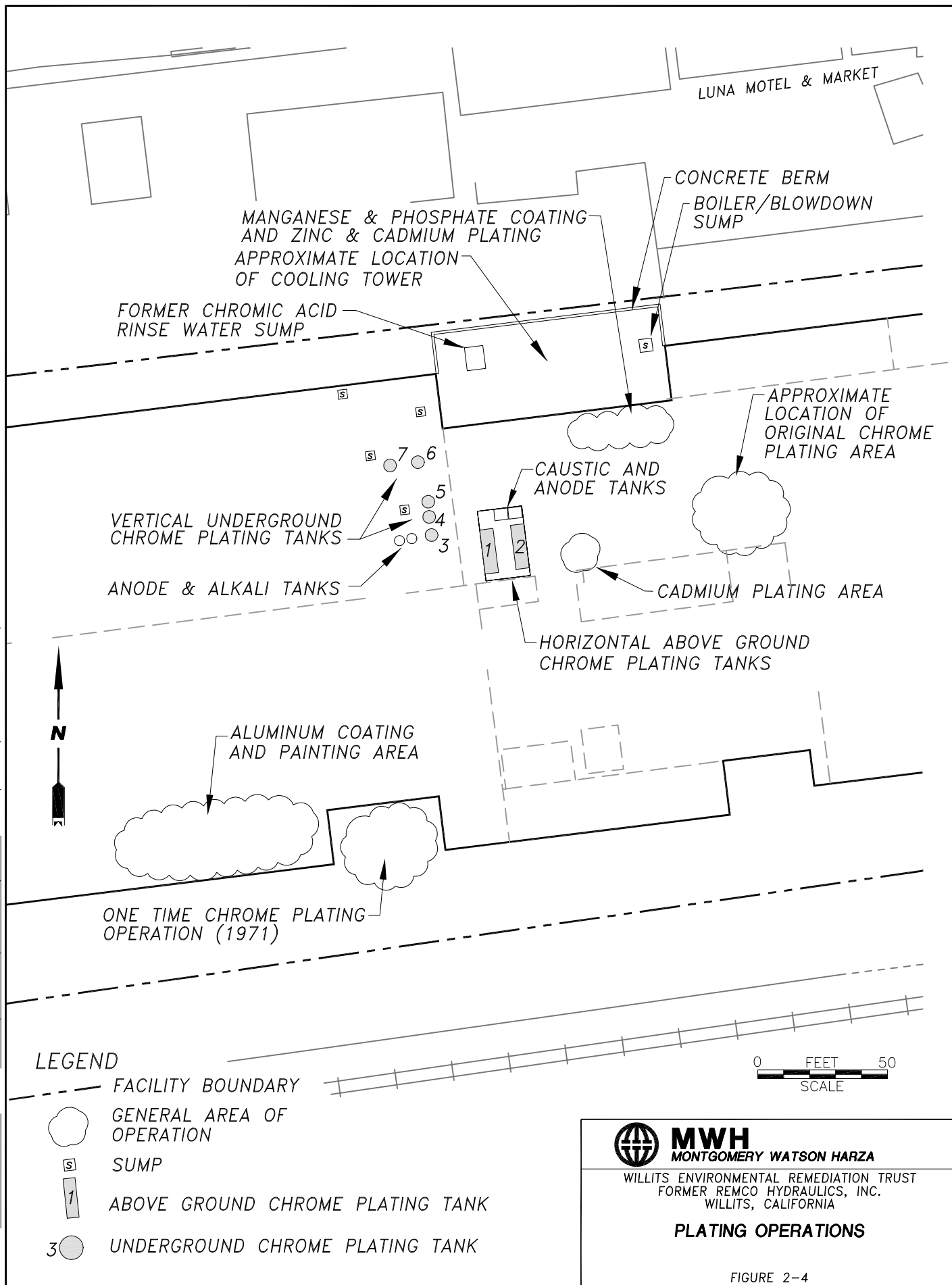
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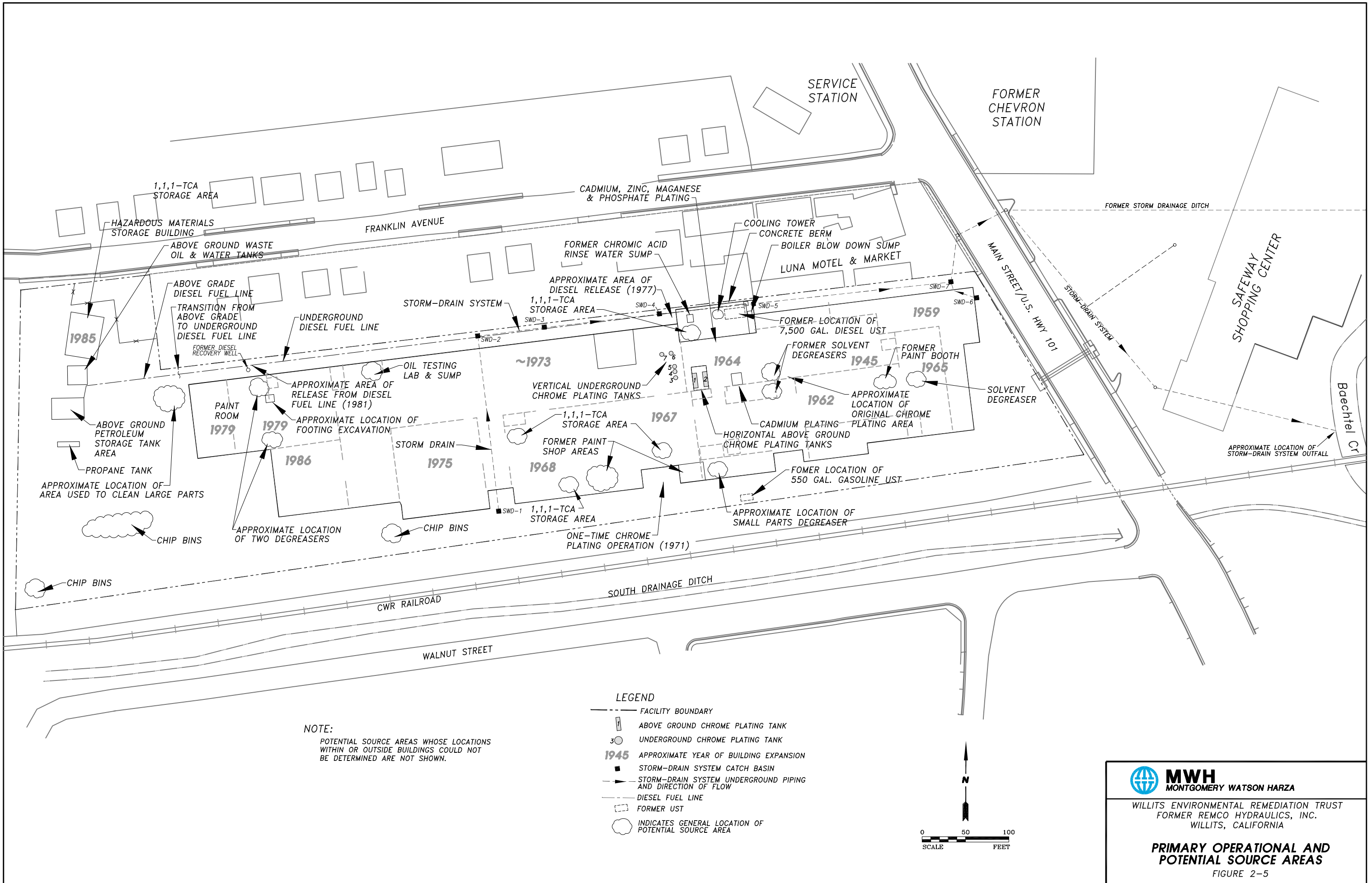
FIGURE 2-1

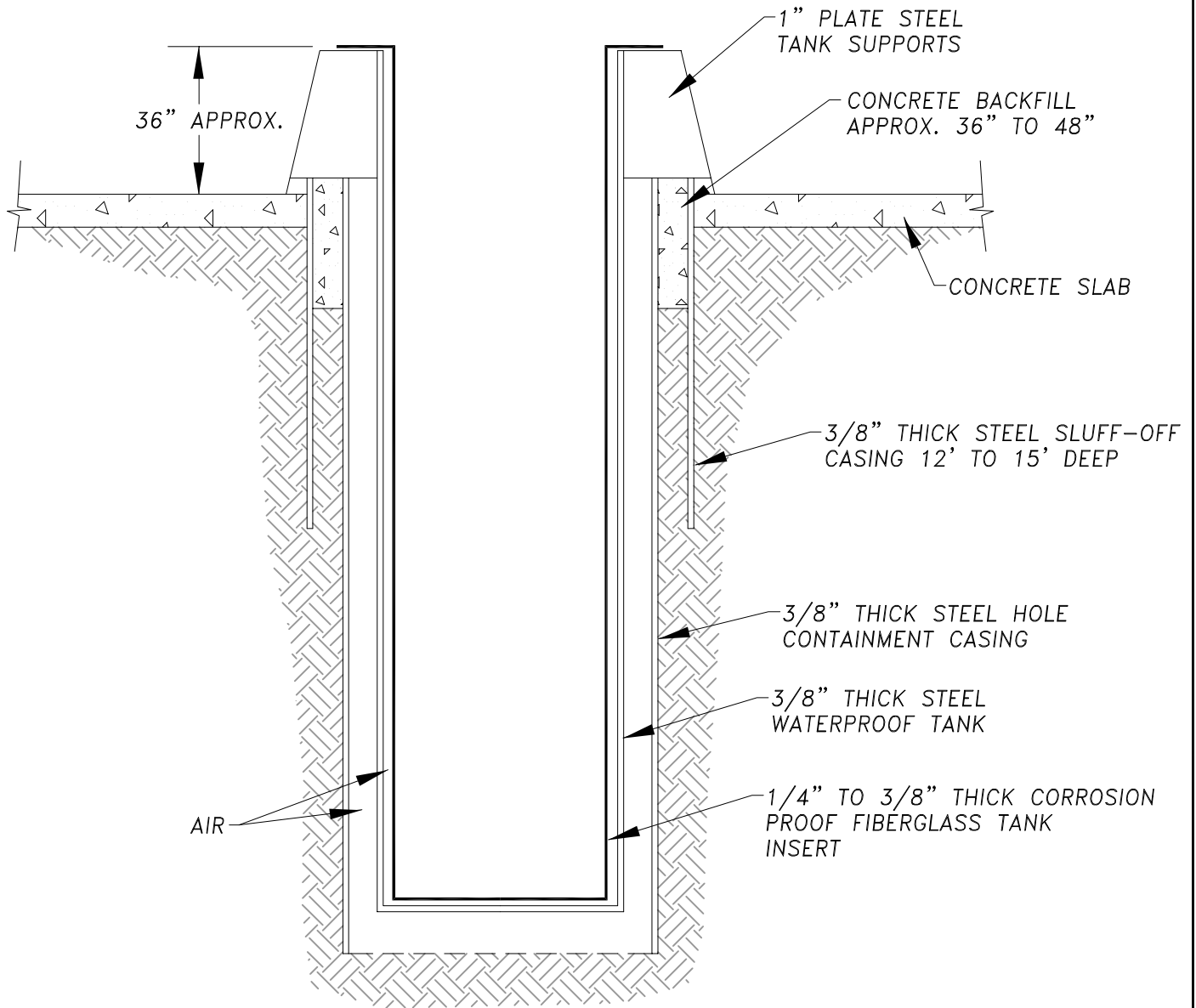


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MWH

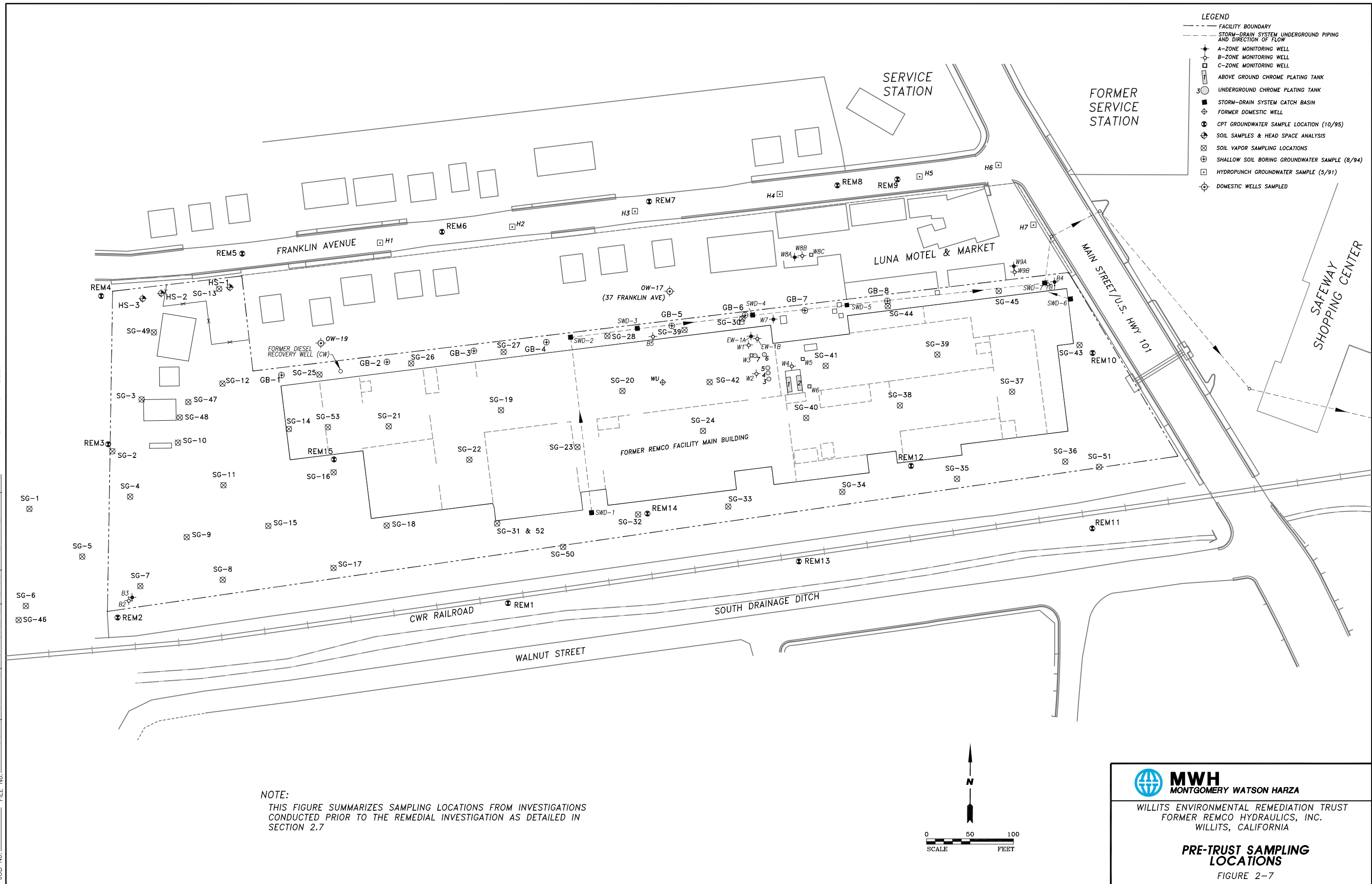
MONTGOMERY WATSON HARZA

WILLITS ENVIRONMENTAL REMEDIATION TRUST
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WILLITS, CALIFORNIA

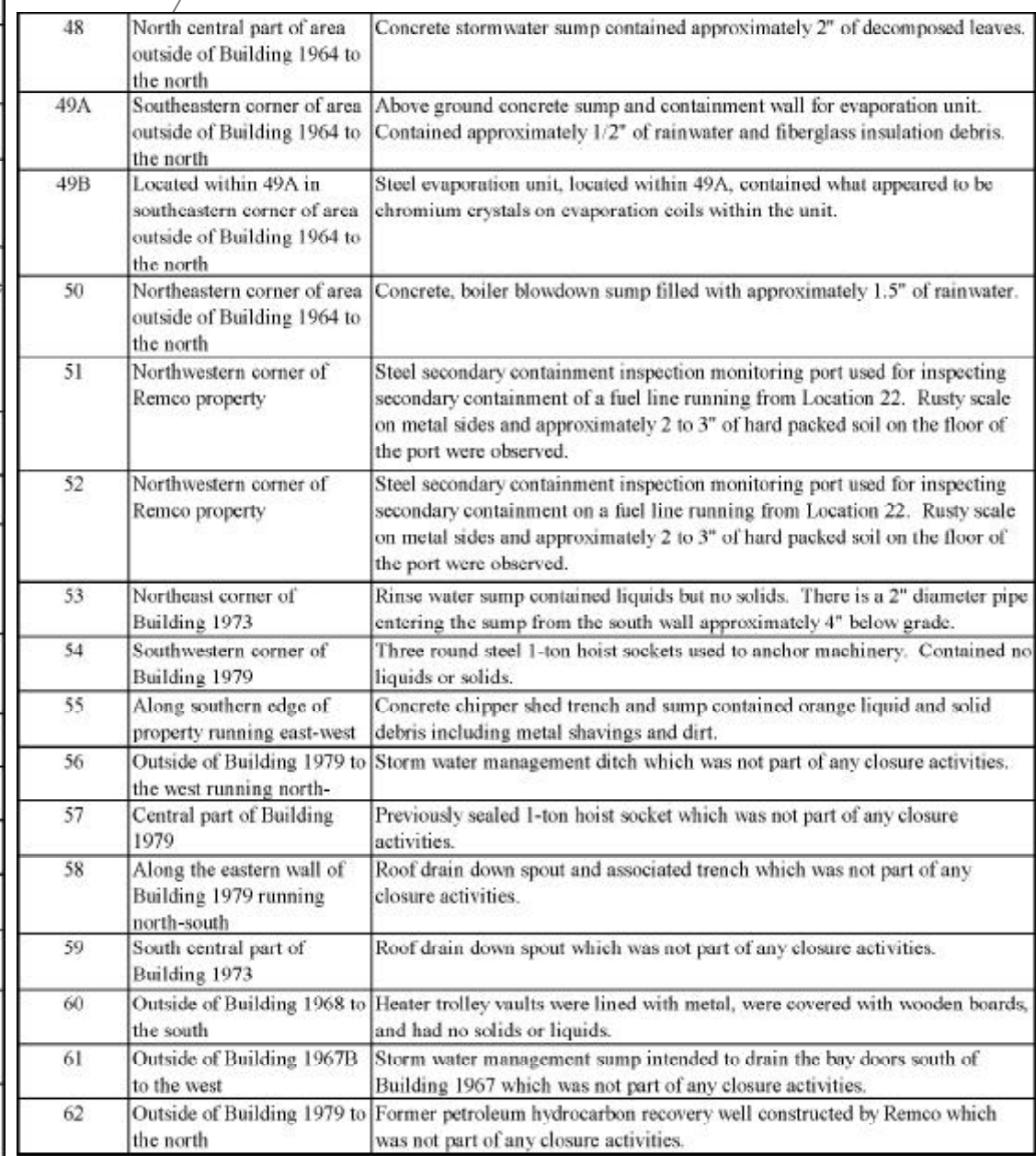
**SCHEMATIC DIAGRAM OF
VERTICAL CHROME PLATING TANKS**

FIGURE 2-6

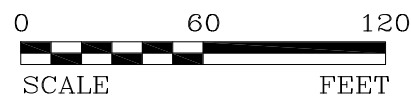
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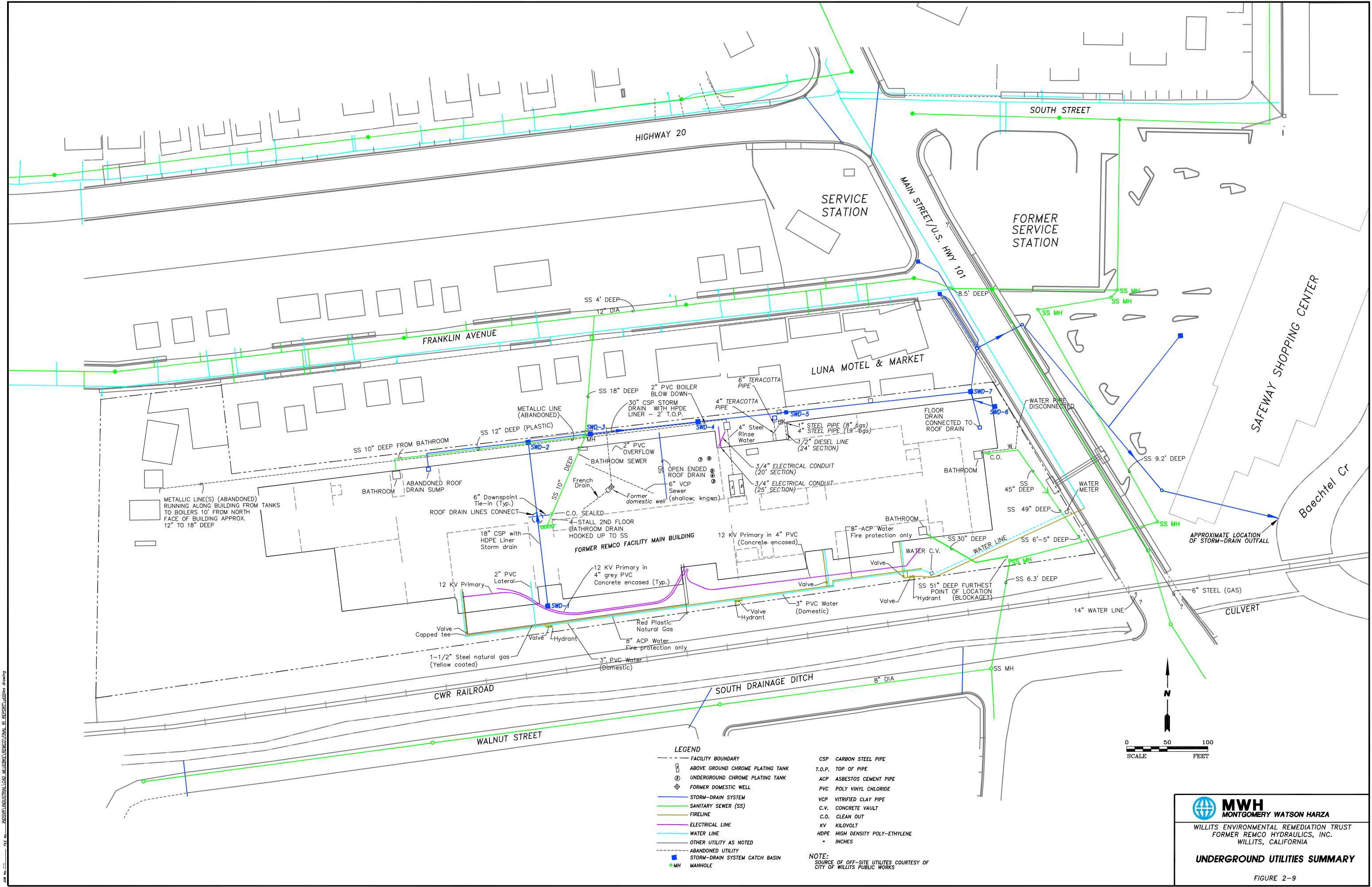


48	North central part of area outside of Building 1964 to the north	Concrete stormwater sump contained approximately 2" of decomposed leaves.
49A	Southeastern corner of area outside of Building 1964 to the north	Above ground concrete sump and containment wall for evaporation unit. Contained approximately 1/2" of rainwater and fiberglass insulation debris.
49B	Located within 49A in southeastern corner of area outside of Building 1964 to the north	Steel evaporation unit, located within 49A, contained what appeared to be chromium crystals on evaporation cells within the unit.
50	Northeastern corner of area outside of Building 1964 to the north	Concrete, boiler blowdown sump filled with approximately 1.5" of rainwater.
51	Northwestern corner of Remco property	Steel secondary containment inspection monitoring port used for inspecting secondary containment of a fuel line running from Location 22. Rusty scale on metal sides and approximately 2 to 3" of hard packed soil on the floor of the port were observed.
52	Northwestern corner of Remco property	Steel secondary containment inspection monitoring port used for inspecting secondary containment on a fuel line running from Location 22. Rusty scale on metal sides and approximately 2 to 3" of hard packed soil on the floor of the port were observed.
53	Northeast corner of Building 1973	Rinse water sump contained liquids but no solids. There is a 2" diameter pipe entering the sump from the south wall approximately 4" below grade.
54	Southwestern corner of Building 1979	Three round steel 1-ton hoist sockets used to anchor machinery. Contained no liquids or solids.
55	Along southern edge of property running east-west	Concrete chipper shed trench and sump contained orange liquid and solid debris including metal shavings and dirt.
56	Outside of Building 1979 to the west running north-south	Storm water management ditch which was not part of any closure activities.
57	Central part of Building 1979	Previously sealed 1-ton hoist socket which was not part of any closure activities.
58	Along the eastern wall of Building 1979 running north-south	Roof drain down spout and associated trench which was not part of any closure activities.
59	South central part of Building 1973	Roof drain down spout which was not part of any closure activities.
60	Outside of Building 1968 to the south	Heater trolley vaults were lined with metal, were covered with wooden boards, and had no solids or liquids.
61	Outside of Building 1967B to the west	Storm water management sump intended to drain the bay doors south of Building 1967 which was not part of any closure activities.
62	Outside of Building 1979 to the north	Former petroleum hydrocarbon recovery well constructed by Remco which was not part of any closure activities.



NE NORTHEAST



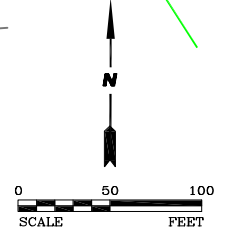


FILE NO. 11050501 INDUSTRIAL LOC. M. L. WILKINS, REMCO FACILITY, RI REPORT, L. 11/05/01

- LEGEND**
- FACILITY BOUNDARY
 - ⊠ ABOVE GROUND CHROME PLATING TANK
 - ⊙ UNDERGROUND CHROME PLATING TANK
 - ⊕ FORMER DOMESTIC WELL
 - STORM-DRAIN SYSTEM
 - SANITARY SEWER (SS)
 - FIRELINE
 - ELECTRICAL LINE
 - WATER LINE
 - OTHER UTILITY AS NOTED
 - ABANDONED UTILITY
 - STORM-DRAIN SYSTEM CATCH BASIN
 - MANHOLE

- CSP CARBON STEEL PIPE
- T.O.P. TOP OF PIPE
- ACP ASBESTOS CEMENT PIPE
- PVC POLY VINYL CHLORIDE
- VCP VITRIFIED CLAY PIPE
- C.V. CONCRETE VAULT
- C.O. CLEAN OUT
- KV KILOVOLT
- HDPE HIGH DENSITY POLY-ETHYLENE
- " INCHES

NOTE:
SOURCE OF OFF-SITE UTILITIES COURTESY OF
CITY OF WILLITS PUBLIC WORKS



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UNDERGROUND UTILITIES SUMMARY

FIGURE 2-9

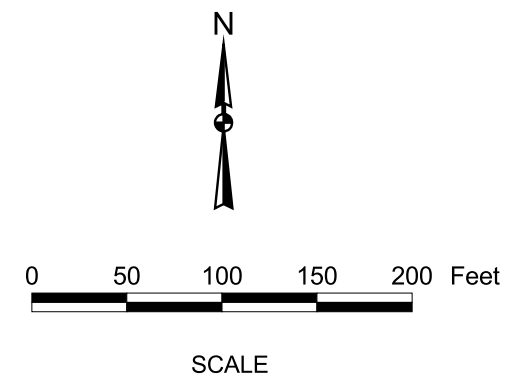
H:\AcGIS\Remco\RL_001\RL_001_1_nw.apr 11/20/01 AE




LEGEND

- Monitoring Well
- Temporary Well
- Piezometer
- Residential Well
- CPT Water Sample
- Soil Boring
- Sediment Sample
- Surface Soil Sample
- Influent to Storm Drain
- Storm Drain Sample
- Surface Water Sample
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Notes: Refer to Figure 3-5 for air and building surface sample locations.
Storm drain system influent to catch basin and catch basin samples collected at SWD-1 through SWD-7.
Sediment and surface water samples collected at SWBR-1, SWBR-2, SWBA-1, SWBA-2, SDD-1, SDD-2, DD-3



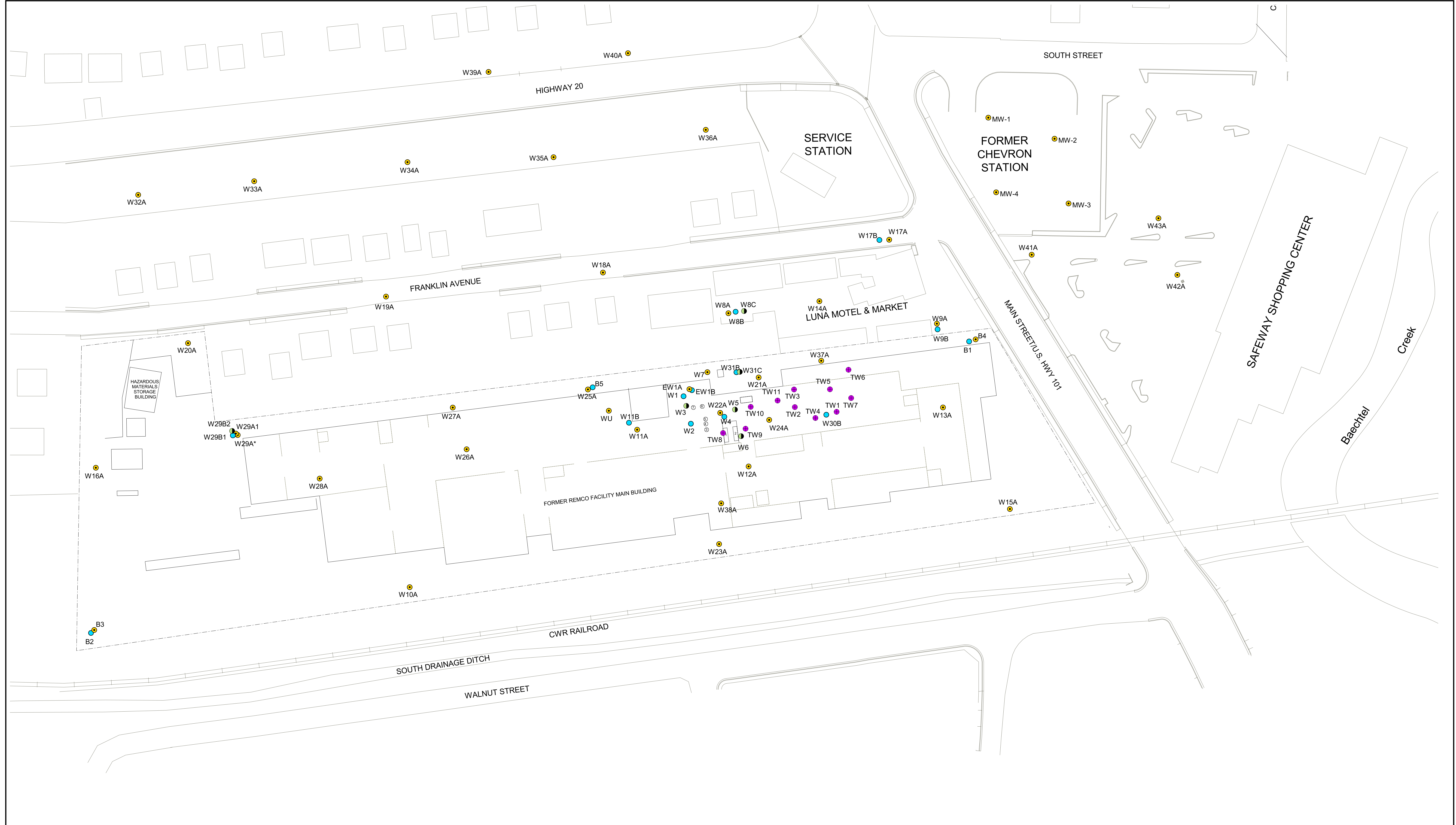
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REMEDIAL INVESTIGATION SAMPLING LOCATIONS

FIGURE 3-1

\\wcc\remco\Remco\GIS\GIS_2501_1_1.mxd 12/11/17 AE



Legend

- Monitoring Well (A-Zone)
- Temporary Well (A-Zone)
- Monitoring Well (B-Zone)
- Monitoring Well (C-Zone)
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Remco Facility Boundary

0 50 100 150 200 Feet

SCALE

W29A has been abandoned

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GROUNDWATER WELL LOCATIONS

FIGURE 3-2

\\041-jgibson-Project\erick\Remco\RI_08\RI_0501_1.dwg 12/1/01 AE



Legend

- Sample Location Types
- Monitoring Well
 - CPT Water Sample
 - Soil Boring
 - Aboveground Chrome Plating Tank
 - Underground Chrome Plating Tank
 - Remco Facility Boundary



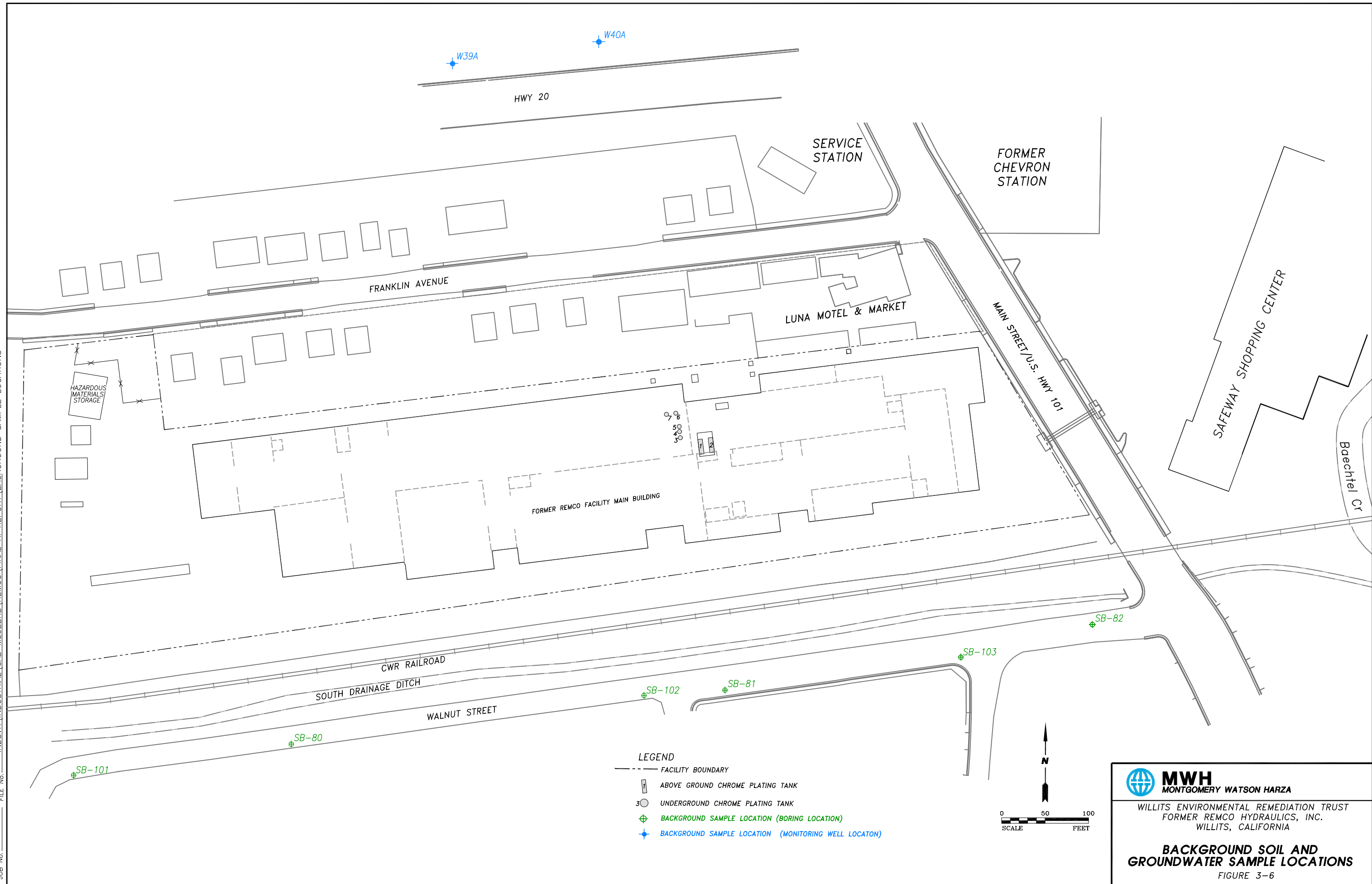
WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC. FACILITY
WILLITS, CALIFORNIA

GRAB GROUNDWATER
SAMPLING LOCATIONS

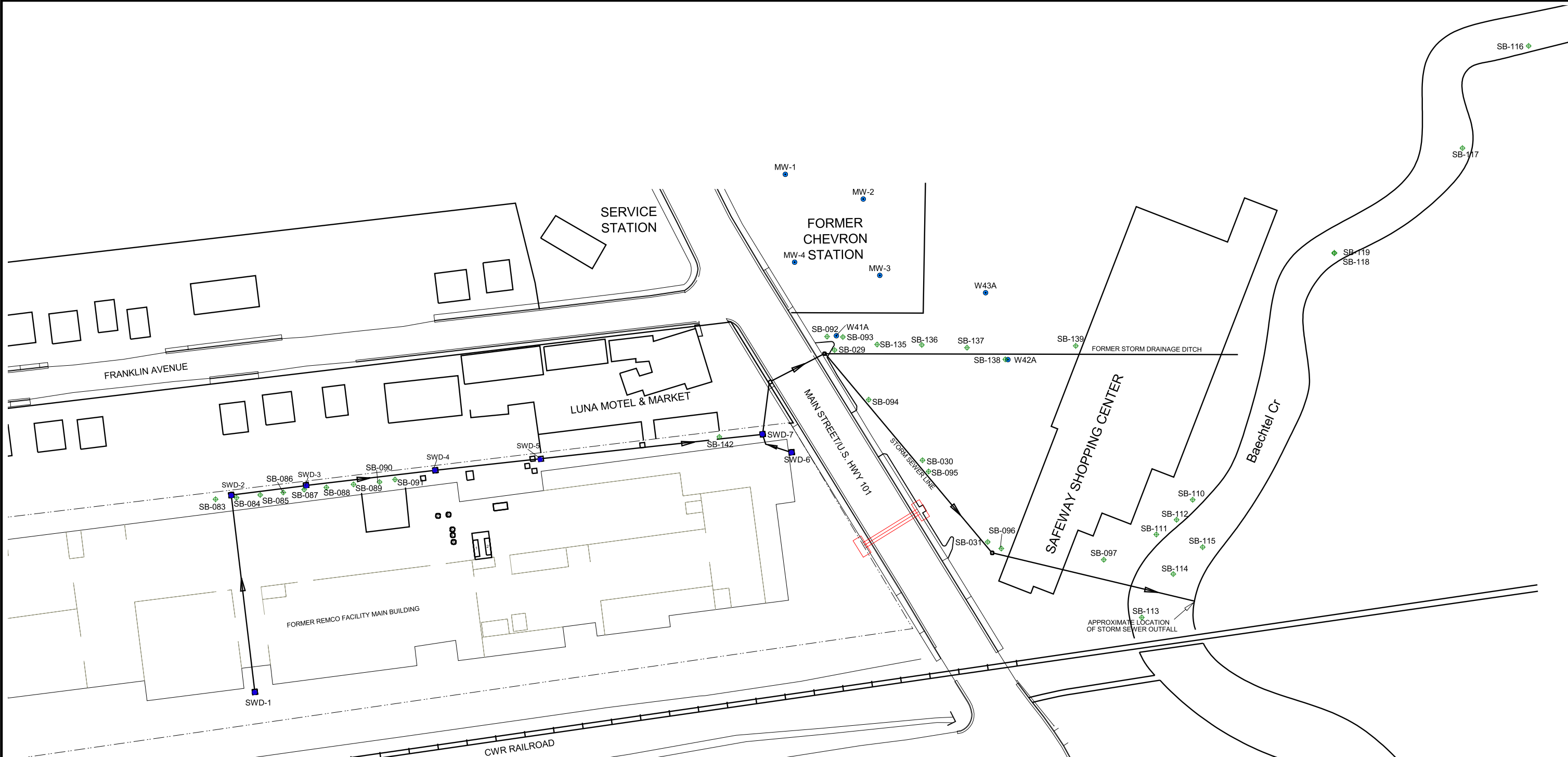
FIGURE 3-3



JOB No. --- FILE No. --- C:\INDSVR\INDUSTRIAL\CAD_MLUEBKE\REMCO\FINAL_RI_REPORT\BACKGROUND SAMPLE LOCATIONS

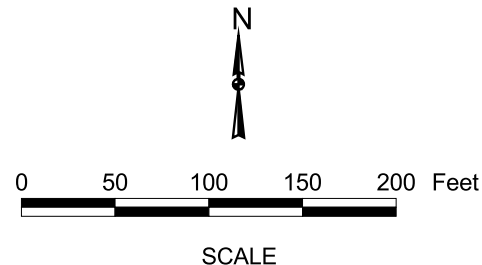



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Legend

- Soil Boring
- Storm Drain Sample
- Monitoring Well
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

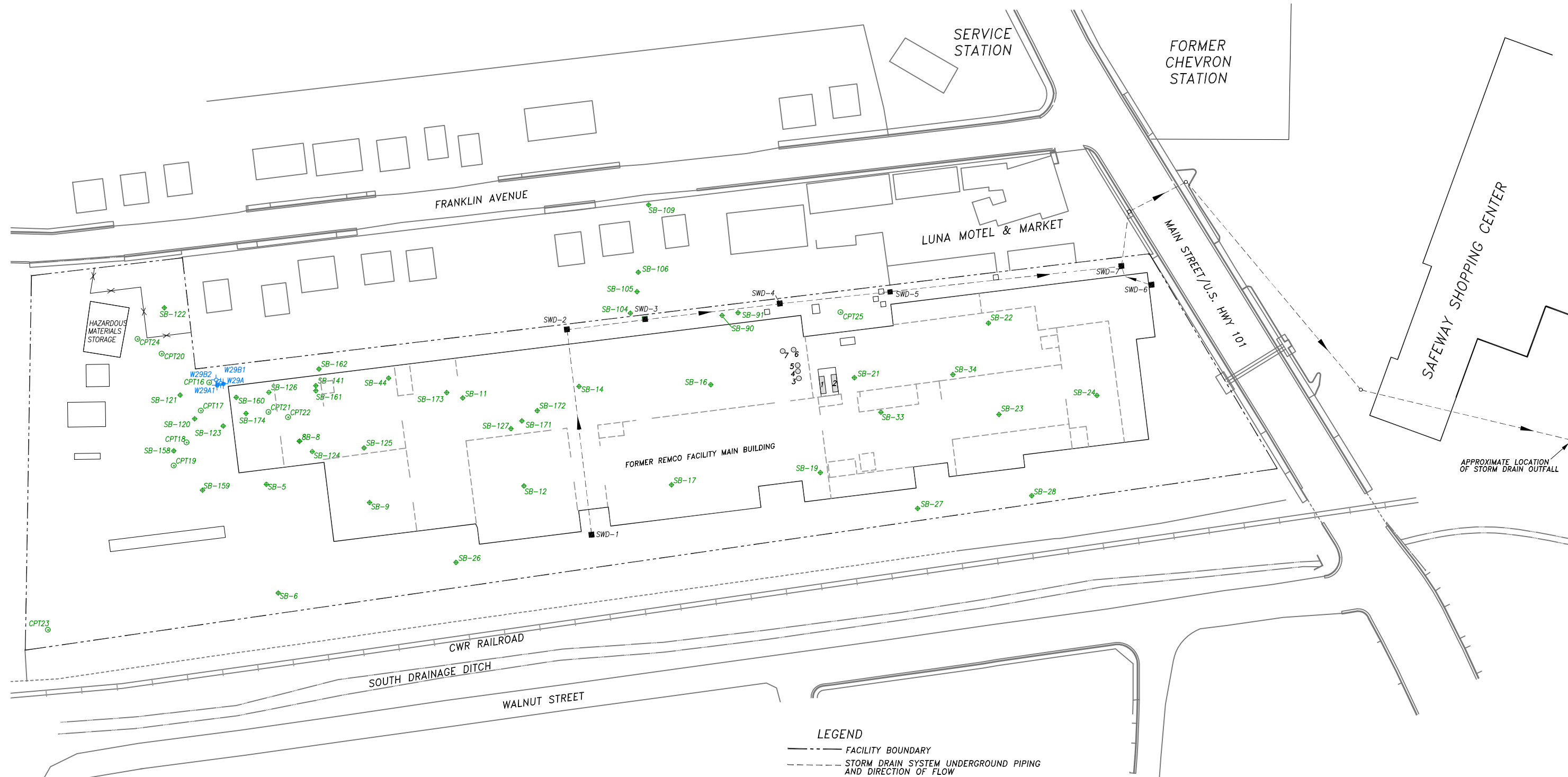


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CATEGORY 2 SAMPLES:
CHROMIUM AND VOCs IN
STORM DRAIN SYSTEM

FIGURE 3-8

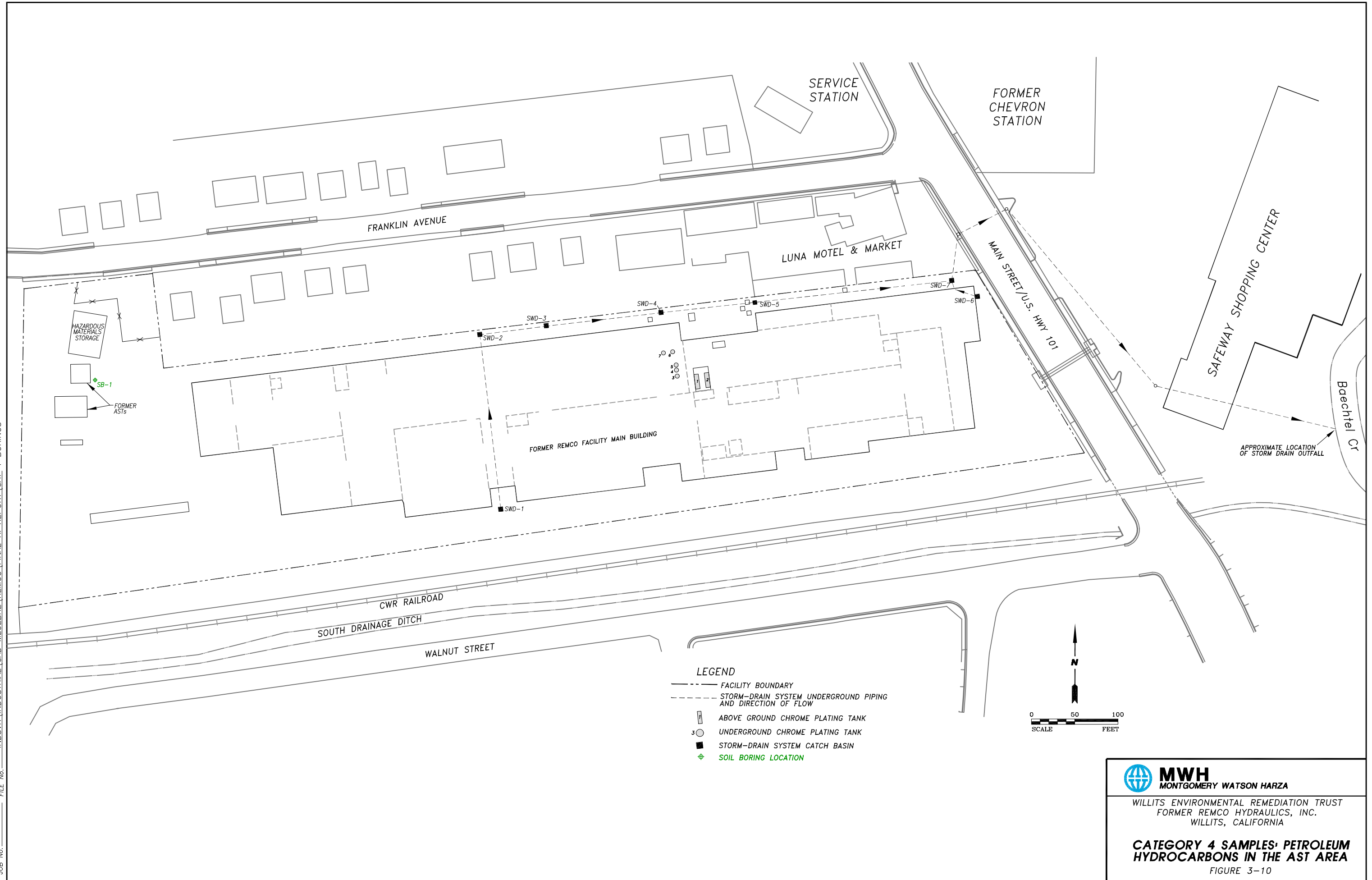


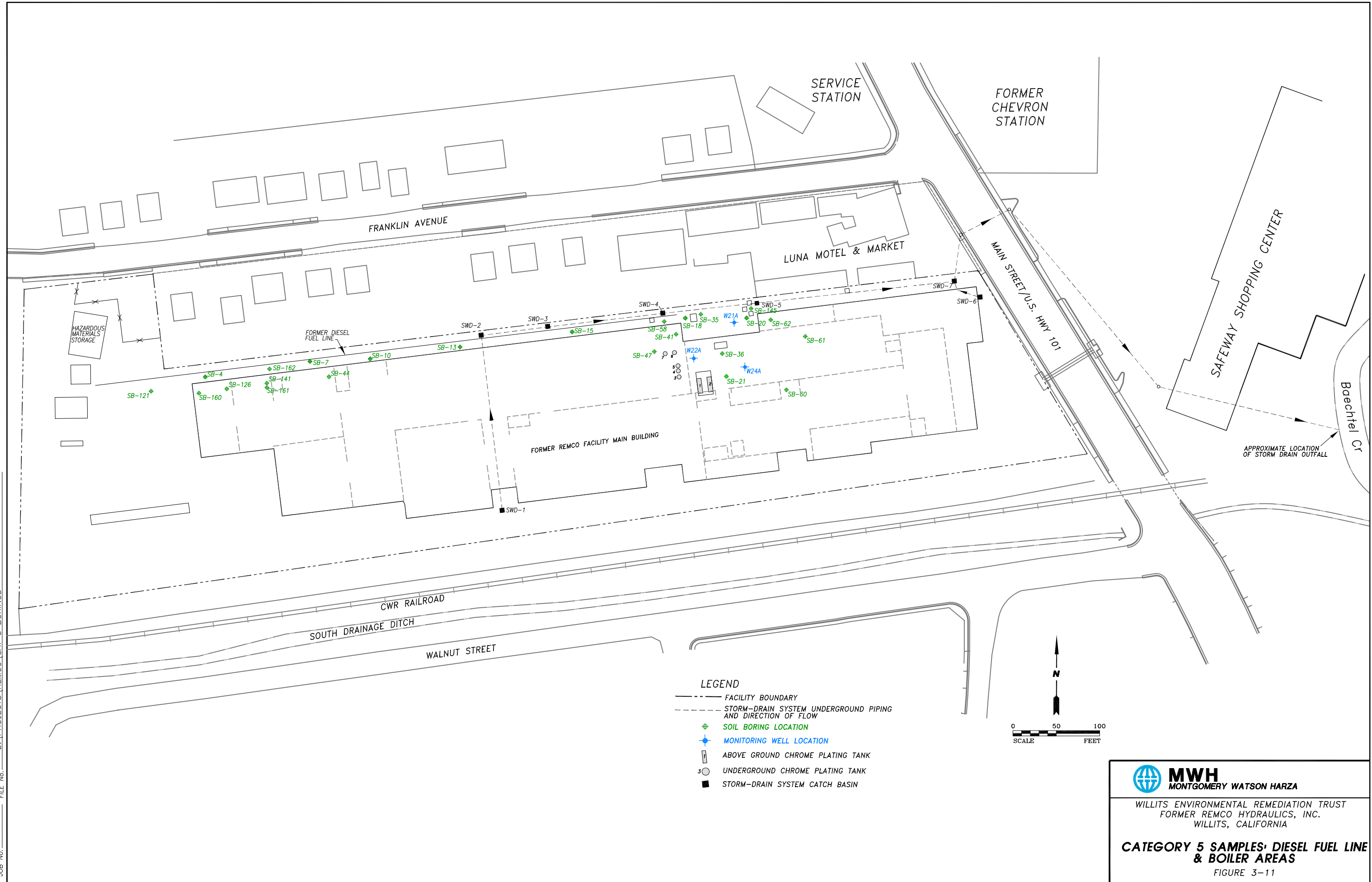
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CATEGORY 3 SAMPLES: VOCs DUE TO SURFACE RELEASES

FIGURE 3-9



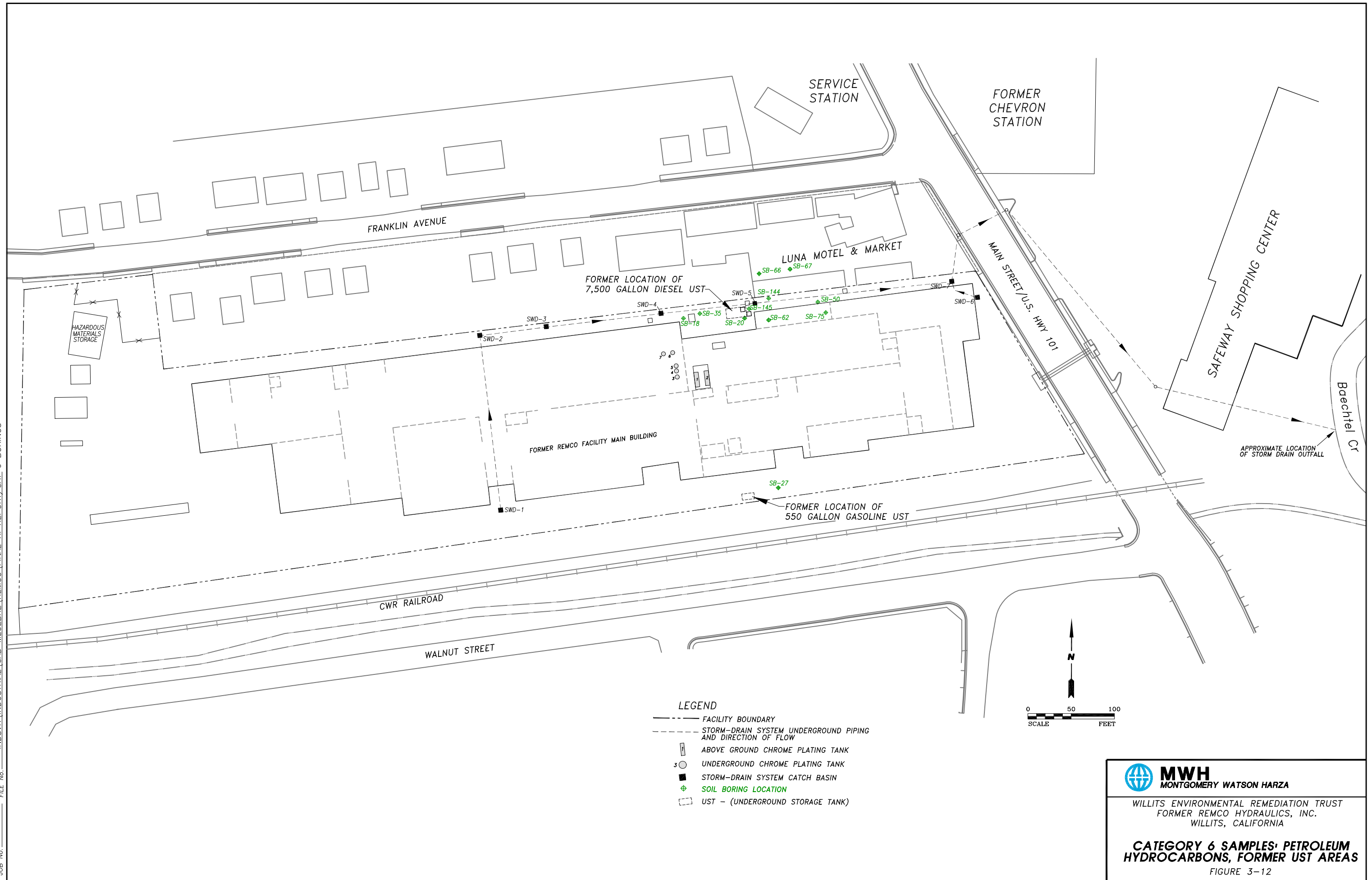


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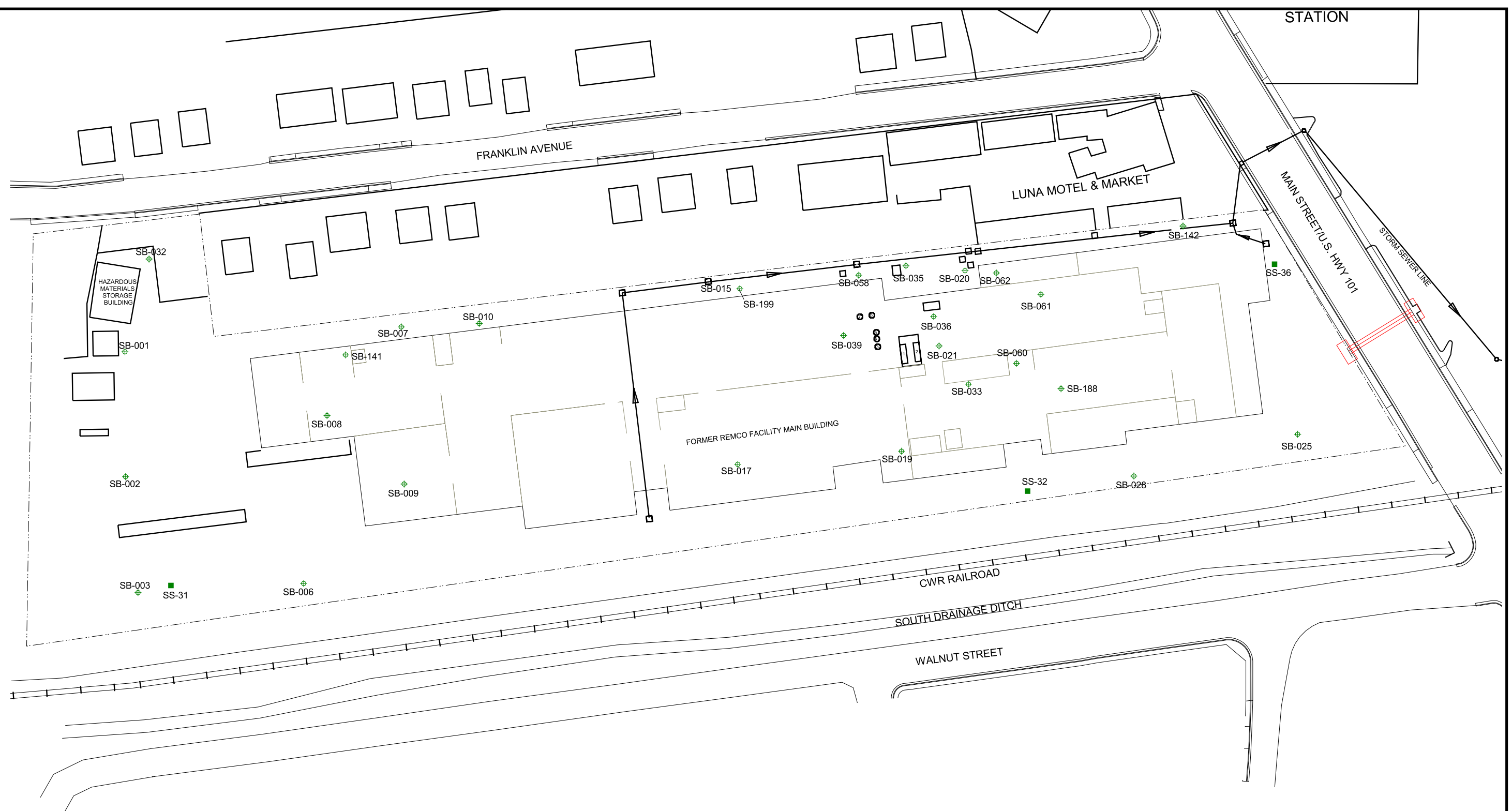
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**CATEGORY 5 SAMPLES: DIESEL FUEL LINE
& BOILER AREAS**

FIGURE 3-11



\\work\l\pissur\Project\ArcGis\Remco\B1_0501\B1_0501_bar_1213\01_AE



Legend

- Surface Soil Sample
- ⊕ Soil Boring
- ⌚ Aboveground Chrome Plating Tank
- ⓪ Underground Chrome Plating Tank
- ◻ Storm-Drain System Catch Basin
- Remco Facility Boundary

N

0 50 100 150 200 Feet

SCALE

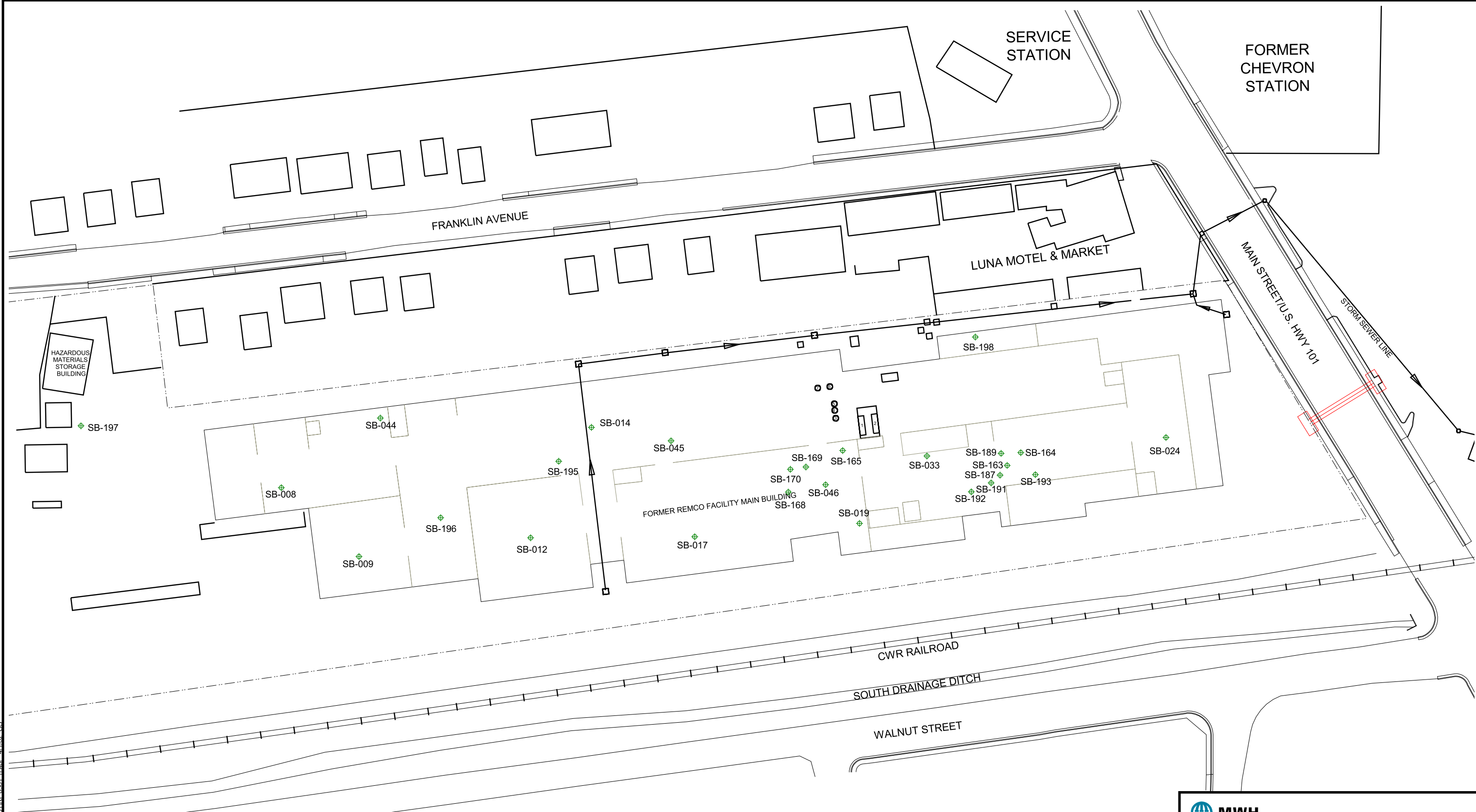
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CATEGORY 7 SAMPLES:
PETROLEUM HYDROCARBONS, METALS, PCBs,
AND PAHs IN DUST SUPPRESSION AREAS

FIGURE 3-13

\\w41-eh01ssvr1\Project\ArcGis\Remco\RI_0501\RI_0501_1.harc 4/1/02 GS



Legend

- Soil Boring
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

0 50 100 150 200 Feet

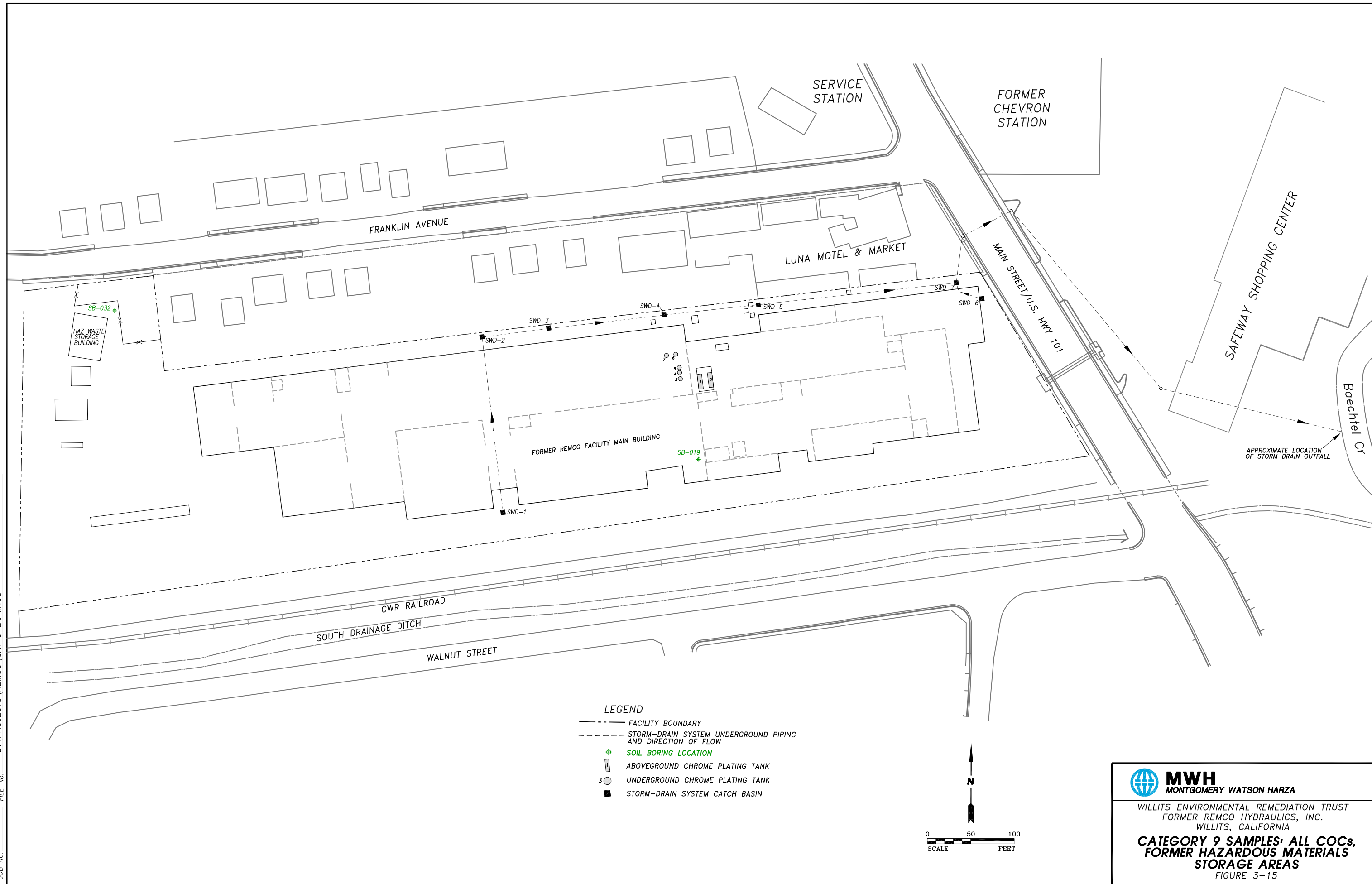
SCALE

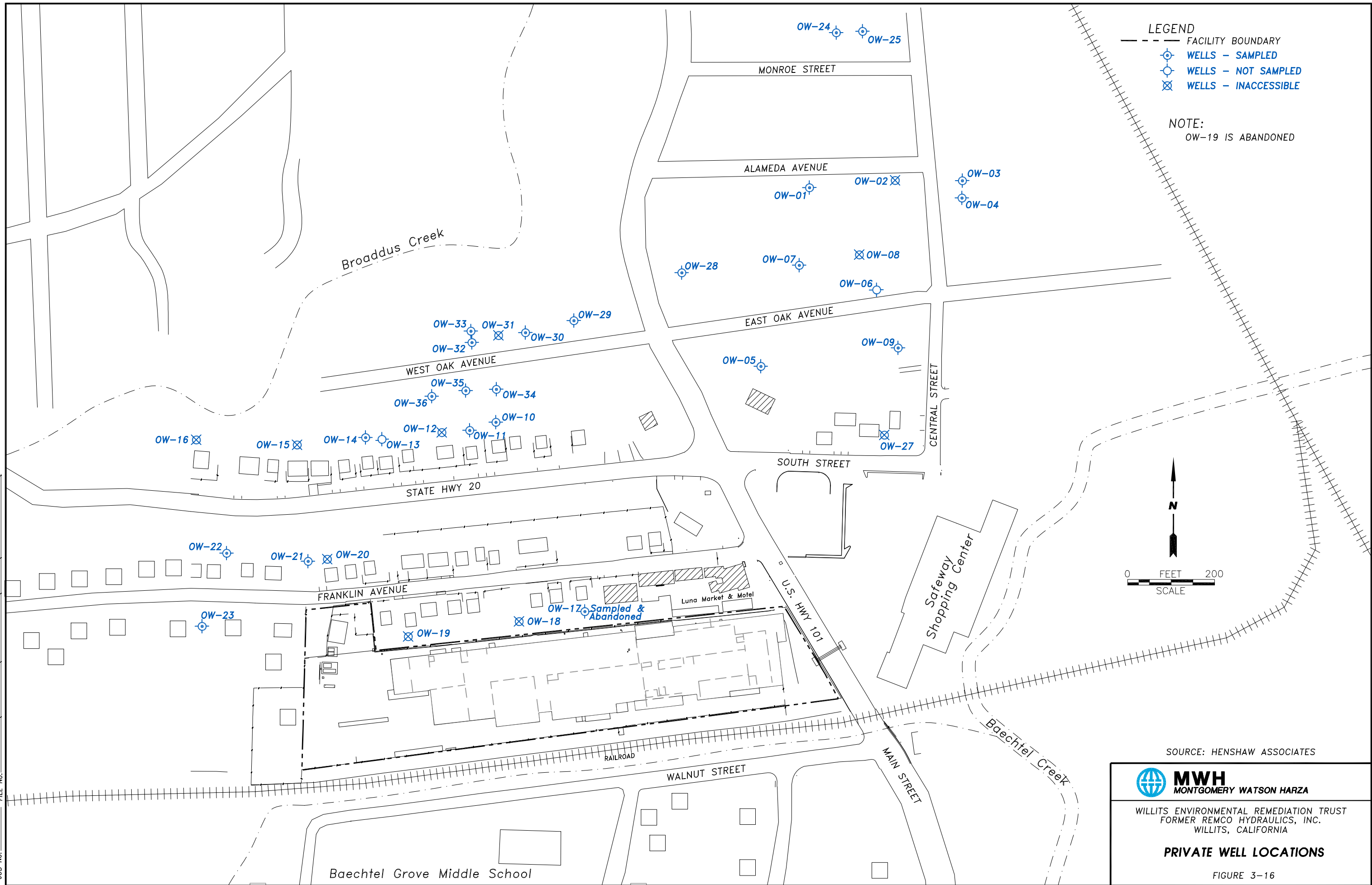
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CATEGORY 8 SAMPLES:
LUBRICATING OILS AND COOLANTS
WITHIN THE FACILITY BUILDING

FIGURE 3-14





SOURCE: HENSHAW ASSOCIATES



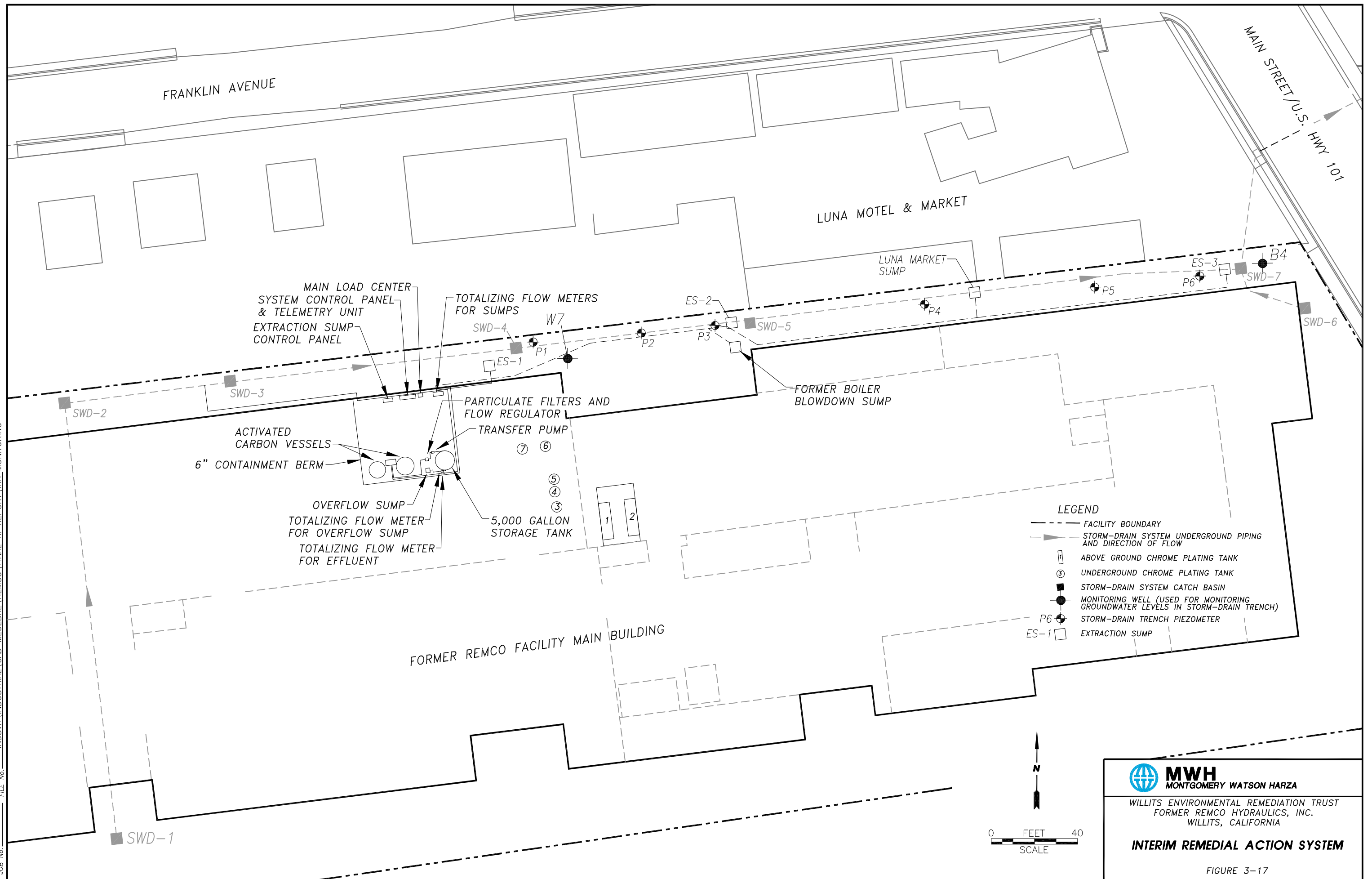
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PRIVATE WELL LOCATIONS

FIGURE 3-16

JOB No. _____ FILE No. _____ INDSVR\INDUSTRIAL\CAD_M\UEBKE\REMCO\FINAL_RI_REPORT\IRA_MONITORING



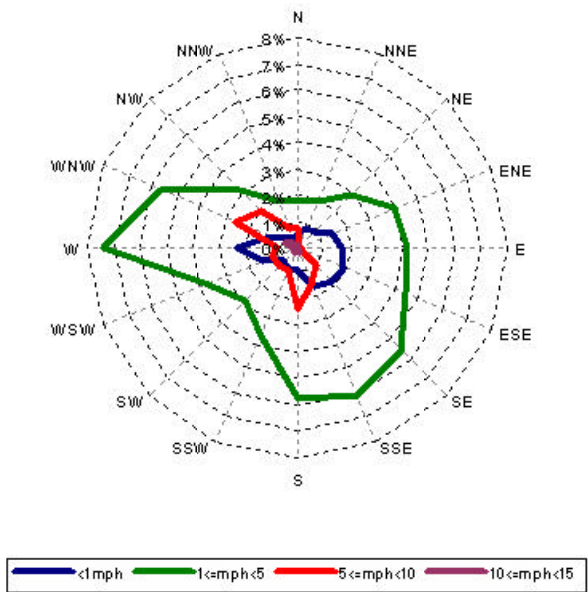
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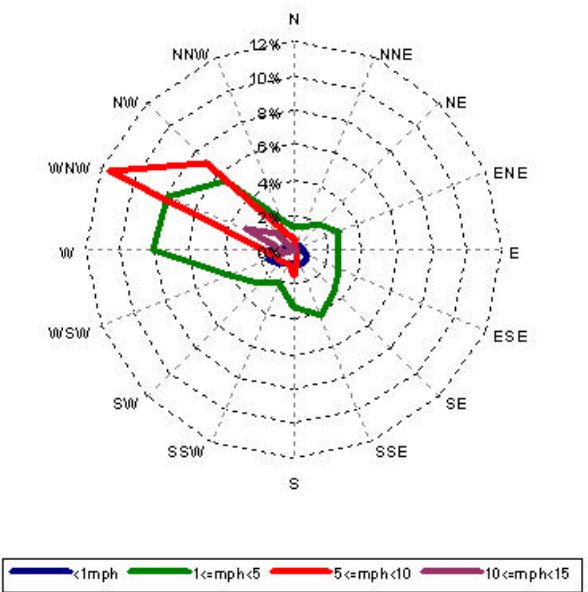
INTERIM REMEDIAL ACTION SYSTEM

FIGURE 3-17

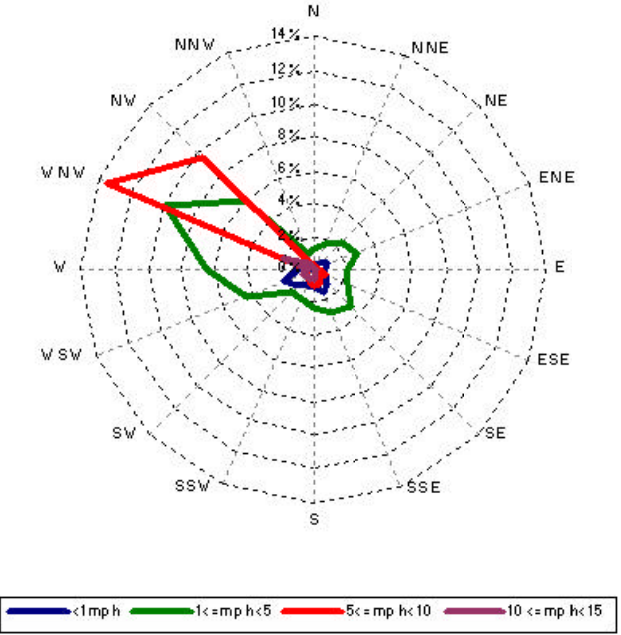
Wind Speed and Direction, Winter
1996 - 2001



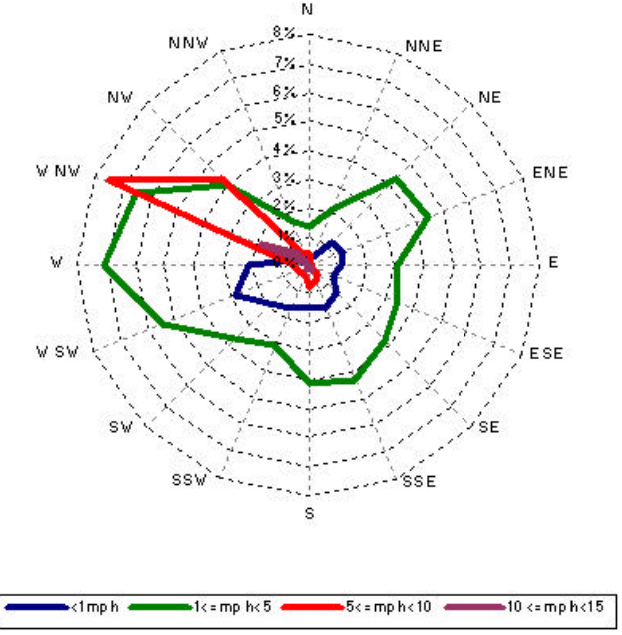
Wind Speed and Direction, Spring
1996 - 2001



Wind Speed and Direction, Summer
1996 - 2000



Wind Speed and Direction, Fall
1995 - 2000

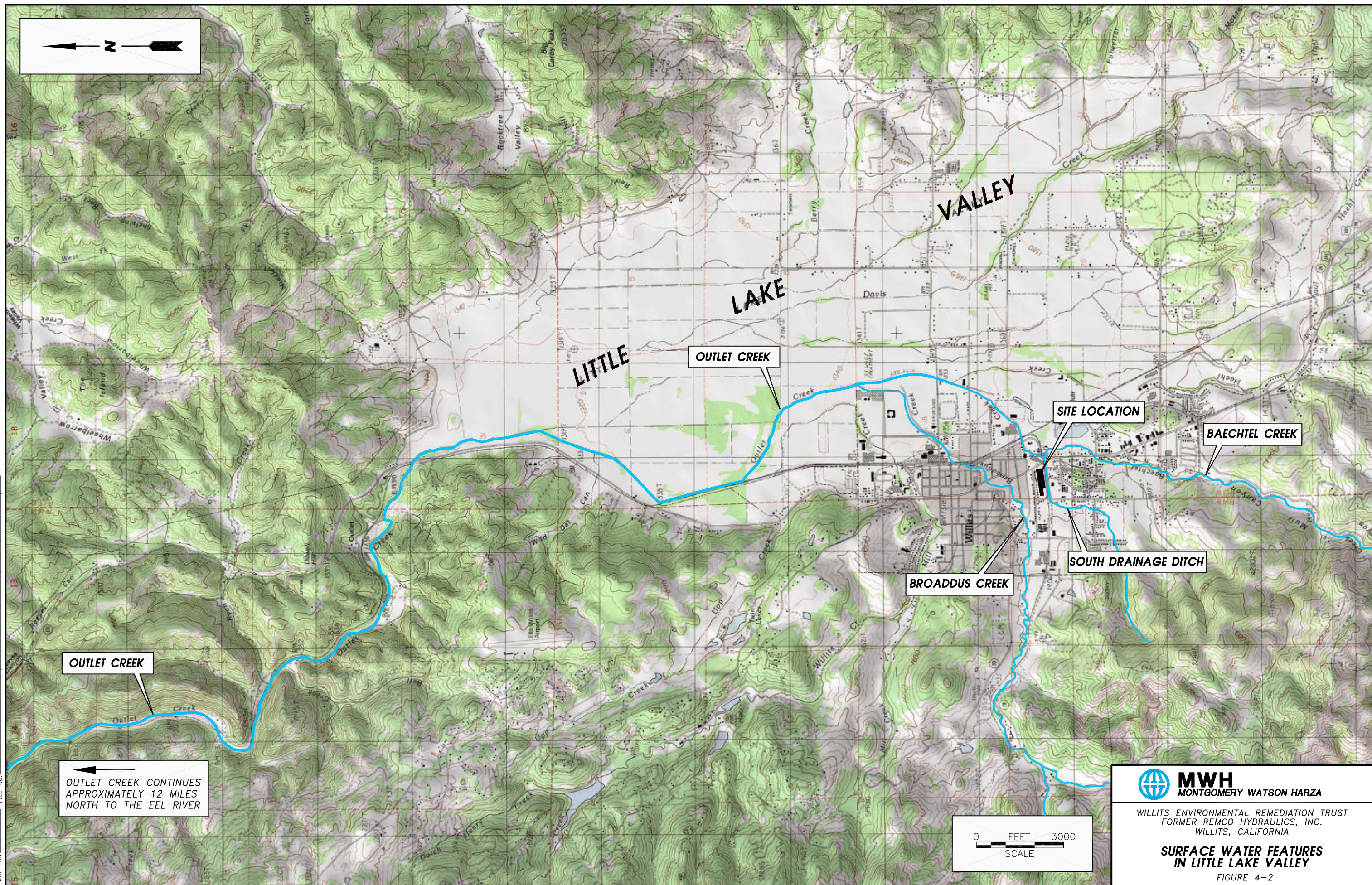


NOTE:
WIND ROSES INDICATE DIRECTION
FROM WHICH WIND IS COMING.



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WIND ROSES FOR
WINTER, SPRING, SUMMER AND FALL
FIGURE 4-1

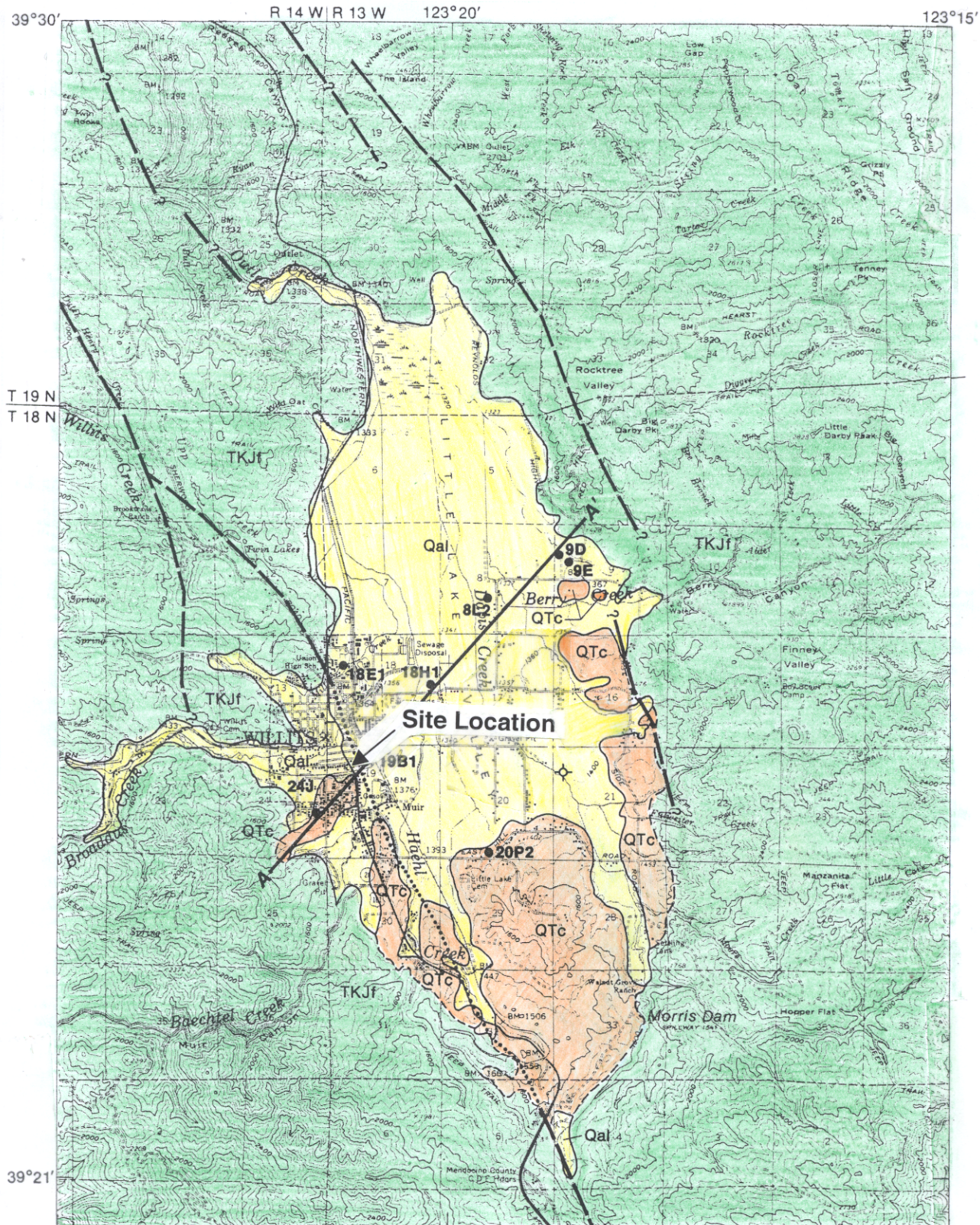


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**SURFACE WATER FEATURES
IN LITTLE LAKE VALLEY**

FIGURE 4-2



NOTES:

TAKEN FROM U.S. GEOLOGIC SURVEY,
WATER-RESOURCES INVESTIGATIONS REPORT 85-4258
GEOLOGY MODIFIED FROM G.T. CARDWELL (1965),
CALIFORNIA DEPARTMENT OF FORESTRY (1979), AND
E.H. PAMPEYAN AND OTHERS (1980).

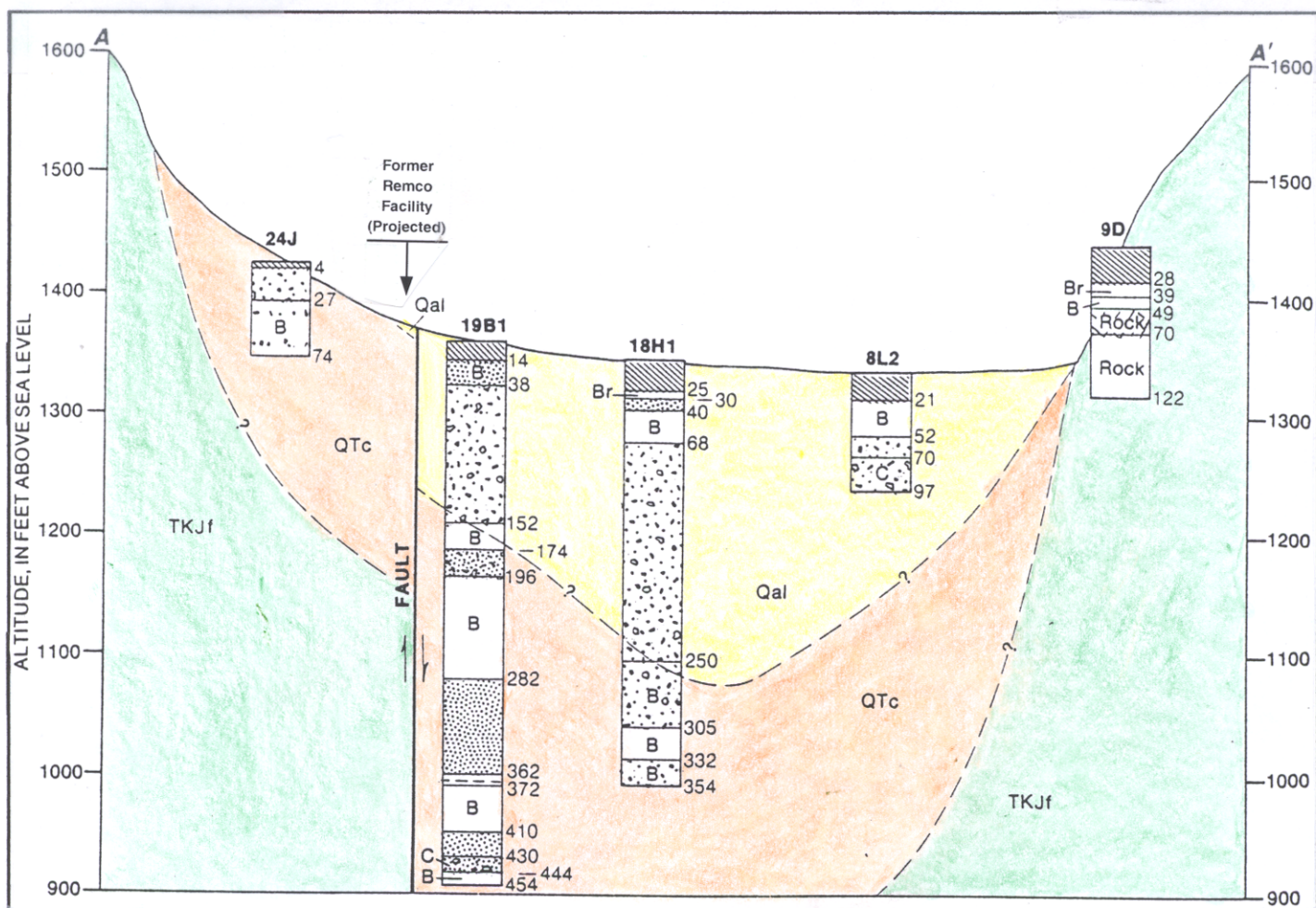


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GEOLOGY OF LITTLE LAKE VALLEY

FIGURE 4-3










Vertical exaggeration approximately X 25

EXPLANATION

Qal	Alluvium	Holocene	Quaternary
QTc	Continental basin deposits	Pleistocene and Pliocene	Tertiary
TKJf	Franciscan Complex, undifferentiated	Unconformity	Tertiary, Cretaceous, and Jurassic

LITHOLOGY

8L2	Well number (Wells have been projected into line of section.)			Soil		Sand
21	} Depth to corresponding changes in lithology, in feet below land surface		Clay: letter indicates color; B-blue; Br-brown; C-color not specified			Gravel
52						
70						
97						
						Rock fractured
						Rock unfractured

Note: combinations of patterns indicate mixtures of materials

---?--- GEOLOGIC CONTACT
- Location approximate

==> FAULT - Arrows show relative displacement

NOTES:

SEE FIGURE 4-3 FOR CROSS SECTION LOCATION.

TAKEN FROM U.S. GEOLOGIC SURVEY,
WATER-RESOURCES INVESTIGATIONS REPORT 85-4258

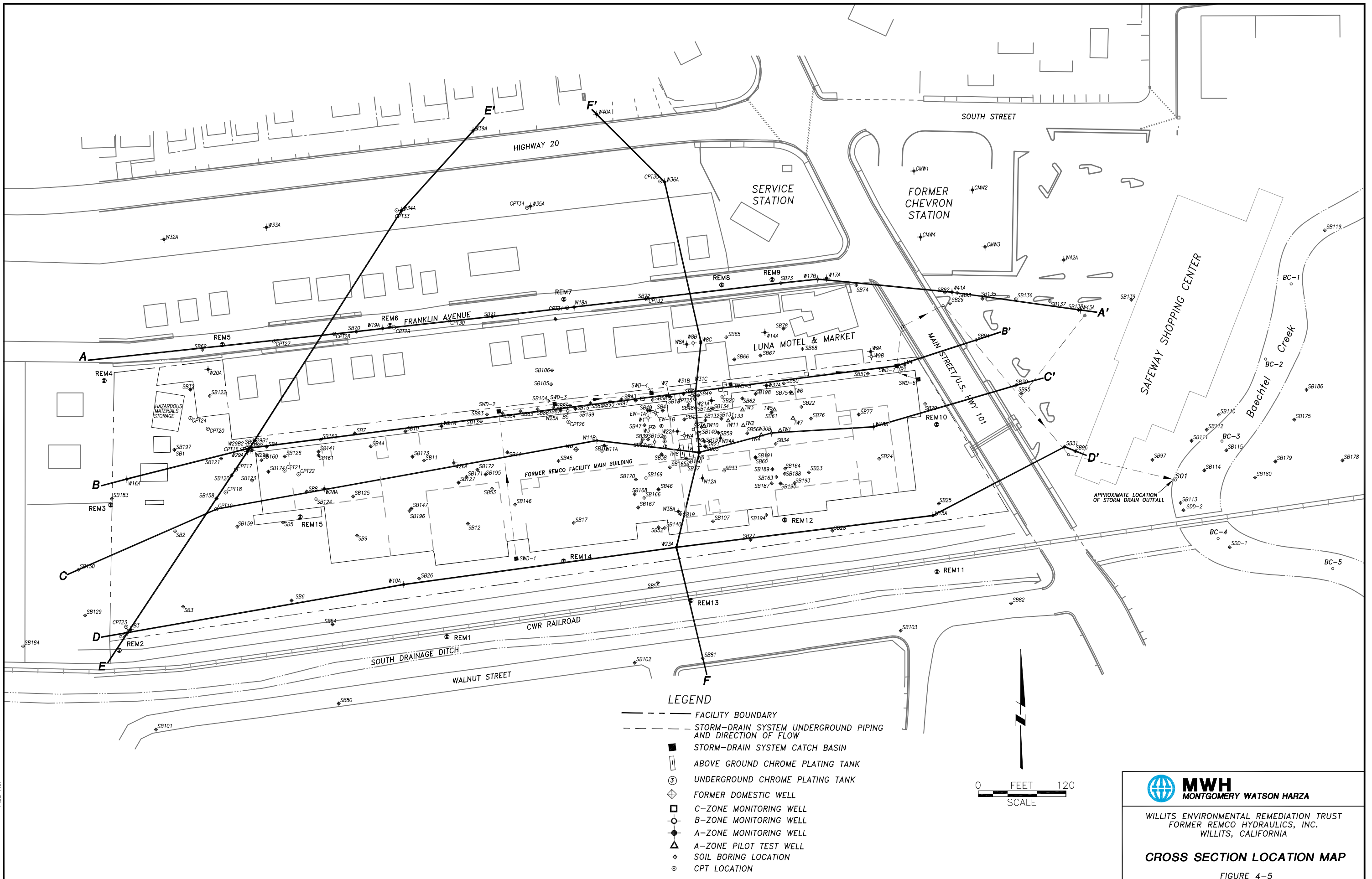


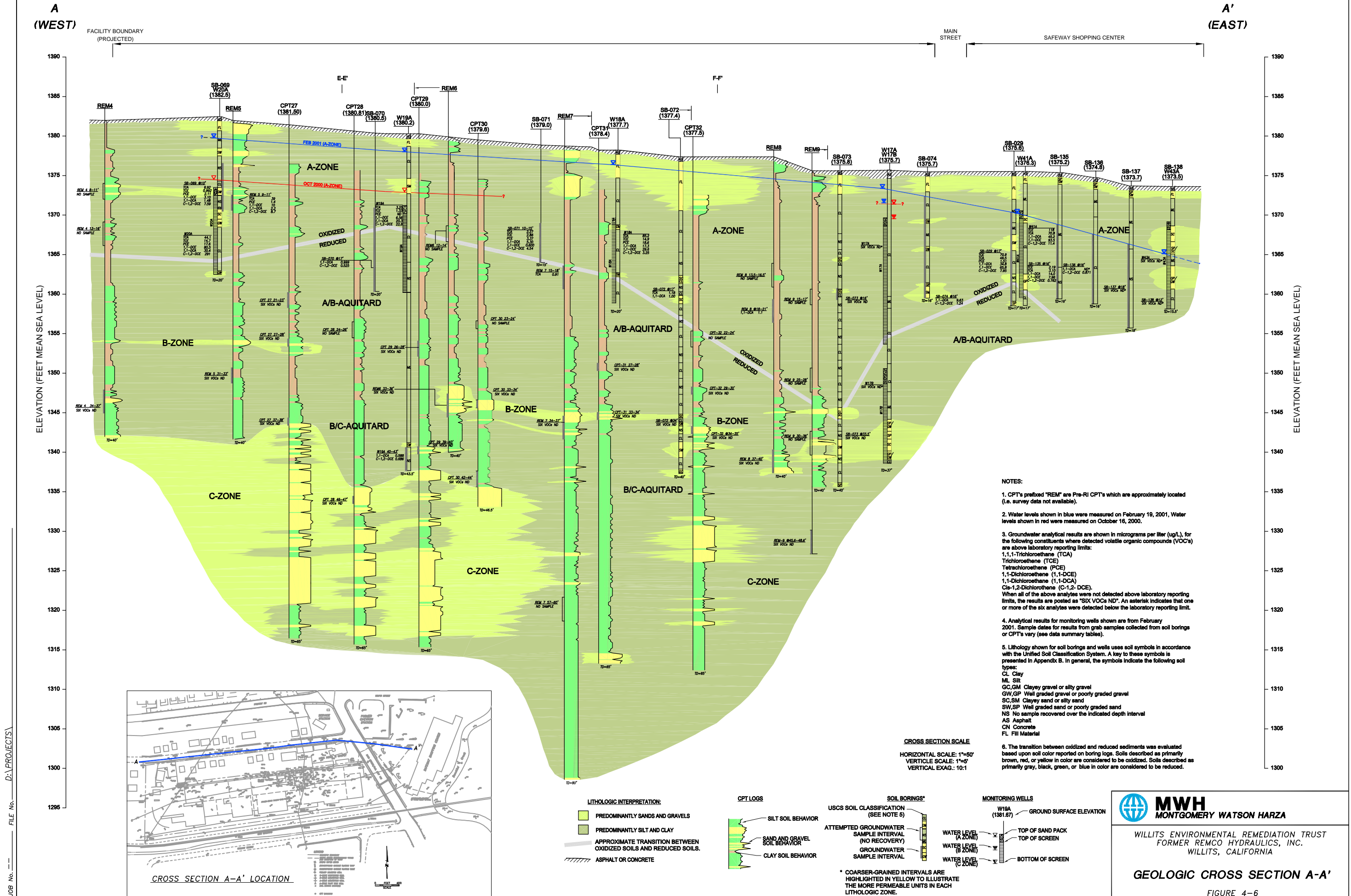
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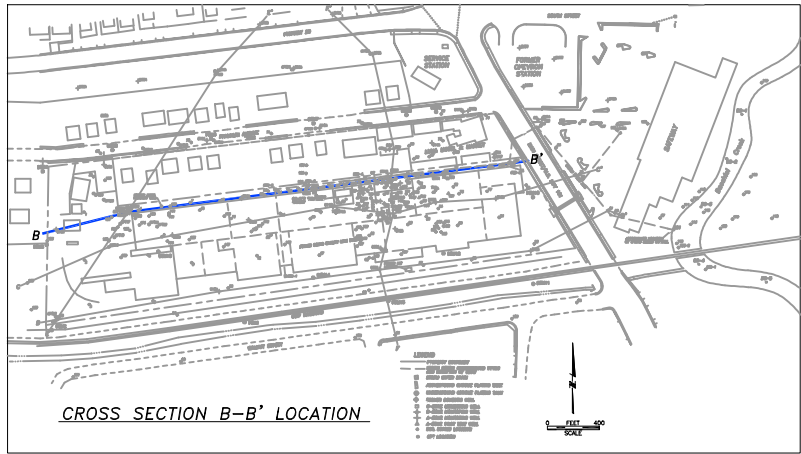
WILLITS ENVIRONMENTAL REMEDIATION TRUST
FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA

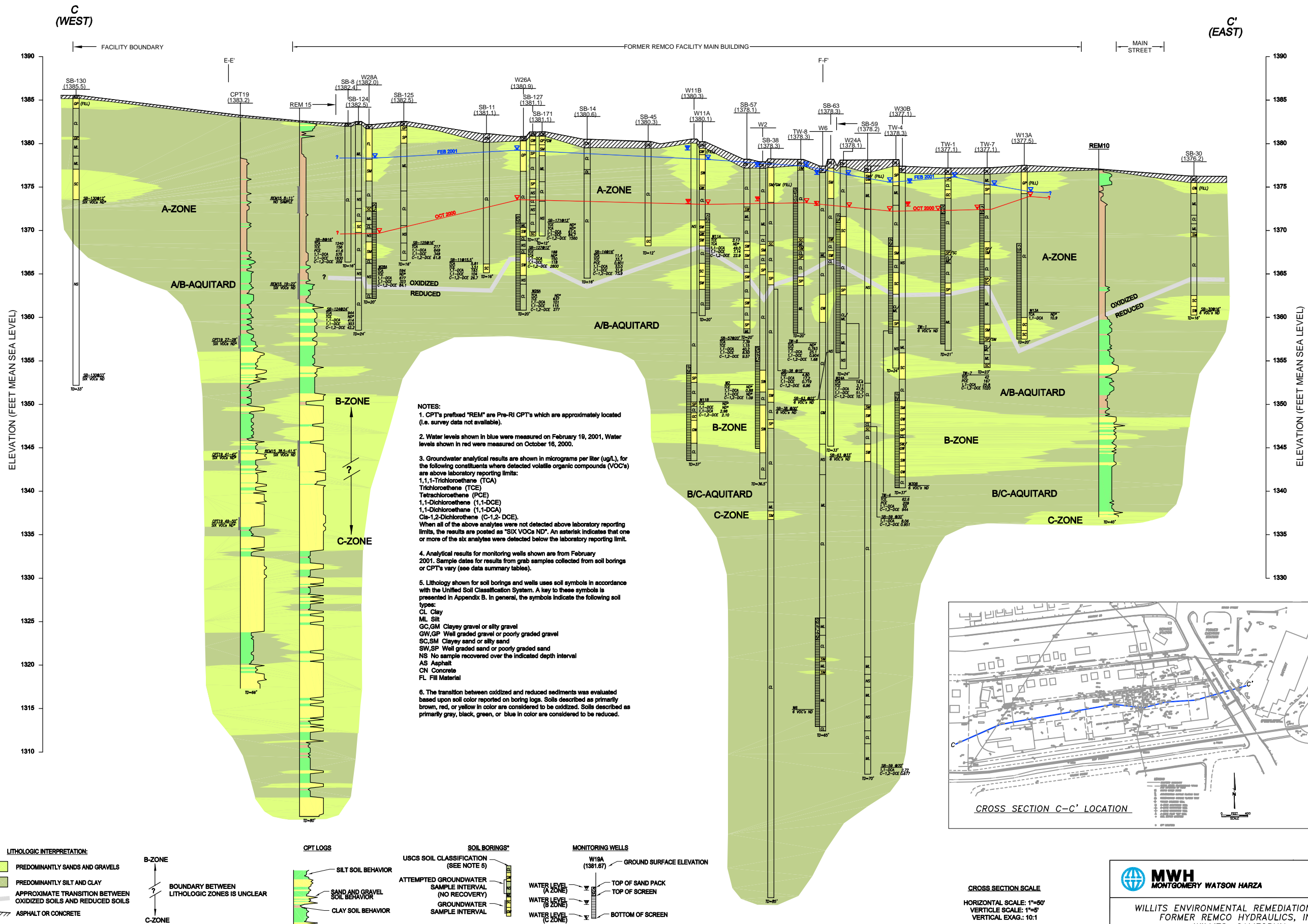
**GEOLOGIC SECTION,
LITTLE LAKE VALLEY**

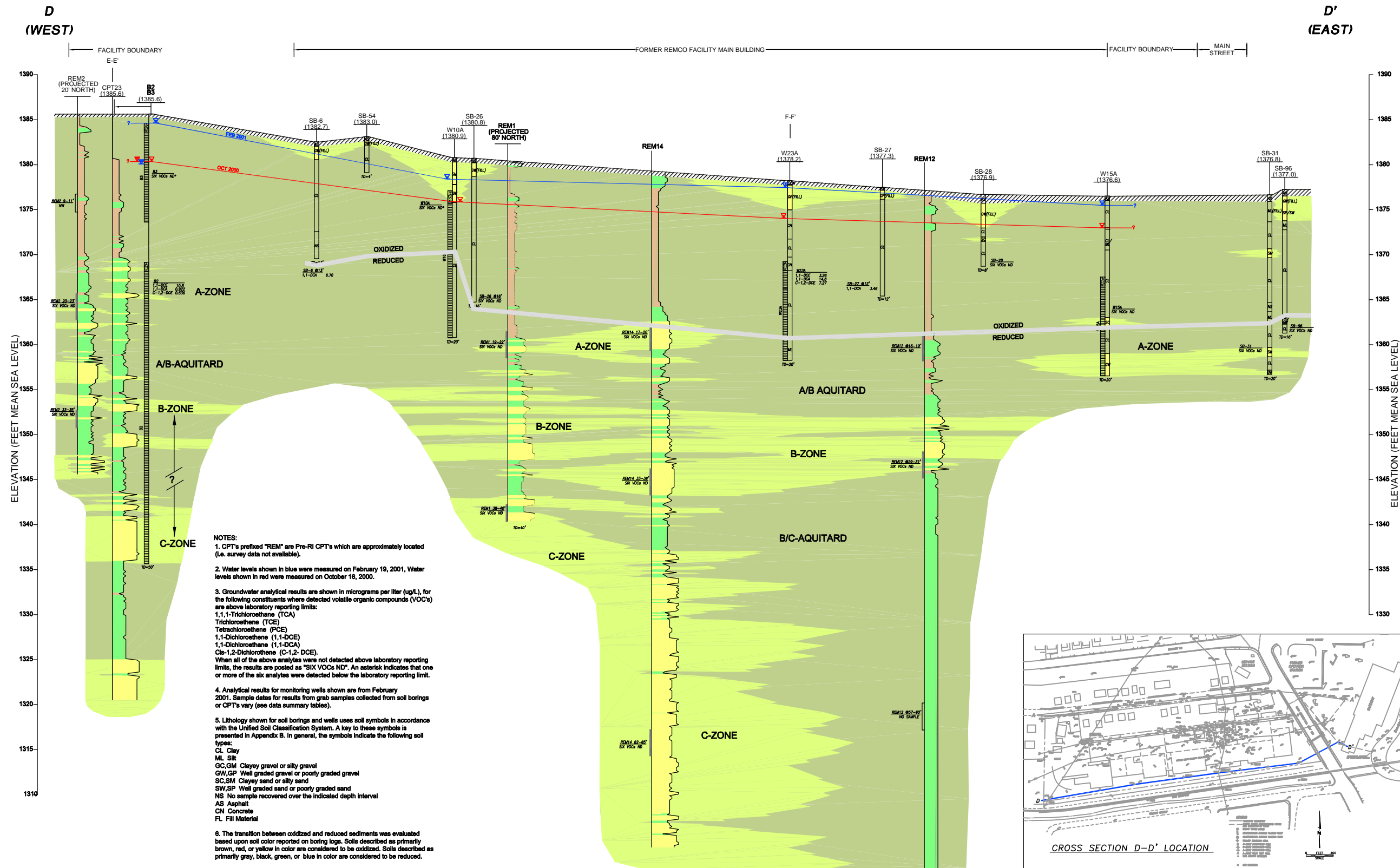
FIGURE 4-4









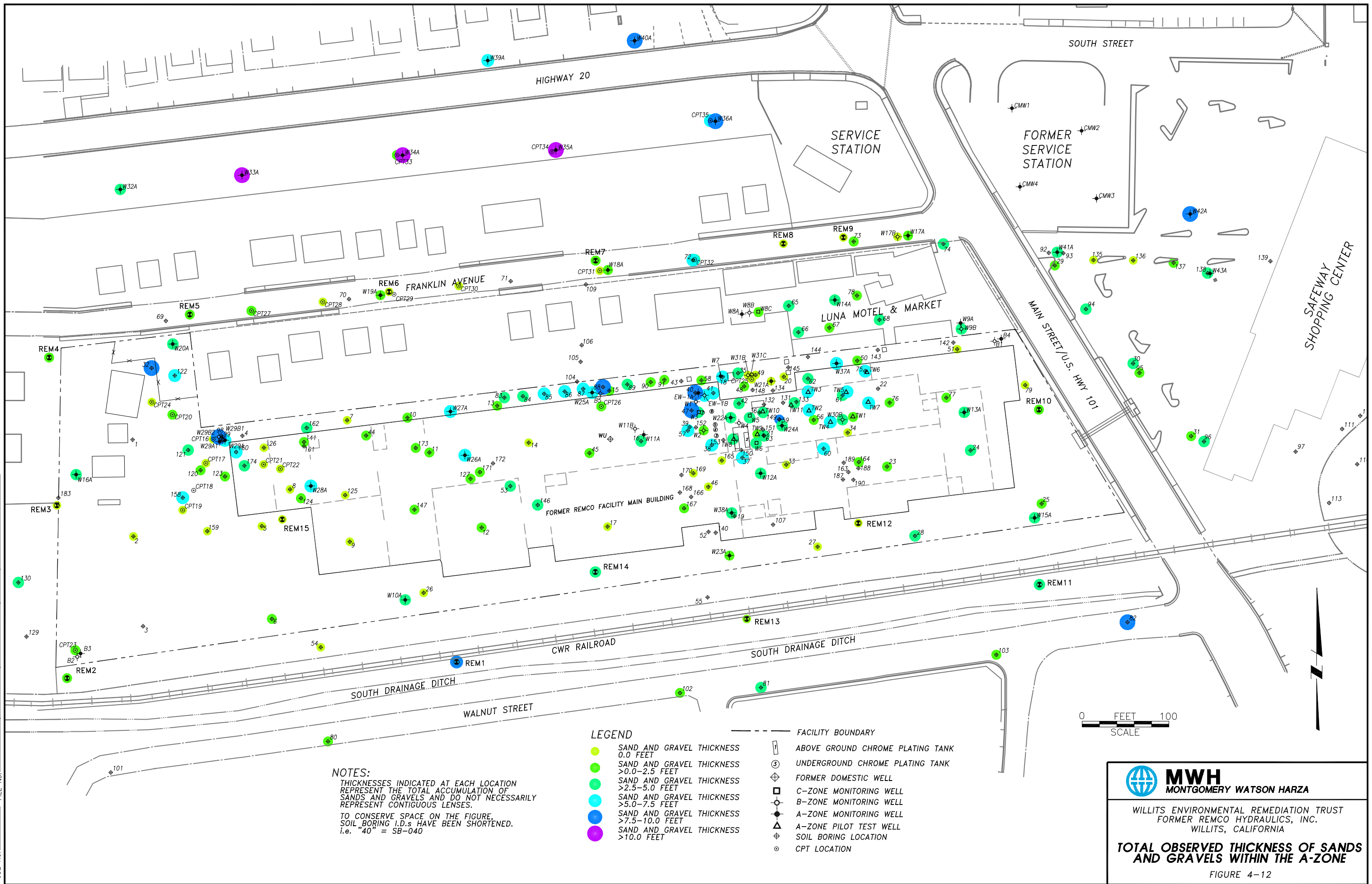


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GEOLOGIC CROSS SECTION D-D'

FIGURE 4-9

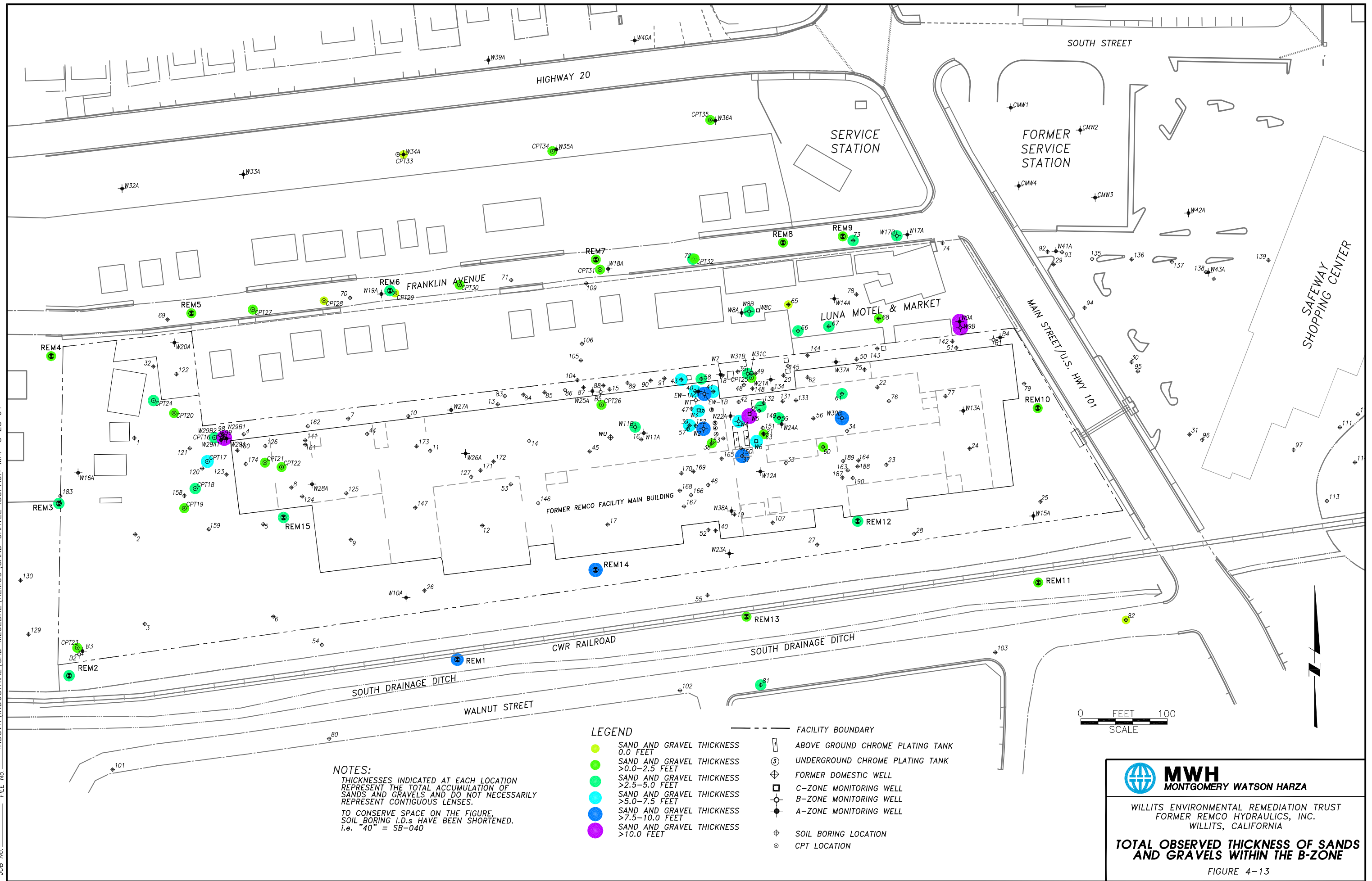


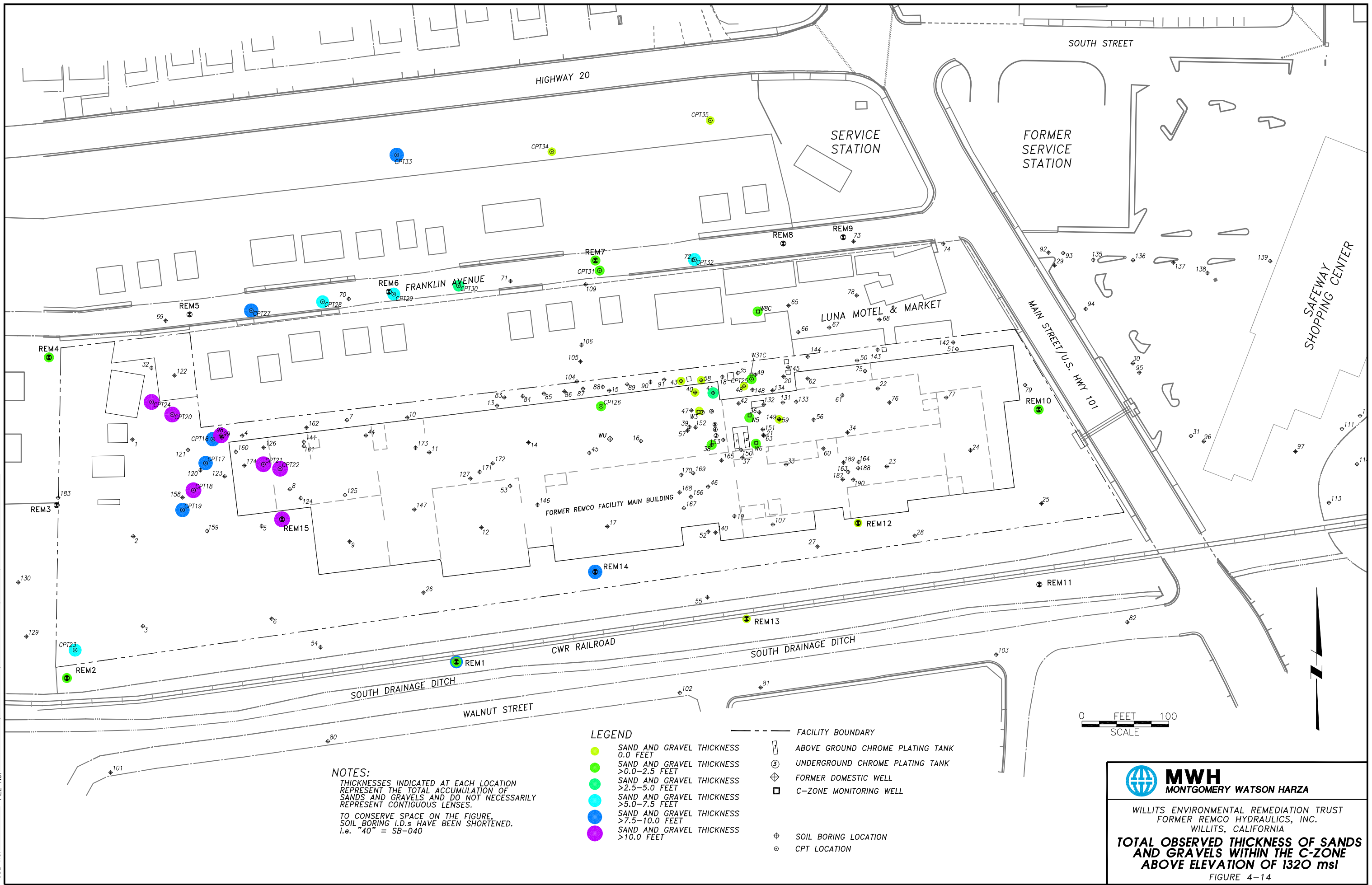
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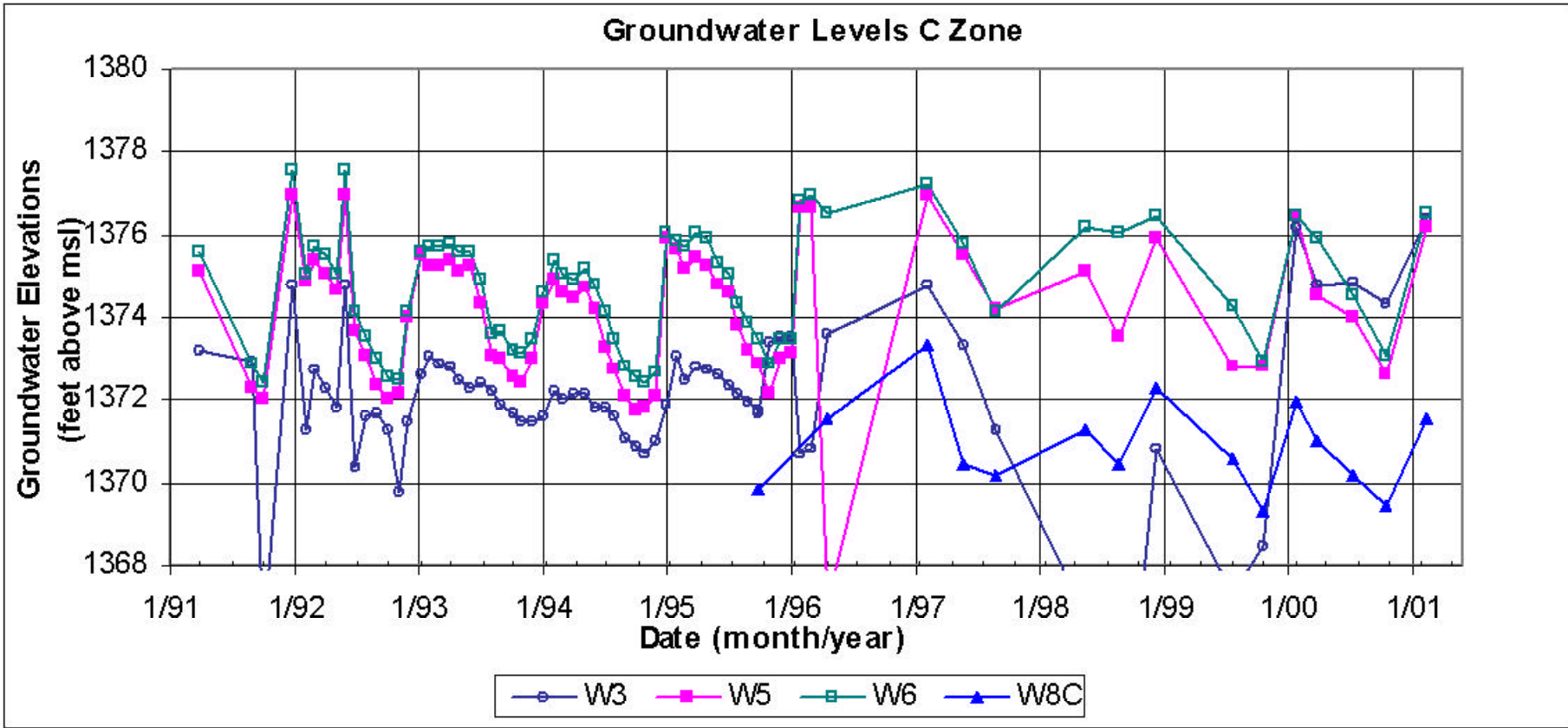
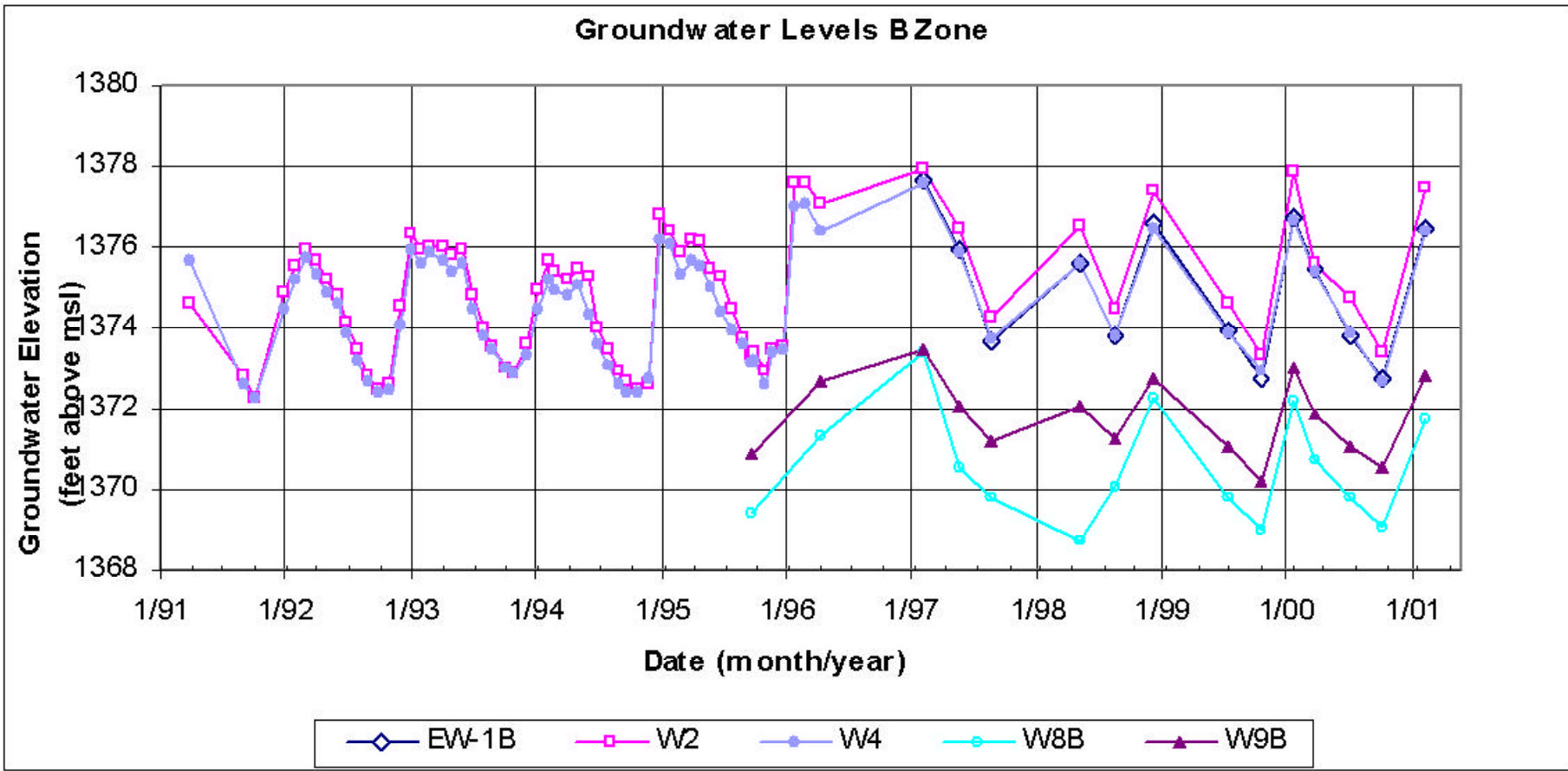
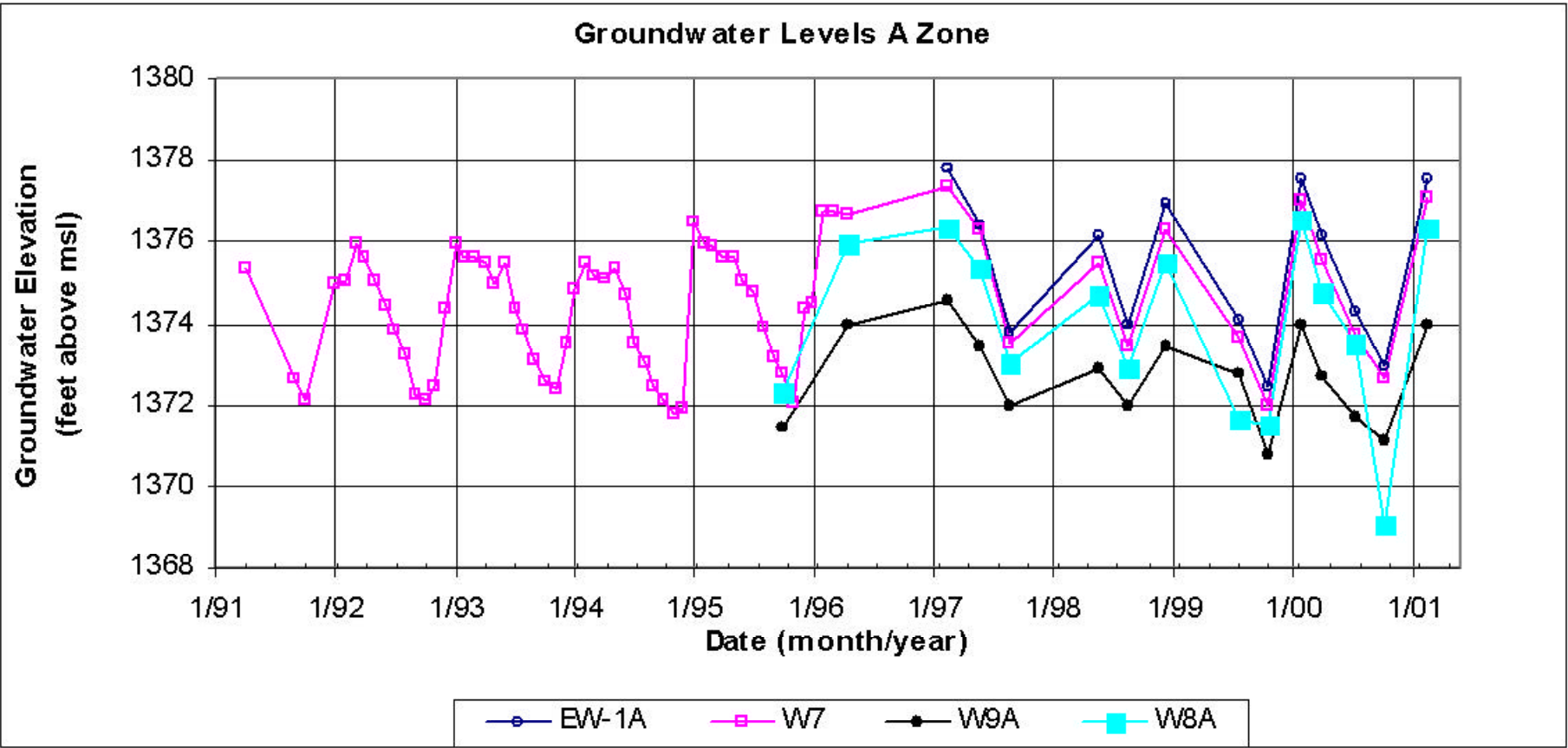
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TOTAL OBSERVED THICKNESS OF SANDS AND GRAVELS WITHIN THE A-ZONE

FIGURE 4-12







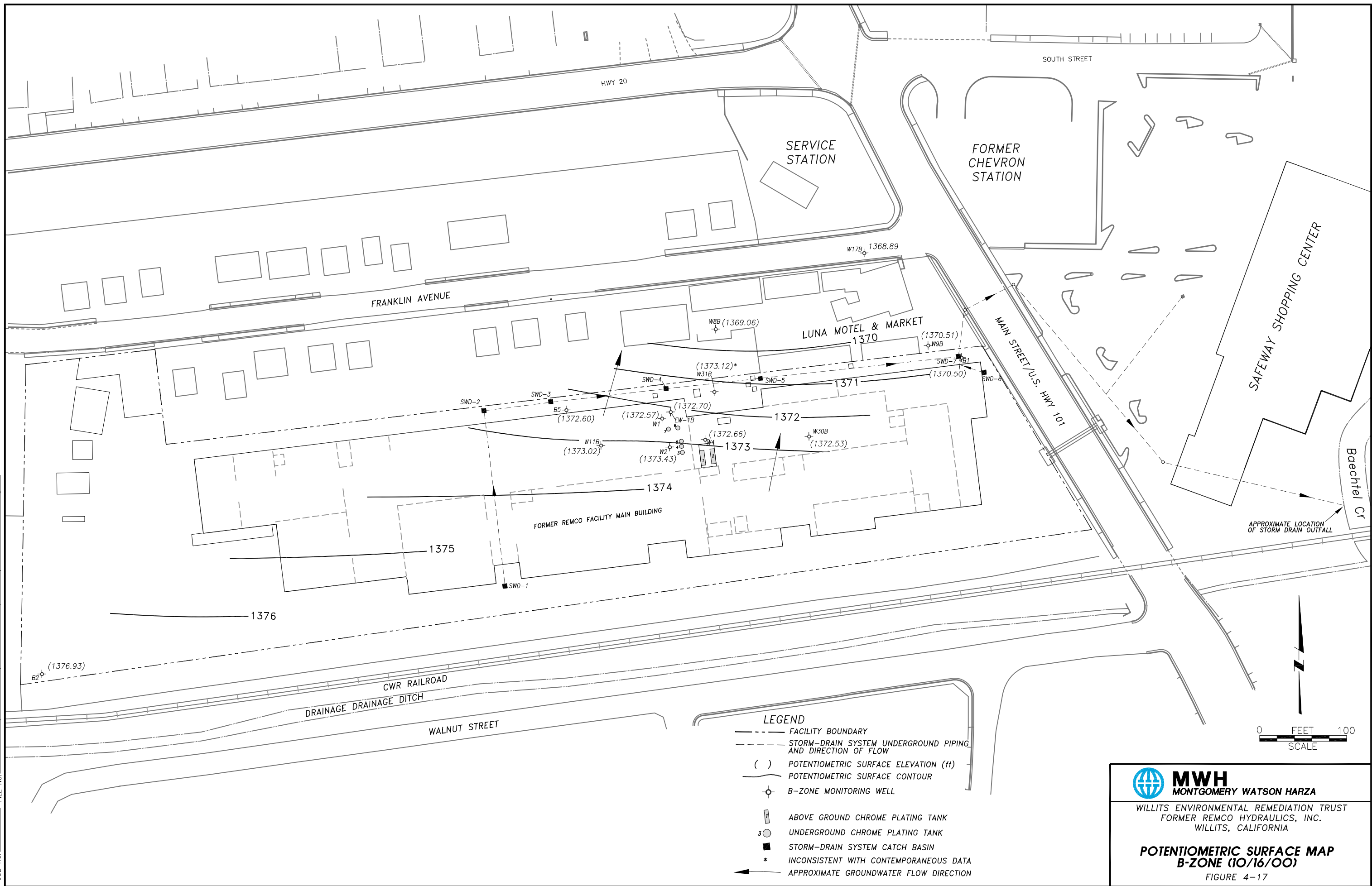
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**HISTORICAL GROUNDWATER
ELEVATION FLUCTUATIONS**

FIGURE 4-15

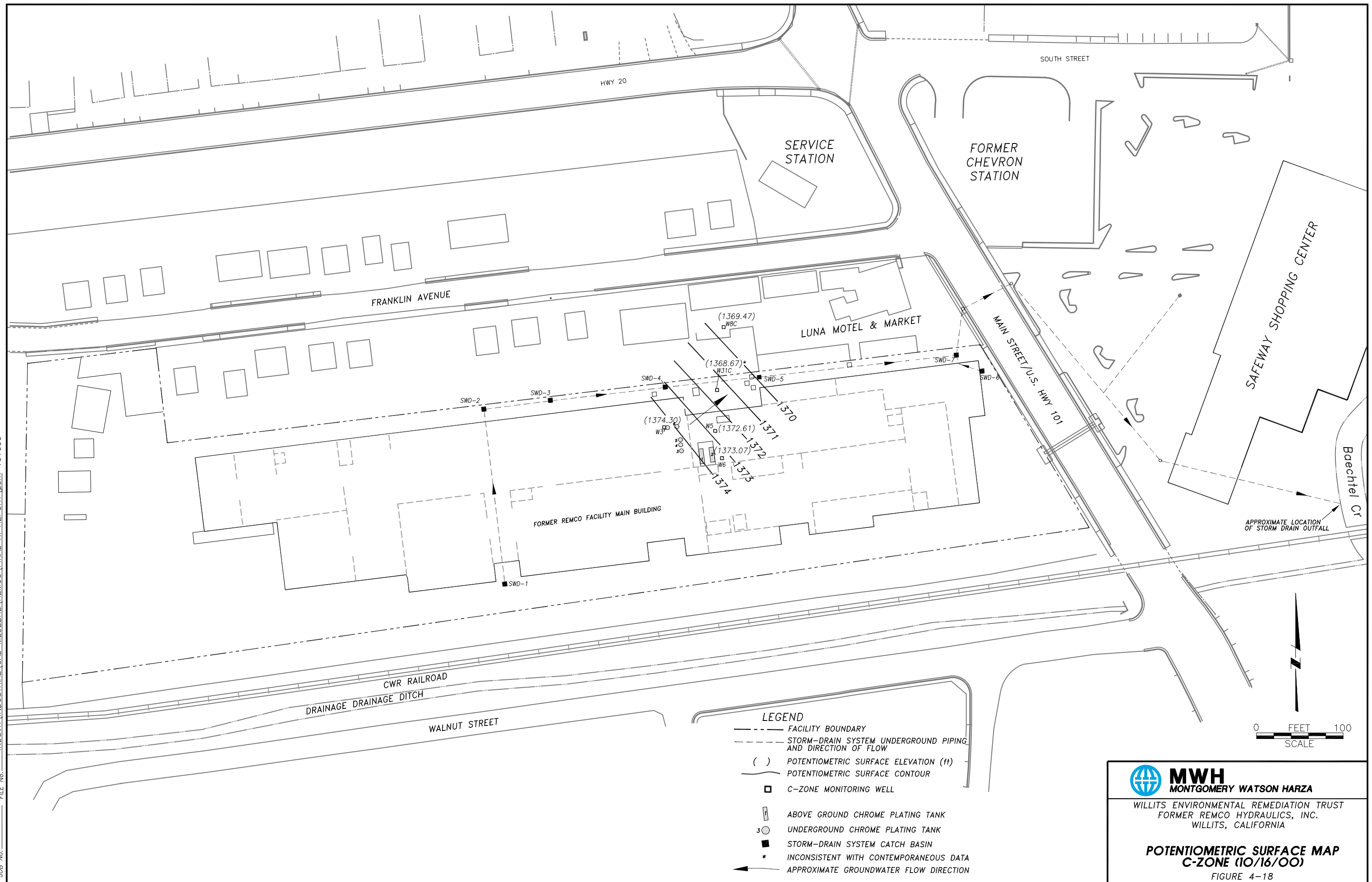
JOB No. _____ FILE No. _____ INDSVR\INDUSTRIAL\CAD_MLUEBKE\REMCO\FINAL_RI_REPORT\psm 101600

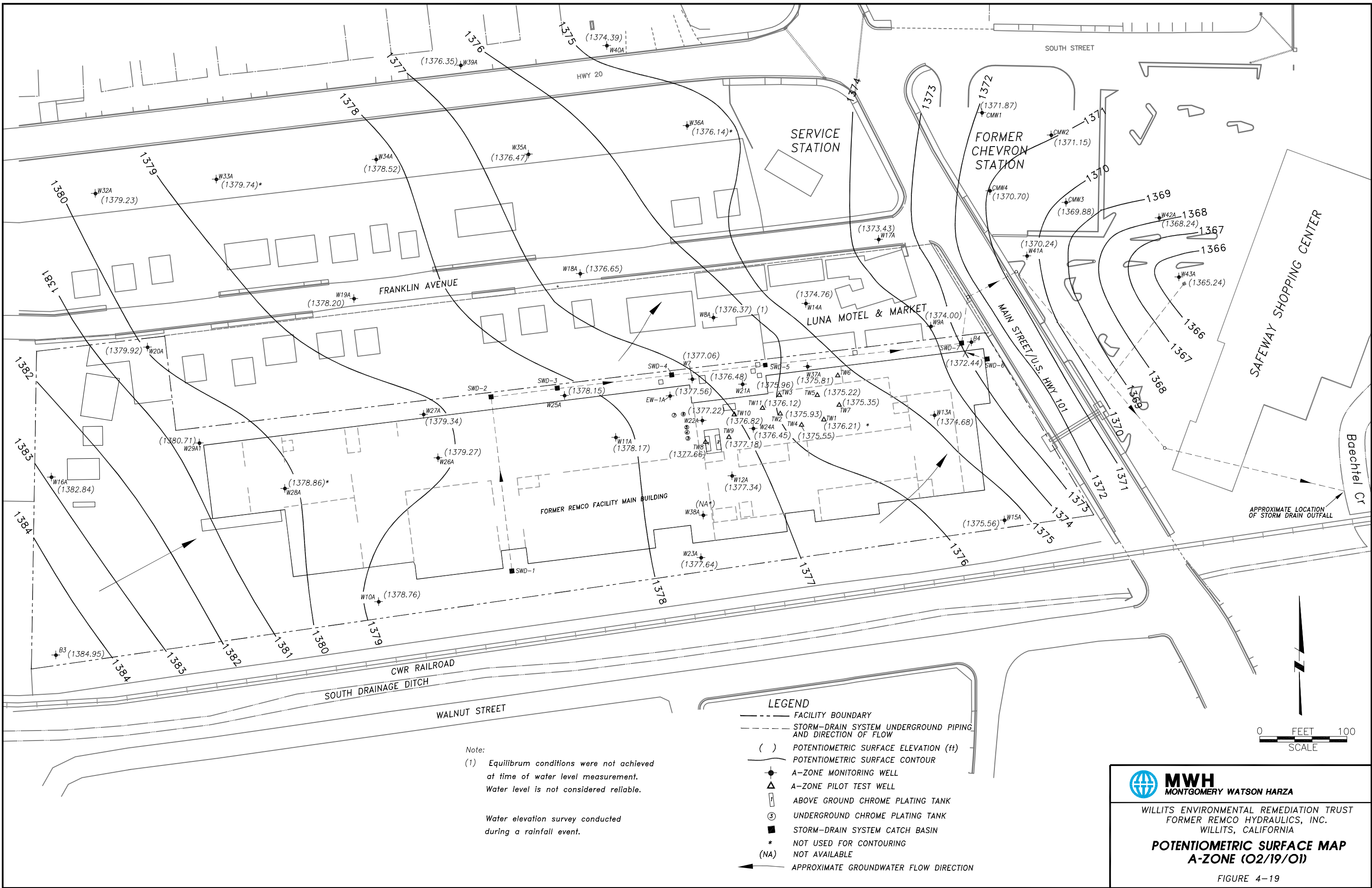


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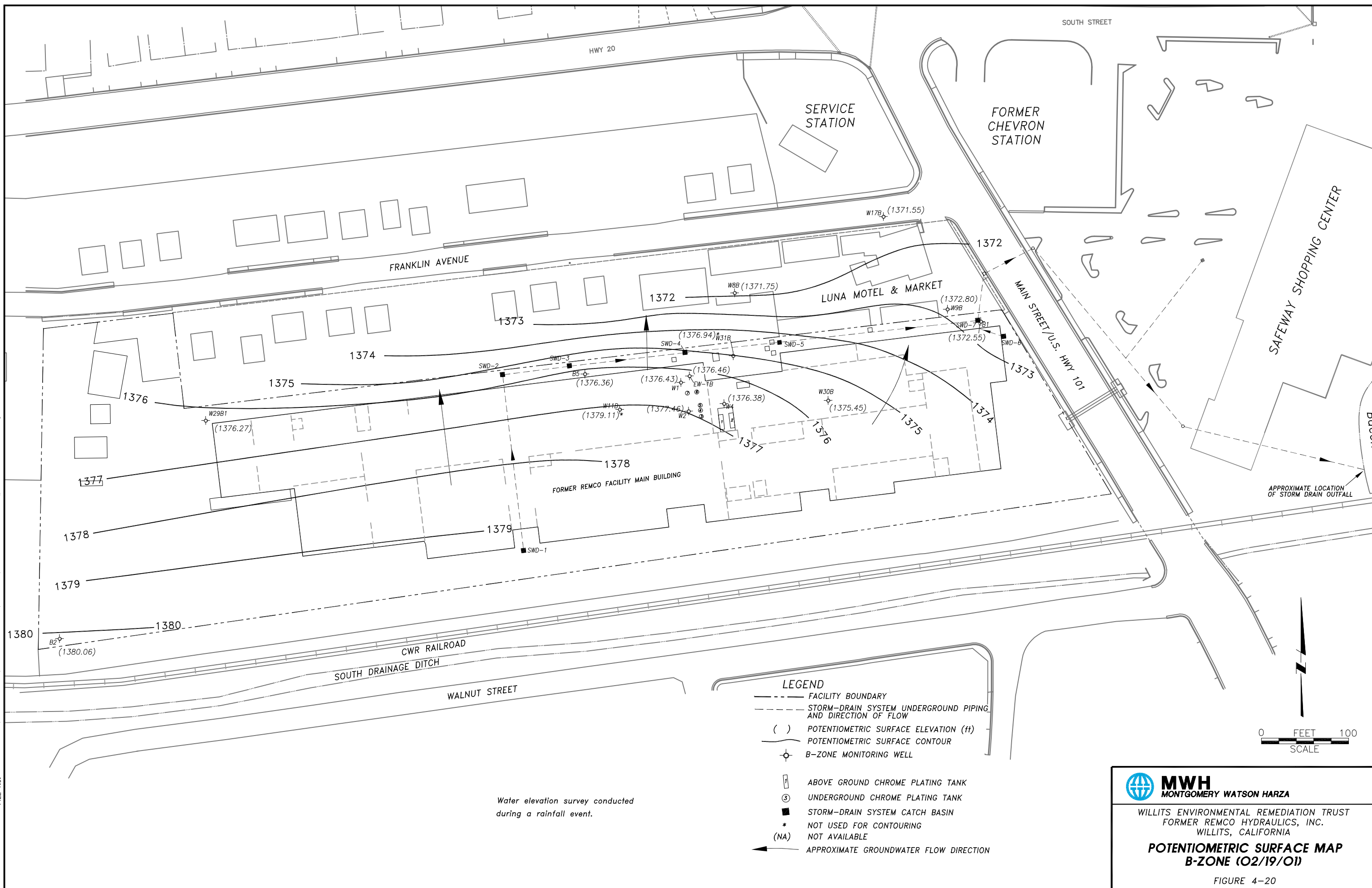
**POTENTIOMETRIC SURFACE MAP
B-ZONE (10/16/00)**

FIGURE 4-17



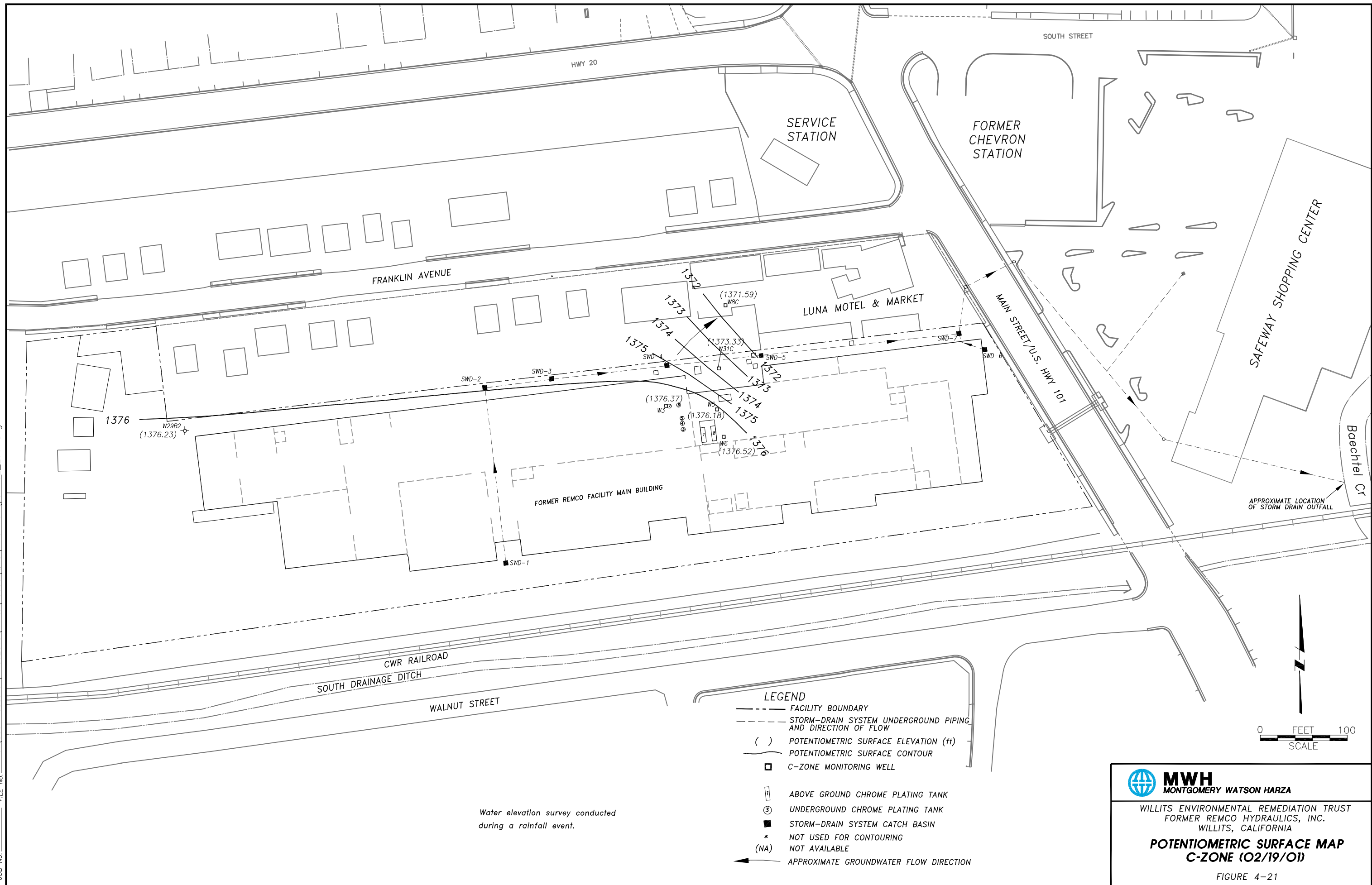


INDSVR\INDUSTRIAL\CAD\MLUEBE\REMCO\FINAL RI REPORT\psm 02_2001.dwg
FILE No. ---
JOB No. ---



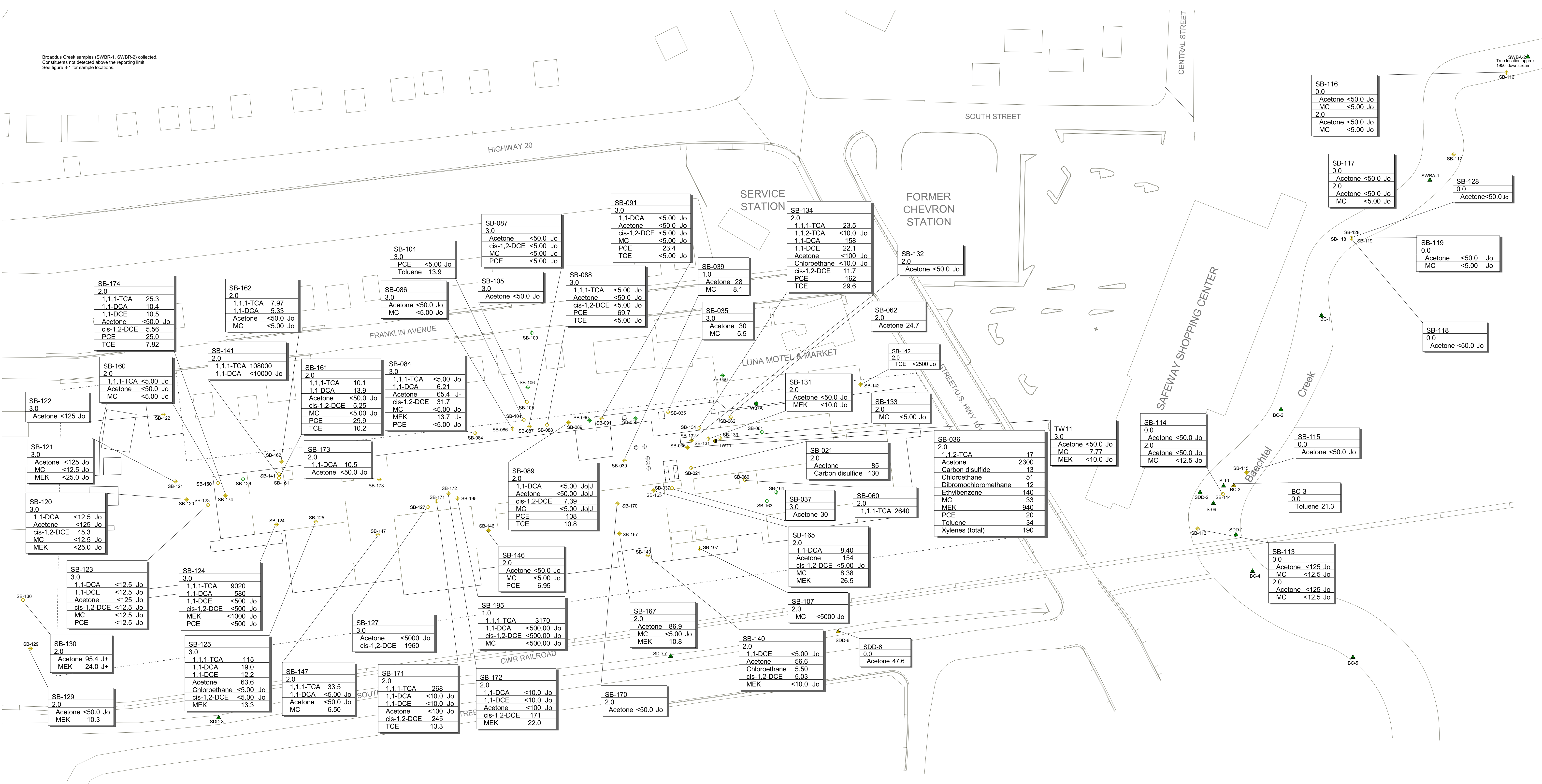
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FORMER REMCO HYDRAULICS, INC.
WILLITS, CALIFORNIA
**POTENTIOMETRIC SURFACE MAP
B-ZONE (02/19/01)**

JOB No. --- FILE No. U:\Sac Industrial\PROJECTS\Willits\Acadd\QMS\7-31-01\psm_02_2001.dwg



Brookside Creek samples (SWBR-1, SWBR-2) collected.
Constituents not detected above the reporting limit.
See figure 3-1 for sample locations.

SWBA-2
True location approx.
1950' downstream



Legend

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Sediment Sample - Detection
- Sediment Sample - No Detection
- Temporary Well - Detection

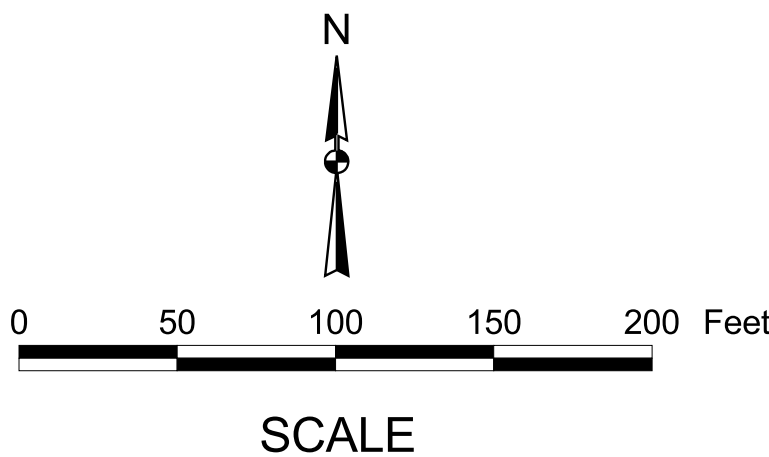
① Aboveground Chrome Plating Tank
③ Underground Chrome Plating Tank
Storm-Drain System Catch Basin
Remco Facility Boundary

Sample Location SB-130
Sample Depth (ft. bgs) 2.0
Constituent Result Qualifier*
Acetone 95.4 J+
MEK 24 J+

Chemical Abbreviations

1,1-DCA	1,1-Dichloroethane
1,1-DCE	1,1-Dichloroethene
1,1,1-TCA	1,1,1-Trichloroethane
1,1,2-TCA	1,1,2-Trichloroethane
cis-1,2-DCE	cis-1,2-Dichloroethane
MC	Methylene Chloride
MEK	Methyl Ethyl Ketone
PCE	Tetrachloroethene
TCE	Trichloroethene

*Refer to Appendix 5-3 for qualifier definitions.



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**VOCS DETECTED IN SEDIMENT
AND SHALLOW SOIL (0-3.0 ft. bgs.)**

FIGURE 5-1



Broaddus Creek samples (SWBR-1, SWBR-2) collected. Constituents not detected above the reporting limit. See figure 3-1 for sample locations.

SB-109
3.0
TPH-diesel <5.00 Jo
7.0
TPH-diesel <5.00

SB-020
2.0
TPH-diesel 11.3
7.0
TPH-diesel 648
10.0
Motor Oil 262
TPH-diesel 245

SS-33
0.0
TPH-diesel 25.1 J+

SB-198
2.0
Motor Oil 10.2
TPH-diesel <5.00 Jo

SB-135
5.0
TPH-diesel 40.8 Jy
10.0
TPH-diesel <5.00 Jo

SB-136
5.0
TPH-diesel 42.9 Jy
10.0
TPH-diesel <5.00 Jo

SB-137
7.0
TPH-diesel 5.85 NJz+
10.0
TPH-diesel <5.00 Jo

SB-138
5.0
TPH-diesel <5.00 Jo
10.0
TPH-diesel <5.00 Jo

SB-128
0.0
TPH-diesel 10.1 Jy

SWBA-1
0.0
TPH-diesel 2.6

SB-117
0.0
TPH-diesel <5.00 Jo
2.0
TPH-diesel <15.0
4.0
TPH-diesel <15.0

SB-116
0.0
TPH-diesel <5.00 Jo
2.0
TPH-diesel <5.00
5.0
TPH-diesel <5.00

SWBA-2
0.0
TPH-diesel 9.30

SB-112
12.0
TPH-diesel <10.0 Jo

SB-115
0.0
TPH-diesel <5.00 Jo
2.0
TPH-diesel <10.0

BC-3
0.0
TPH-diesel 65.8

SDD-1
0.0
TPH-diesel 13.00

SB-113
0.0
TPH-diesel <10.0 Jo
2.0
TPH-diesel <10.0 Jo
5.0
TPH-diesel <10.0 Jo

SDD-2
0.0
TPH-diesel 60.00

SB-097
15.0
TPH-diesel <5.00 Jo

DD-3
0.0
TPH-diesel 5.70

DD-4
0.0
TPH-diesel 5.40

DD-5
0.0
TPH-diesel 8.10

SB-188
2.0
Motor Oil 181
TPH-diesel 486
6.0
Motor Oil 140
TPH-diesel 310

SB-187
2.0
Motor Oil 3760
TPH-diesel 3240
6.0
Motor Oil 231
TPH-diesel 392

SB-194
2.0
Motor Oil 16.7
TPH-diesel 11.8

SDD-6
0.0
TPH-diesel 17.4

SB-192
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00 Jo

SDD-7
0.0
TPH-diesel 6.76

SB-166
4.0
TPH-diesel 76.2 Jy-
10.0

SB-169
10.0
TPH-diesel 21.5

SB-046
8.5
TPH-diesel 9.73

SB-019
2.0
TPH-diesel 82.2
13.0
TPH-diesel <5.00

SB-033
1.5
TPH-diesel 9.99

SB-045
11.0
TPH-diesel 77.1

SB-017
1.5
TPH-diesel 7.94

SB-170
2.0
TPH-diesel 63.2

SB-195
1.0
Motor Oil 11500
TPH-diesel 8560
6.0
TPH-diesel <5.00 Jo

SB-196
2.0
TPH-diesel <5.00 Jo
6.0
Motor Oil 27.4

SB-127
3.0
TPH-diesel 309
6.0
TPH-diesel 1800

SB-126
3.0
TPH-diesel 3290 J+
6.0
TPH-diesel 645
9.0
TPH-diesel 5930 J+

SB-008
2.0
TPH-diesel 5.17
13.0
TPH-diesel <5.00

SB-124
3.0
TPH-diesel 650
6.0
TPH-diesel <5.00 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SB-126
3.0
TPH-diesel 3290 J+
6.0
TPH-diesel 645
9.0
TPH-diesel 5930 J+

SB-008
2.0
TPH-diesel 5.17
13.0
TPH-diesel <5.00

SB-124
3.0
TPH-diesel 650
6.0
TPH-diesel <5.00 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <10.0 Jo

SB-125
3.0
TPH-diesel 8.61 Jy
6.0
TPH-diesel 8.56

SS-31
0.0
TPH-diesel <100 Jo

SB-129
2.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel <5.00

SB-120
3.0
TPH-diesel <10.0 Jo

SB-121
3.0
TPH-diesel <10.0 Jo
6.0
TPH-diesel <10.0 Jo

SB-122
3.0
TPH-diesel <5.00 Jo
6.0
TPH-diesel 45.3 Jy

SB-123
3.0
TPH-diesel <5

Legend

Sample Locations

- ✚ Soil Boring - Detection
- ✚ Soil Boring - No Detection
- Monitoring Well - Detection
- Monitoring Well - No Detection
- ▲ Sediment Sample - Detection
- ▲ Sediment Sample - No Detection
- Temporary Well - Detection
- Surface Soil- Detection

Chemical Abbreviations

TPH-diesel	Total Petroleum Hydrocarbon as diesel
TPH-gasoline	Total Petroleum Hydrocarbon as gasoline
TPH-motor oil	Total Petroleum Hydrocarbon as motor oil

Approximate area where TPH-diesel is ≥ 100 mg/kg or ≥ 10 mg/kg TPH-gasoline (RWQCB, 1990).

Figure 5-27: TPH Concentrations at Monitoring Wells

Figure 5-27 is a map showing the locations of monitoring wells and the results of TPH (Total Petroleum Hydrocarbon) concentrations. The map includes a legend for sample locations and chemical abbreviations. A table titled "Sample Location ID" and "Sample Depth (ft. bgs.)" provides data for wells SB-129, 9.0, TPH-diesel, 5930, and J+. The table indicates that TPH-diesel and 5930 are constituents, while J+ is a qualifier. The map also shows the approximate area where TPH-diesel is ≥ 100 mg/kg or ≥ 10 mg/kg TPH-gasoline (RWQCB, 1990). The map includes a scale bar and a north arrow.

Sample Location ID	Sample Depth (ft. bgs.)	Constituent	Result (mg/kg)	Qualifier*
SB-129	9.0	TPH-diesel	5930	J+

FIGURE 5-3



Legend

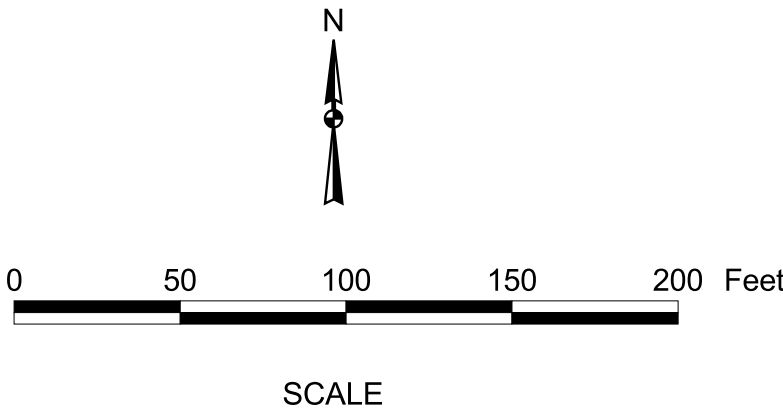
- Soil Boring - Detection
- Soil Boring - No Detection
- Groundwater Monitoring Well Boring - No Detection
- Temporary Well Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Sample Location	SB-195
Sample Depth (ft bgs)	1.0
Constituent	Naptha
Result	<500.00 Jo
Qualifier*	Jo

Chemical Abbreviations
Naptha Napthalene

*Refer to appendix 5-3 for complete list of qualifiers.

Note: Figure includes detected results from 8310 (PAH) and Napthalene results from 8260 (VOC) analysis.

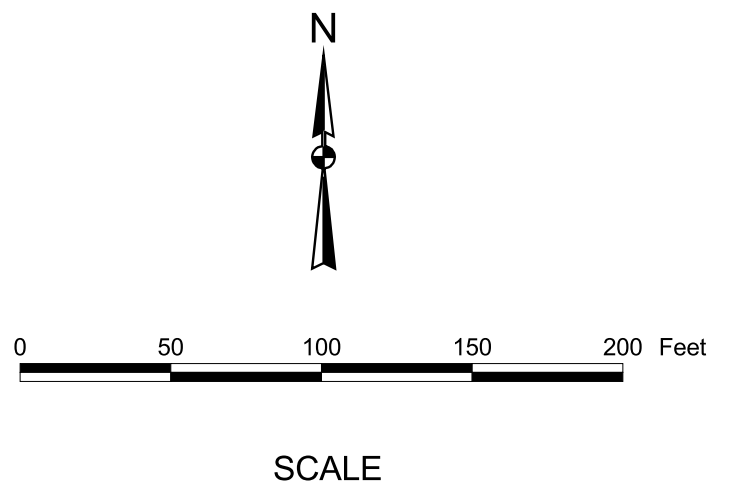
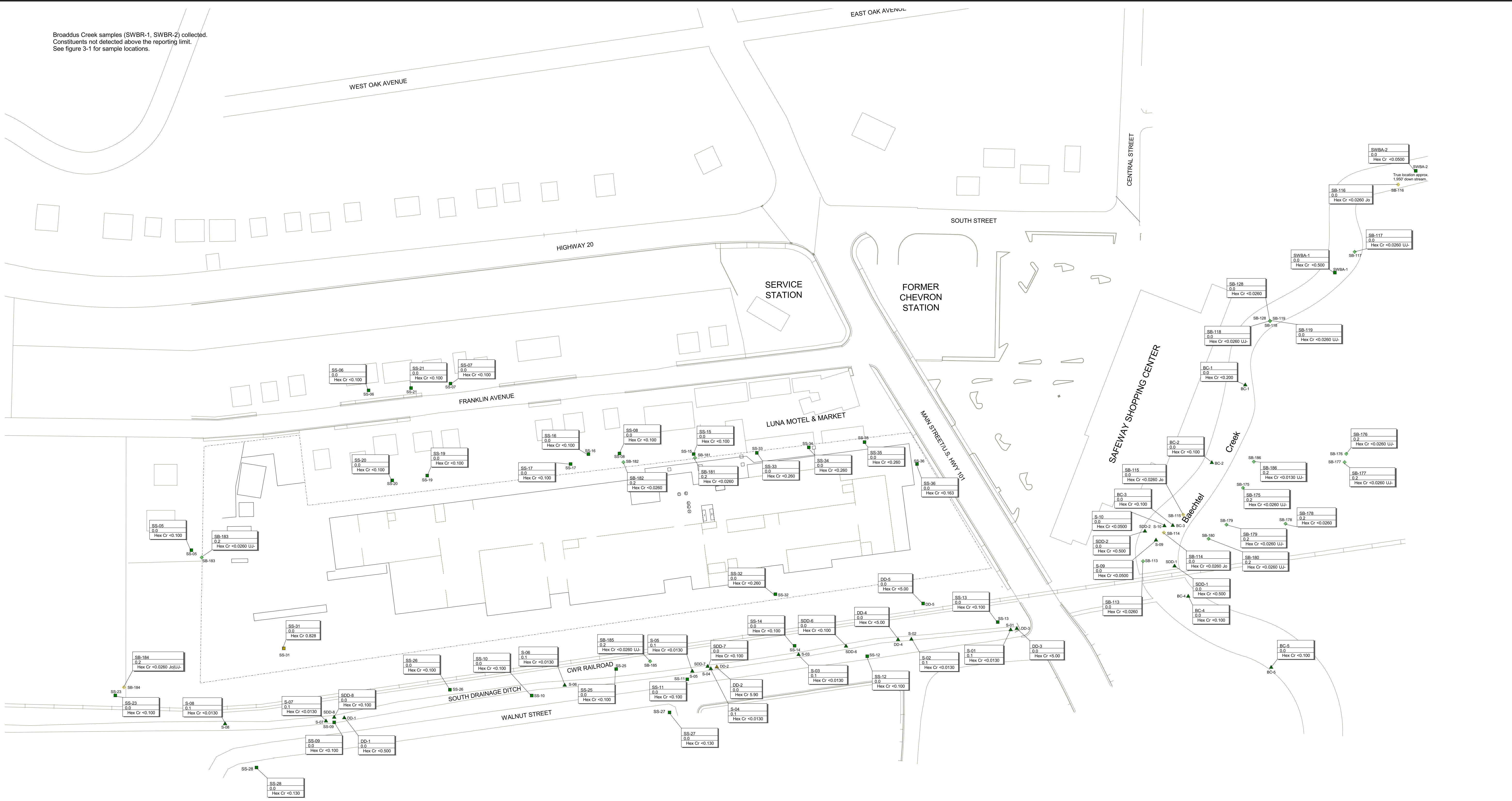


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PAHs DETECTED IN SOIL

FIGURE 5-4

Broaddus Creek samples (SWBR-1, SWBR-2) collected.
Constituents not detected above the reporting limit.
See figure 3-1 for sample locations.



Legend

- Soil Boring - Detection
- Soil Boring - No Detection
- Sediment Sample - Detection
- Sediment Sample - No Detection
- Surface Soil Sample - Detection
- Surface Soil Sample - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Sample Location ID
Sample Depth (ft. bgs.)

SS-31	0.0	Cr	123	J-	Hex Cr	0.828
Constituent	Result	Qualifier*				

Chemical Abbreviations
Hex Cr Hexavalent Chromium

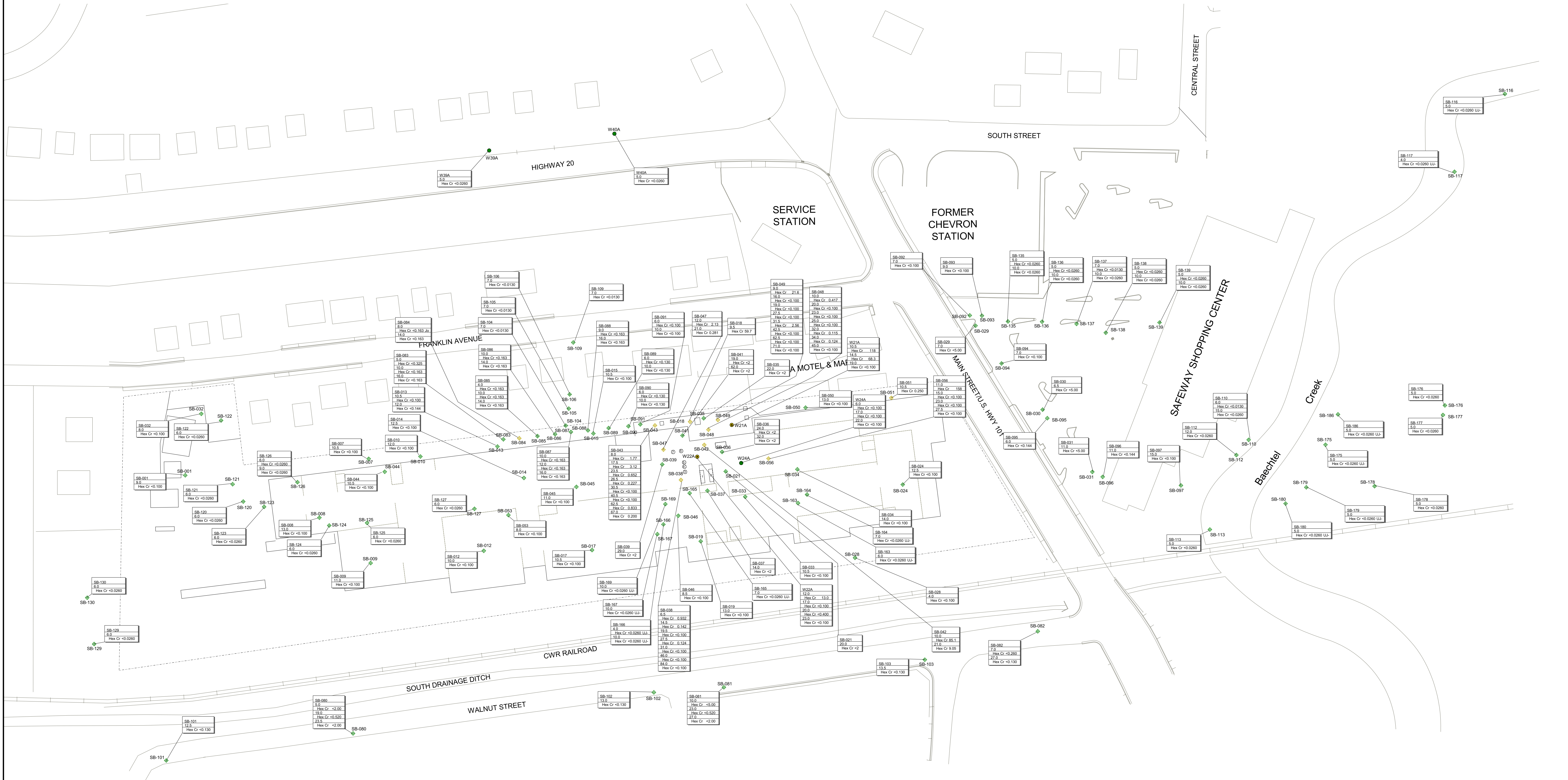
*Refer to Appendix 5-3 for qualifier definitions.

MWH
MONTGOMERY WATSON HARZA

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**HEXAVALENT CHROMIUM
DETECTED IN SURFACE SOIL AND SEDIMENT
(0 - <0.5 ft. bgs.)**

FIGURE 5-5



Legend

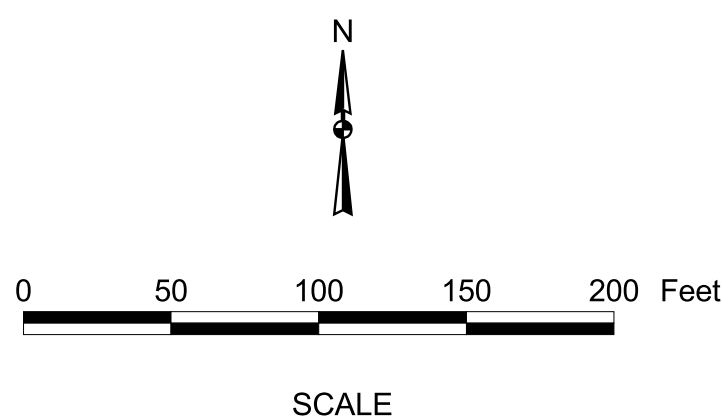
- Soil Boring - Detection
- Soil Boring - No Detection
- Monitoring Well - Detection
- Monitoring Well - No Detection

- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basis
- Remco Facility Boundary

Sample Location		
Sample Depth (ft bgs)		
SB-027	12.0	
Hex Cr	3.46	UJ-
Constituent Result Qualifier*		
(mg/kg)		

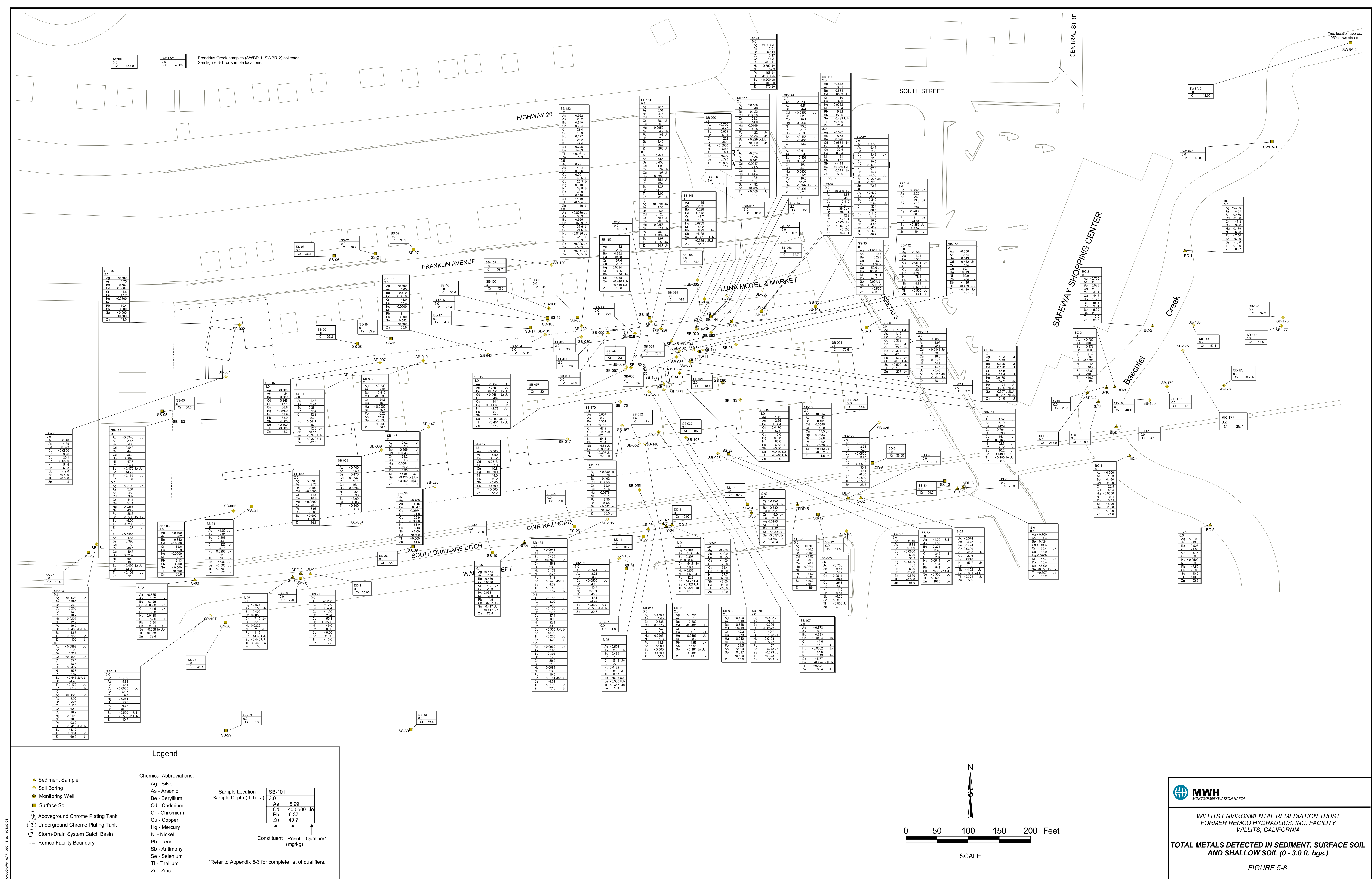
Chemical Abbreviations
Hex Cr Hexavalent Chromium

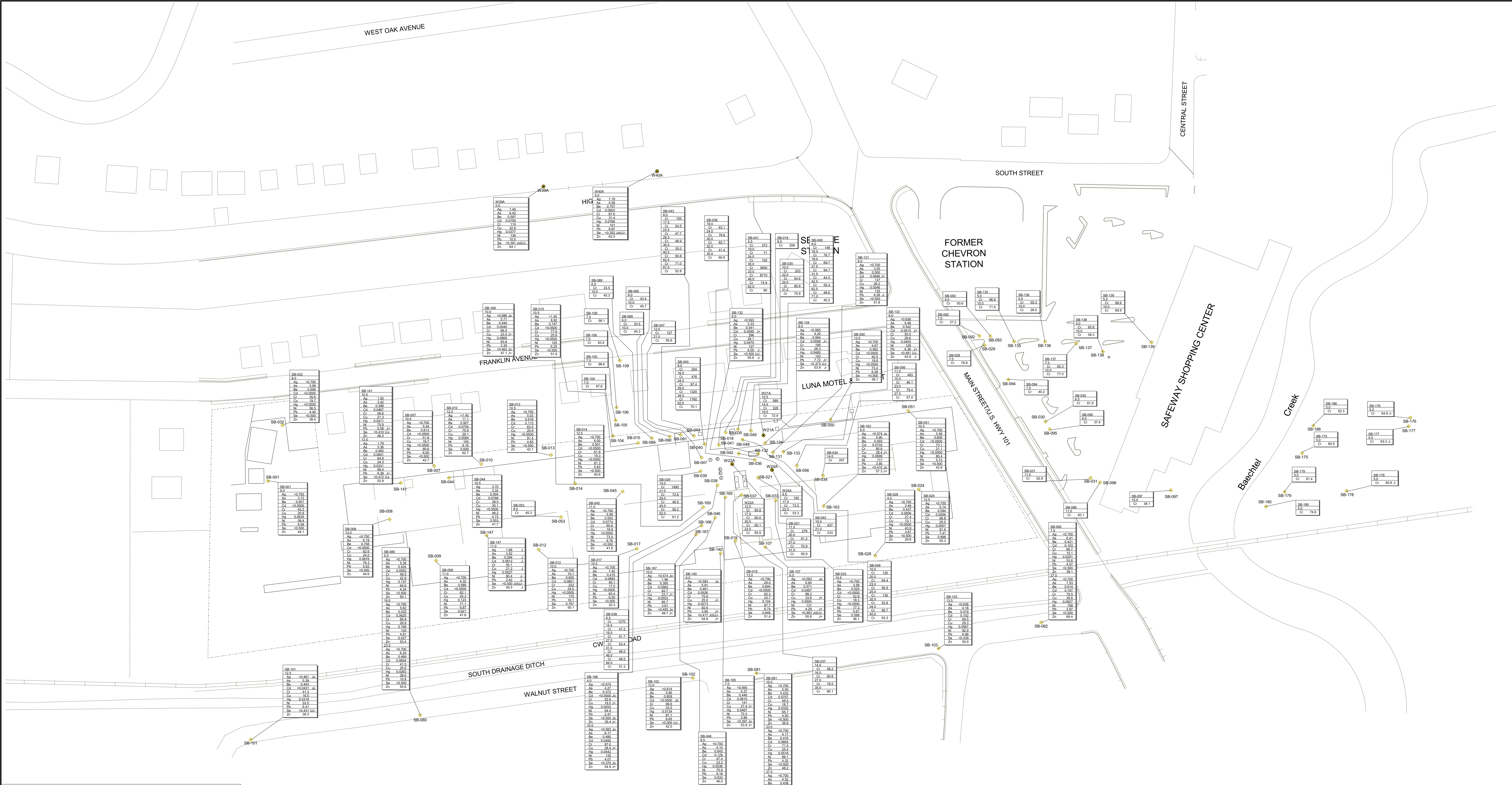
*Refer to appendix 5-3 for complete list of qualifiers.



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**HEXAVALENT CHROMIUM DETECTED IN DEEPER SOIL
(>3.0 ft. bgs.)**

FIGURE 5-7





Legend

◆ Soil Boring - Detection
● Groundwater Monitoring
○ Well Boring - Detection

⬆ Aboveground Chrome Plating Tank
⬆ Underground Chrome Plating Tank
⬆ Storm-Drain System Catch Basin
--- Remco Facility Boundary

Chemical Abbreviations

Ag	Silver
As	Arsenic
Be	Beryllium
Cd	Cadmium
Cr	Chromium
Cu	Copper
Hg	Mercury
Ni	Nickel
Pb	Lead
Se	Selenium
Zn	Zinc

*Refer to Appendix 5-3 for qualifier definitions.

Sample Location SB-176
Sample Depth (ft bgs) 51.0

Cr	64.8	J
----	------	---

Constituent Result* Qualifier* (mg/kg)

MWH
MONTGOMERY WATSON HARZAR

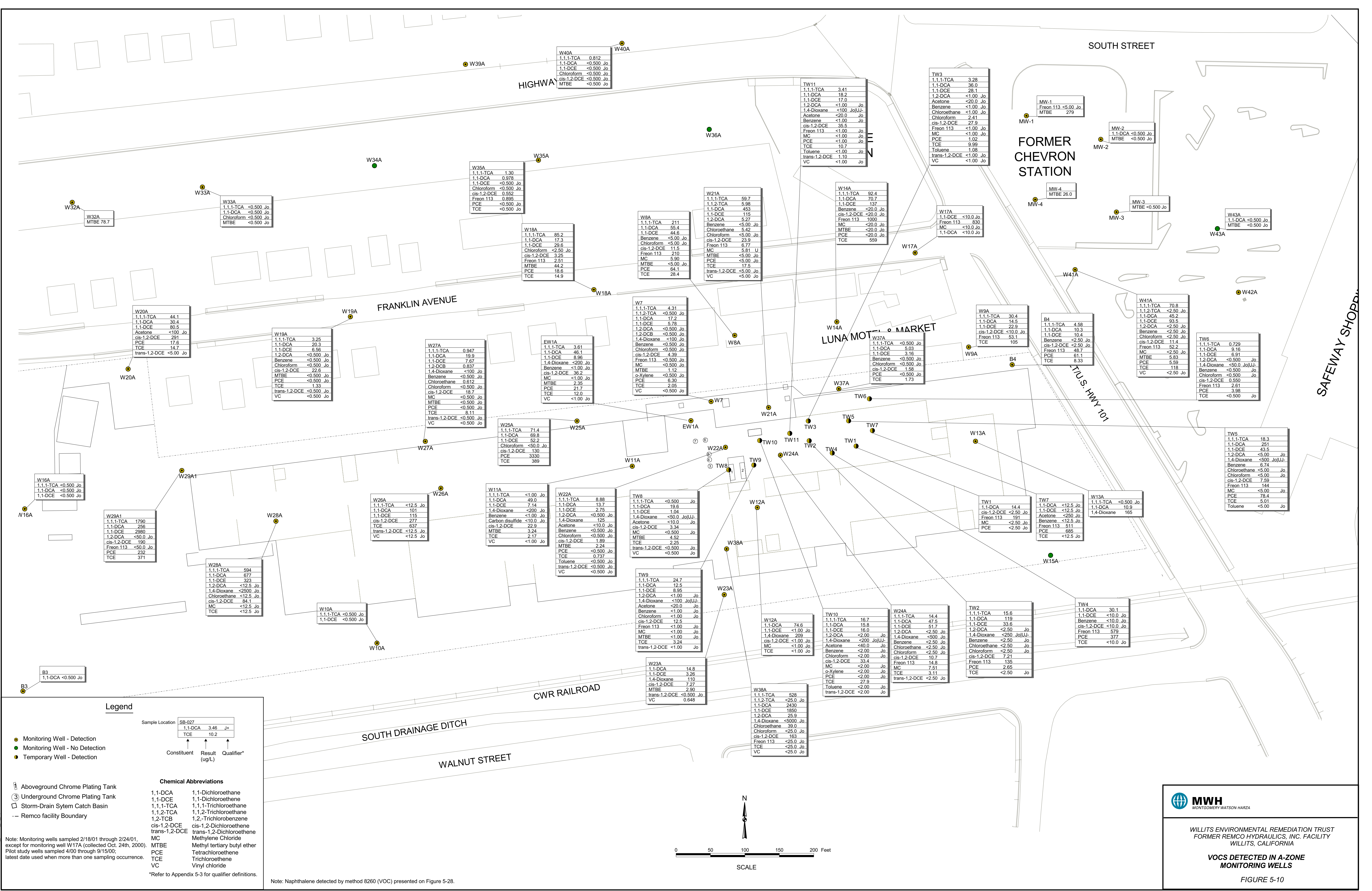
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TOTAL METALS DETECTED IN DEEPER SOIL (>3.0 ft. bgs.)

FIGURE 5-9

Figure 5-9A/5-9B/5-9C/5-9D/5-9E/5-9F/5-9G/5-9H/5-9I/5-9J/5-9K/5-9L/5-9M/5-9N/5-9O/5-9P/5-9Q/5-9R/5-9S/5-9T/5-9U/5-9V/5-9W/5-9X/5-9Y/5-9Z/5-9AA/5-9AB/5-9AC/5-9AD/5-9AE/5-9AF/5-9AG/5-9AH/5-9AI/5-9AJ/5-9AK/5-9AL/5-9AM/5-9AN/5-9AO/5-9AP/5-9AQ/5-9AR/5-9AS/5-9AT/5-9AU/5-9AV/5-9AW/5-9AX/5-9AY/5-9AZ/5-9BA/5-9BB/5-9BC/5-9BD/5-9BE/5-9BF/5-9BG/5-9BH/5-9BI/5-9BJ/5-9BK/5-9BL/5-9BM/5-9BN/5-9BO/5-9BP/5-9BQ/5-9BR/5-9BS/5-9BT/5-9BU/5-9BV/5-9BW/5-9BX/5-9BY/5-9BZ/5-9CA/5-9CB/5-9CC/5-9CD/5-9CE/5-9CF/5-9CG/5-9CH/5-9CI/5-9CJ/5-9CK/5-9CL/5-9CM/5-9CN/5-9CO/5-9CP/5-9CQ/5-9CSR/5-9CS/5-9CT/5-9CU/5-9CV/5-9CW/5-9CX/5-9CY/5-9CZ/5-9DA/5-9DB/5-9DC/5-9DD/5-9DE/5-9DF/5-9DG/5-9DH/5-9DI/5-9DJ/5-9DK/5-9DL/5-9DM/5-9DN/5-9DO/5-9DP/5-9DQ/5-9DS/5-9DT/5-9DU/5-9DV/5-9DW/5-9DX/5-9DY/5-9DZ/5-9EA/5-9EB/5-9EC/5-9ED/5-9EE/5-9EF/5-9EG/5-9EH/5-9EI/5-9EJ/5-9EK/5-9EL/5-9EM/5-9EN/5-9EO/5-9EP/5-9EQ/5-9ER/5-9ES/5-9ET/5-9EU/5-9EV/5-9EW/5-9EX/5-9EY/5-9EZ/5-9FA/5-9FB/5-9FC/5-9FD/5-9FE/5-9FF/5-9FG/5-9FH/5-9FI/5-9FJ/5-9FK/5-9FL/5-9FM/5-9FN/5-9FO/5-9FP/5-9FQ/5-9FS/5-9FT/5-9FU/5-9FV/5-9FW/5-9FX/5-9FY/5-9FZ/5-9GA/5-9GB/5-9GC/5-9GD/5-9GE/5-9GF/5-9GG/5-9GH/5-9GI/5-9GJ/5-9GK/5-9GL/5-9GM/5-9GN/5-9GO/5-9GP/5-9GQ/5-9GR/5-9GS/5-9GT/5-9GU/5-9GV/5-9GW/5-9GX/5-9GY/5-9GZ/5-9HA/5-9HB/5-9HC/5-9HD/5-9HE/5-9HF/5-9HG/5-9HH/5-9HI/5-9HJ/5-9HK/5-9HL/5-9HM/5-9HN/5-9HO/5-9HP/5-9HQ/5-9HR/5-9HS/5-9HT/5-9HU/5-9HV/5-9HW/5-9HX/5-9HY/5-9HZ/5-9IA/5-9IB/5-9IC/5-9ID/5-9IE/5-9IF/5-9IG/5-9IH/5-9II/5-9IJ/5-9IK/5-9IL/5-9IM/5-9IN/5-9IO/5-9IP/5-9IQ/5-9IR/5-9IS/5-9IT/5-9IU/5-9IV/5-9IW/5-9IX/5-9IY/5-9IZ/5-9JA/5-9JB/5-9JC/5-9JD/5-9JE/5-9JF/5-9JG/5-9JH/5-9JI/5-9JJ/5-9JK/5-9JL/5-9JM/5-9JN/5-9JO/5-9JP/5-9JQ/5-9JS/5-9JT/5-9JU/5-9JV/5-9JW/5-9JX/5-9JY/5-9JZ/5-9KA/5-9KB/5-9KC/5-9KD/5-9KE/5-9KF/5-9KG/5-9KH/5-9KI/5-9KJ/5-9KK/5-9KL/5-9KM/5-9KN/5-9KO/5-9KP/5-9KQ/5-9KS/5-9KT/5-9KU/5-9KV/5-9KW/5-9KX/5-9KY/5-9KZ/5-9LA/5-9LB/5-9LC/5-9LD/5-9LE/5-9LF/5-9LG/5-9LH/5-9LI/5-9LJ/5-9LK/5-9LM/5-9LN/5-9LO/5-9LP/5-9LQ/5-9LS/5-9LT/5-9LU/5-9LV/5-9LW/5-9LX/5-9LY/5-9LZ/5-9MA/5-9MB/5-9MC/5-9MD/5-9ME/5-9MF/5-9MG/5-9MH/5-9MI/5-9MJ/5-9MK/5-9ML/5-9MM/5-9MN/5-9MO/5-9MP/5-9MQ/5-9MS/5-9MT/5-9MU/5-9MV/5-9MW/5-9MX/5-9MY/5-9MZ/5-9NA/5-9NB/5-9NC/5-9ND/5-9NE/5-9NF/5-9NG/5-9NH/5-9NI/5-9NJ/5-9NK/5-9NL/5-9NM/5-9NO/5-9NP/5-9NQ/5-9NS/5-9NT/5-9NU/5-9NV/5-9NW/5-9NX/5-9NY/5-9NZ/5-9OA/5-9OB/5-9OC/5-9OD/5-9OE/5-9OF/5-9OG/5-9OH/5-9OI/5-9OJ/5-9OK/5-9OL/5-9OM/5-9ON/5-9OO/5-9OP/5-9OQ/5-9OS/5-9OT/5-9OU/5-9OV/5-9OW/5-9OX/5-9OY/5-9OZ/5-9PA/5-9PB/5-9PC/5-9PD/5-9PE/5-9PF/5-9PG/5-9PH/5-9PI/5-9PJ/5-9PK/5-9PL/5-9PM/5-9PN/5-9PO/5-9PP/5-9PQ/5-9PS/5-9PT/5-9PU/5-9PV/5-9PW/5-9PX/5-9PY/5-9PZ/5-9QA/5-9QB/5-9QC/5-9QD/5-9QE/5-9QF/5-9QG/5-9QH/5-9QI/5-9QJ/5-9QK/5-9QL/5-9QM/5-9QN/5-9QO/5-9QP/5-9QQ/5-9QS/5-9QT/5-9QU/5-9QV/5-9QW/5-9QX/5-9QY/5-9QZ/5-9RA/5-9RB/5-9RC/5-9RD/5-9RE/5-9RF/5-9RG/5-9RH/5-9RI/5-9RJ/5-9RK/5-9RL/5-9RM/5-9RN/5-9RO/5-9RP/5-9RQ/5-9RS/5-9RT/5-9RU/5-9RV/5-9RW/5-9RX/5-9RY/5-9RZ/5-9SA/5-9SB/5-9SC/5-9SD/5-9SE/5-9SF/5-9SG/5-9SH/5-9SI/5-9SJ/5-9SK/5-9SL/5-9SM/5-9SN/5-9SO/5-9SP/5-9SQ/5-9SS/5-9ST/5-9SU/5-9SV/5-9SW/5-9SX/5-9SY/5-9SZ/5-9TA/5-9TB/5-9TC/5-9TD/5-9TE/5-9TF/5-9TG/5-9TH/5-9TI/5-9TJ/5-9TK/5-9TL/5-9TM/5-9TN/5-9TO/5-9TP/5-9TQ/5-9TS/5-9TT/5-9TU/5-9TV/5-9TW/5-9TX/5-9TY/5-9TZ/5-9UA/5-9UB/5-9UC/5-9UD/5-9UE/5-9UF/5-9UG/5-9UH/5-9UI/5-9UJ/5-9UK/5-9UL/5-9UM/5-9UN/5-9UO/5-9UP/5-9UQ/5-9US/5-9UT/5-9UU/5-9UV/5-9UW/5-9UX/5-9UY/5-9UZ/5-9VA/5-9VB/5-9VC/5-9VD/5-9VE/5-9VF/5-9VG/5-9VH/5-9VI/5-9VJ/5-9VK/5-9VL/5-9VM/5-9VN/5-9VO/5-9VP/5-9VQ/5-9VS/5-9VT/5-9VU/5-9VV/5-9VW/5-9VX/5-9VY/5-9VZ/5-9WA/5-9WB/5-9WC/5-9WD/5-9WE/5-9WF/5-9WG/5-9WH/5-9WI/5-9WJ/5-9WK/5-9WL/5-9WM/5-9WN/5-9WO/5-9WP/5-9WQ/5-9WS/5-9WT/5-9WU/5-9WV/5-9WW/5-9WX/5-9WY/5-9WZ/5-9XA/5-9XB/5-9XC/5-9XD/5-9XE/5-9XF/5-9XG/5-9XH/5-9XI/5-9XJ/5-9XK/5-9XL/5-9XM/5-9XN/5-9XO/5-9XP/5-9XQ/5-9XS/5-9XT/5-9XU/5-9XV/5-9XW/5-9XX/5-9XY/5-9XZ/5-9YA/5-9YB/5-9YC/5-9YD/5-9YE/5-9YF/5-9YG/5-9YH/5-9YI/5-9YJ/5-9YK/5-9YL/5-9YM/5-9YN/5-9YO/5-9YP/5-9YQ/5-9YS/5-9YT/5-9YU/5-9YV/5-9YW/5-9YX/5-9YY/5-9YZ/5-9ZA/5-9ZB/5-9ZC/5-9ZD/5-9ZE/5-9ZF/5-9ZG/5-9ZH/5-9ZI/5-9ZJ/5-9ZK/5-9ZL/5-9ZM/5-9ZN/5-9ZO/5-9ZP/5-9ZQ/5-9ZS/5-9ZT/5-9ZU/5-9ZV/5-9ZW/5-9ZX/5-9ZY/5-9ZZ

H:\ArcGis\Remco\RL_0501_K_apr GS 03/21/02TC





Legend

Sampling Points

- Monitoring Well - Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm System Catch Basin Drain
- Remco Facility Boundary

Sample Location

Constituent Result (ug/L) Qualifier*

*Refer to Appendix 5-3 for qualifier definitions.

** Indicates detections in grab groundwater samples collected from fine-grained sediments underlying the A - Zone

Chemical Abbreviations

1,2-DCA 1,2-Dichloroethane
1,1-DCA 1,1-Dichloroethane
1,1,1-TCA 1,1,1-Trichloroethane
1,1,2-TCA 1,1,2-Trichloroethane
1,2,4-TMB 1,2,4-Trimethylbenzene
cis-1,2-DCE cis-1,2-Dichloroethene
trans-1,2-DCE trans-1,2-Dichloroethene
MC Methylene Chloride
MEK Methyl Ethyl Ketone
MTBE Methyl tertiary butyl ether
PCE Tetrachloroethene
TCE Trichloroethene
VC Vinyl chloride

VOCs DETECTED in A-ZONE GROUNDWATER GRAB SAMPLES

Figure 5-11

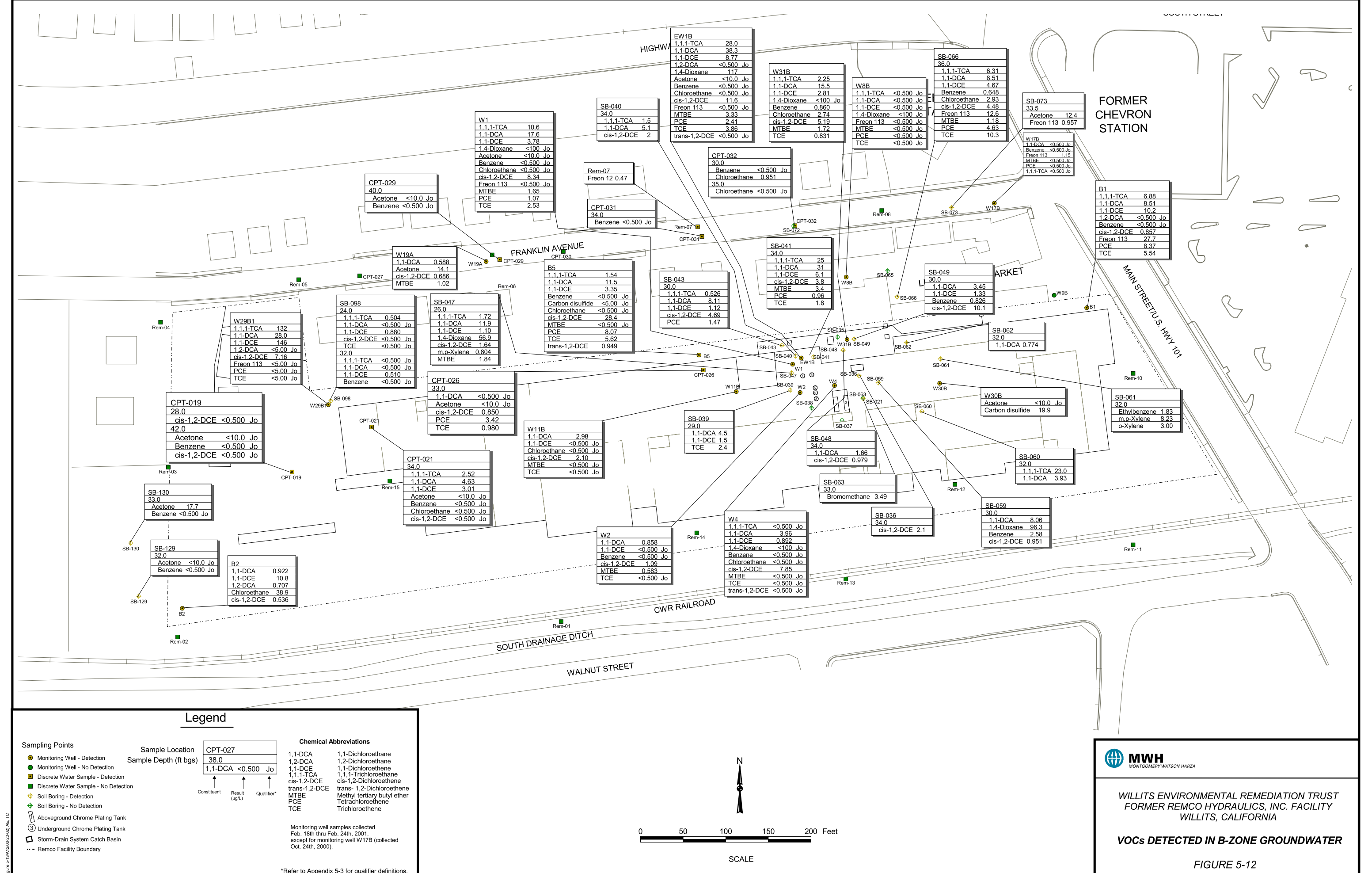
Figure 5-11


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Willits, California

VOCs DETECTED in A-ZONE
GROUNDWATER GRAB SAMPLES

Figure 5-11

(Figure 5-13A 12/03/2007) A.E. TC



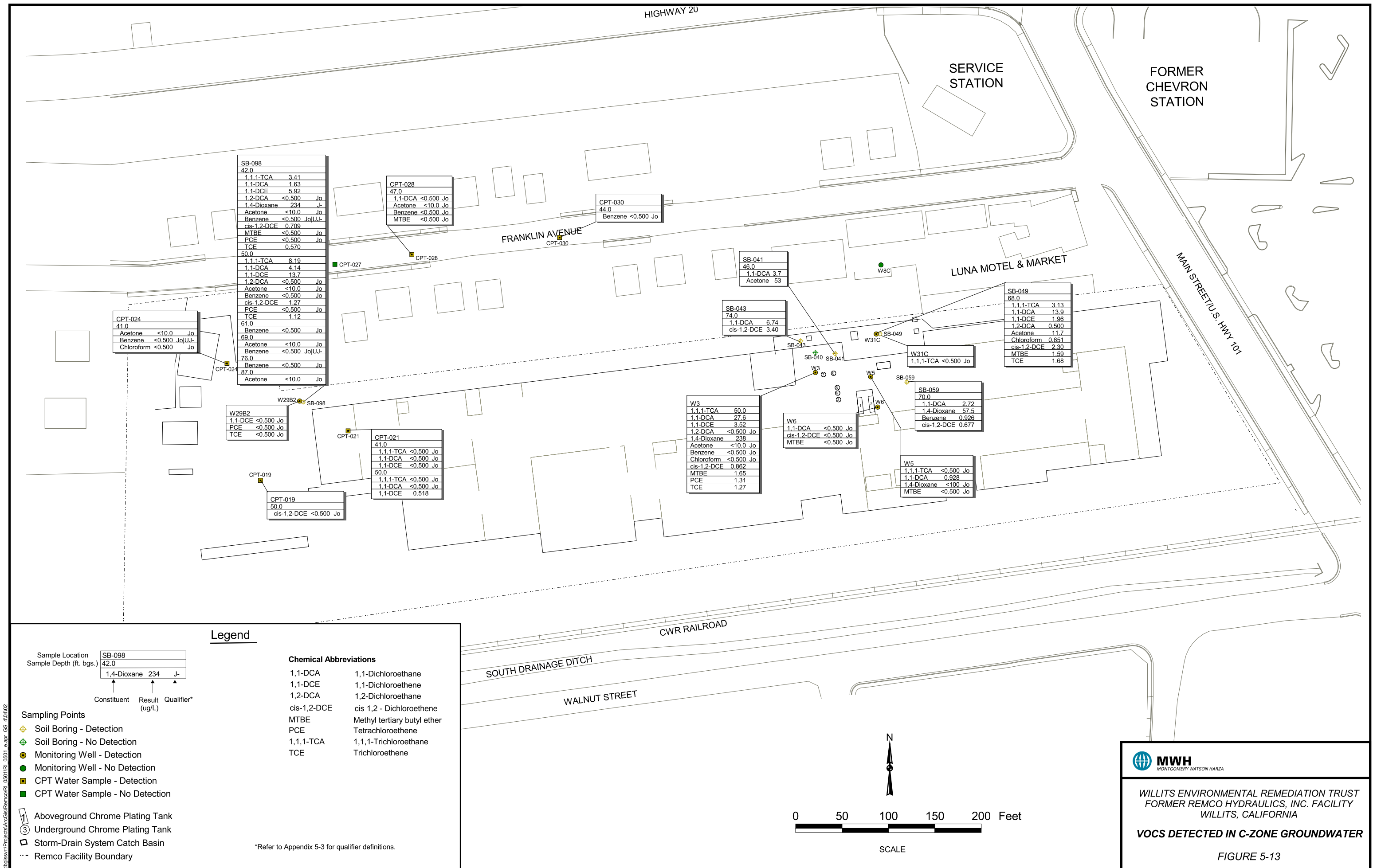


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VOCs DETECTED IN B-ZONE GROUNDWATER

FIGURE 5-12





Legend

Summed Result (ug/L) 4070.7
Sample Location W28A

Abbreviation

MCL Maximum Contaminant Level

10 Summed result contour (ug/L)

2 Where uncertain

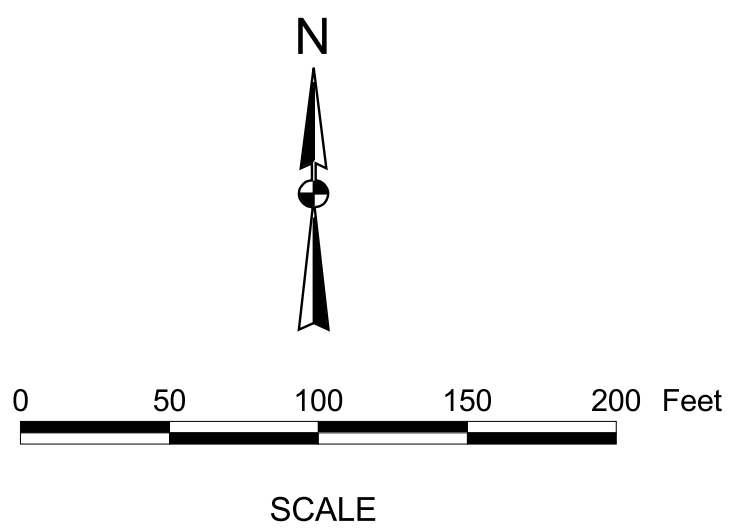
Dashed where approximate

Estimated area exceeding California MCLs for one or more of the constituents listed below.

Note: Monitoring well data collected from 2-18-01 through 2-24-01, except for monitoring well W17A (collected 10-24-00) and pilot study monitoring wells (collected 4-00 through 9-15-00). Latest result used when more than one sampling occurrence.

Note: Refer to Tables 5-3a-1 and 5-3b-1 for data. The following VOC analytes were summed, if detected, for each location shown: Tetrachloroethene, cis-1,2-Dichloroethene, 1,1,1-Trichloroethene, Vinyl chloride, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1,2-Trichloroethane, 1,2-dichloroethane, chloroethane and Trichloroethene.

- Soil Boring - Detection
- Soil Boring - No Detection
- CPT Water Sample - Detection
- CPT Water Sample - No Detection
- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary
- Data not used in contouring

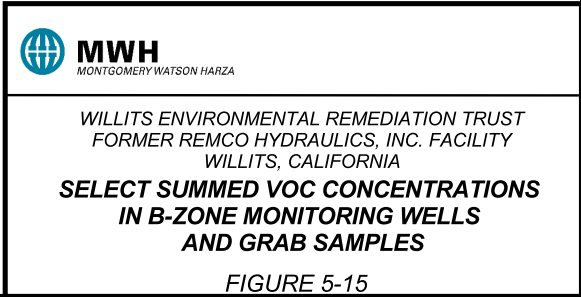
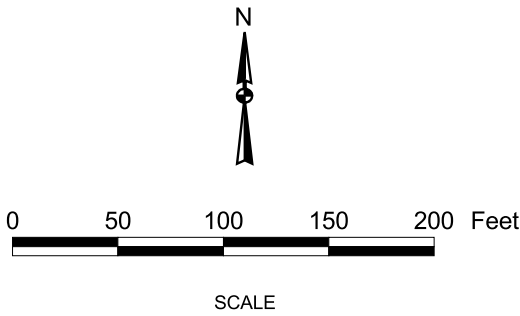
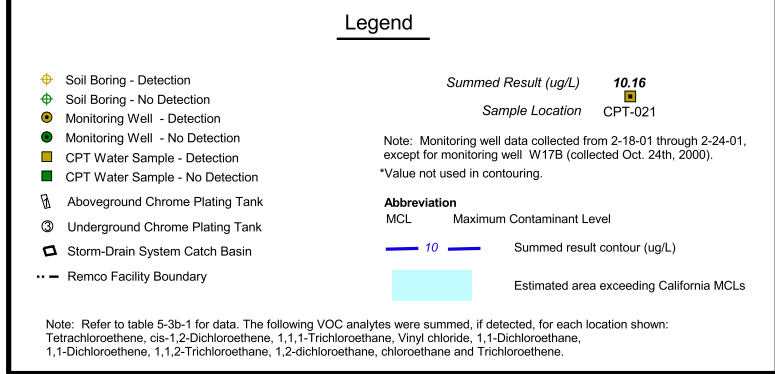
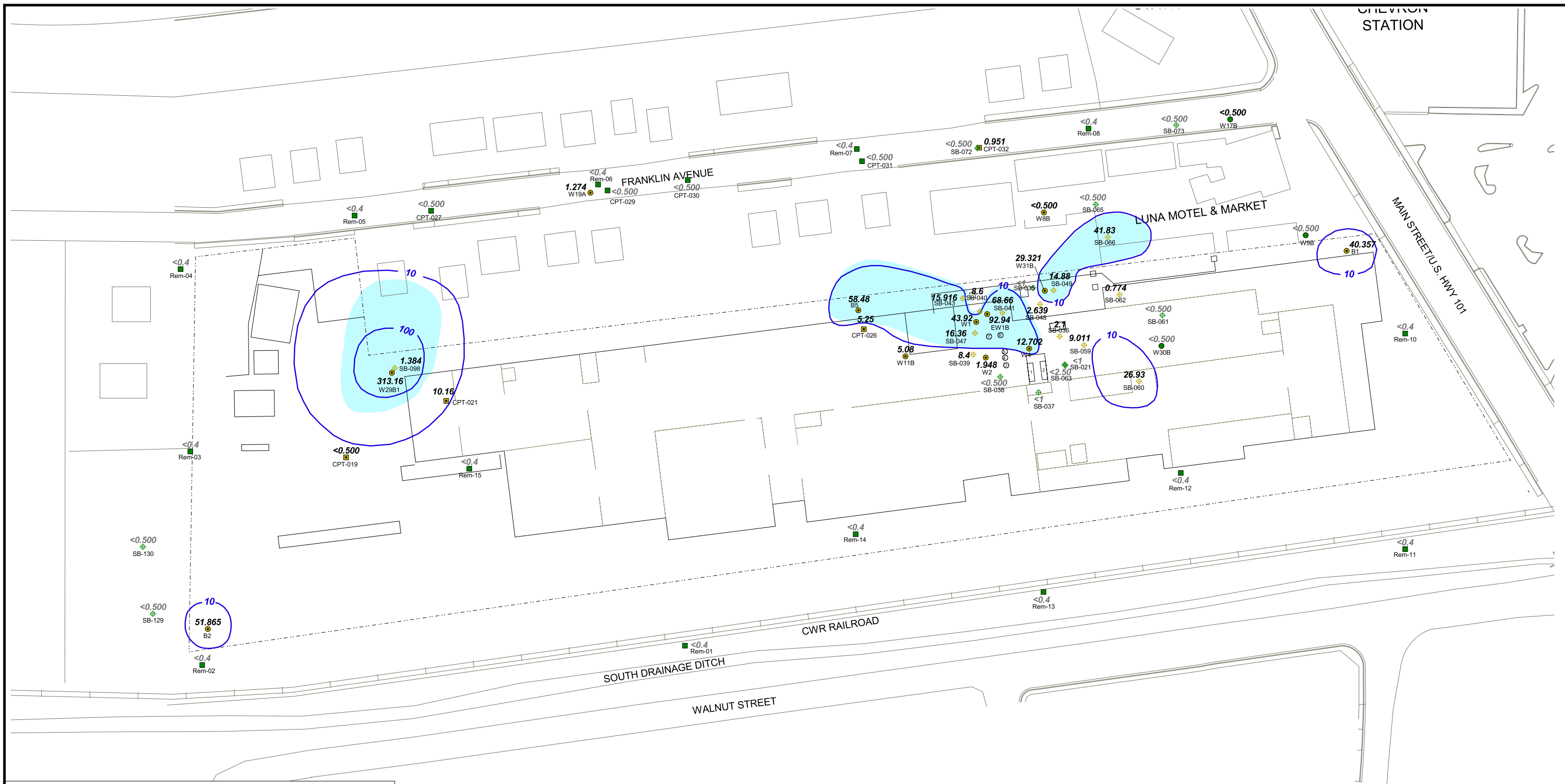


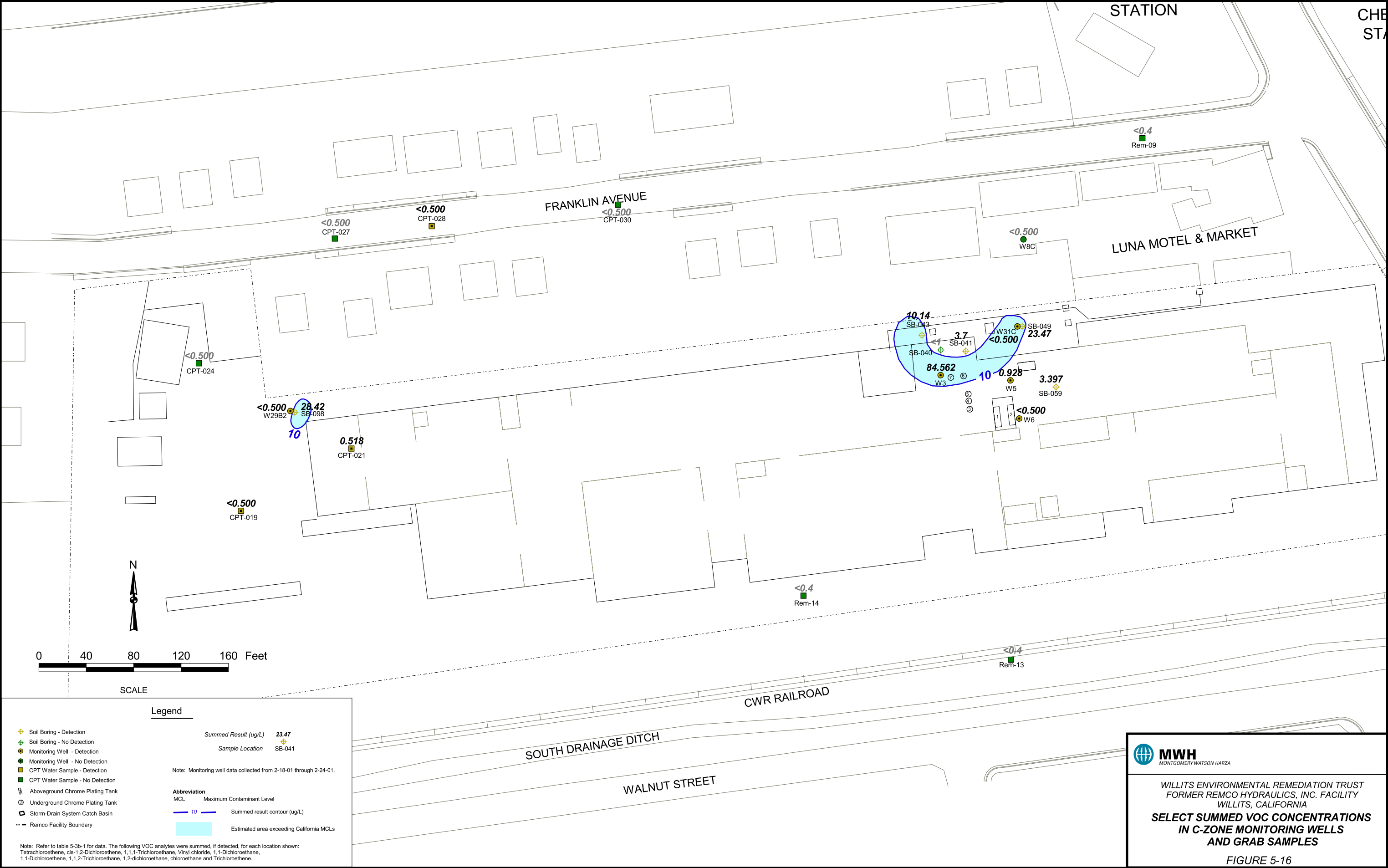
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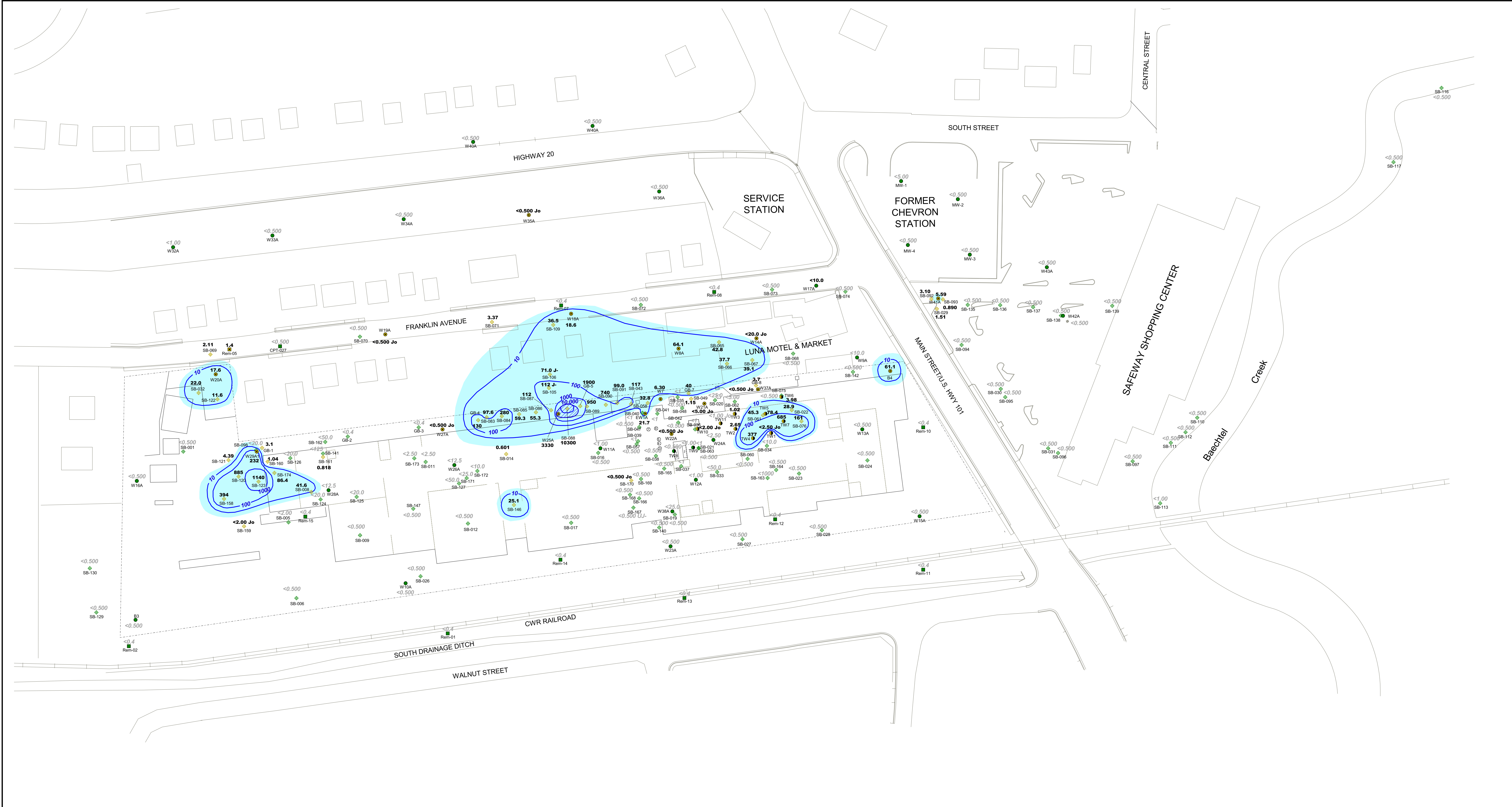
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**SELECT SUMMED VOC CONCENTRATIONS
IN A-ZONE MONITORING WELLS
AND GRAB SAMPLES**

FIGURE 5-14







Legend

Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm System Catch Basin Drain
- Remco Facility Boundary

Abbreviation

MCL Maximum Contaminant Level
PCE Tetrachloroethene

NOTES:
Refer to Appendix 5-3 for qualifier definitions.
The maximum detection from each grab groundwater and temporary well sample was used.
Monitoring well samples collected Feb. 18th thru Feb. 24th, 2001, except for monitoring well W17A collected Oct. 24th, 2000.
Pilot Study well samples collected April 2000 through Sept. 15th, 2000; latest date reported when more than one sampling occurrence.

Result (ug/L) 394

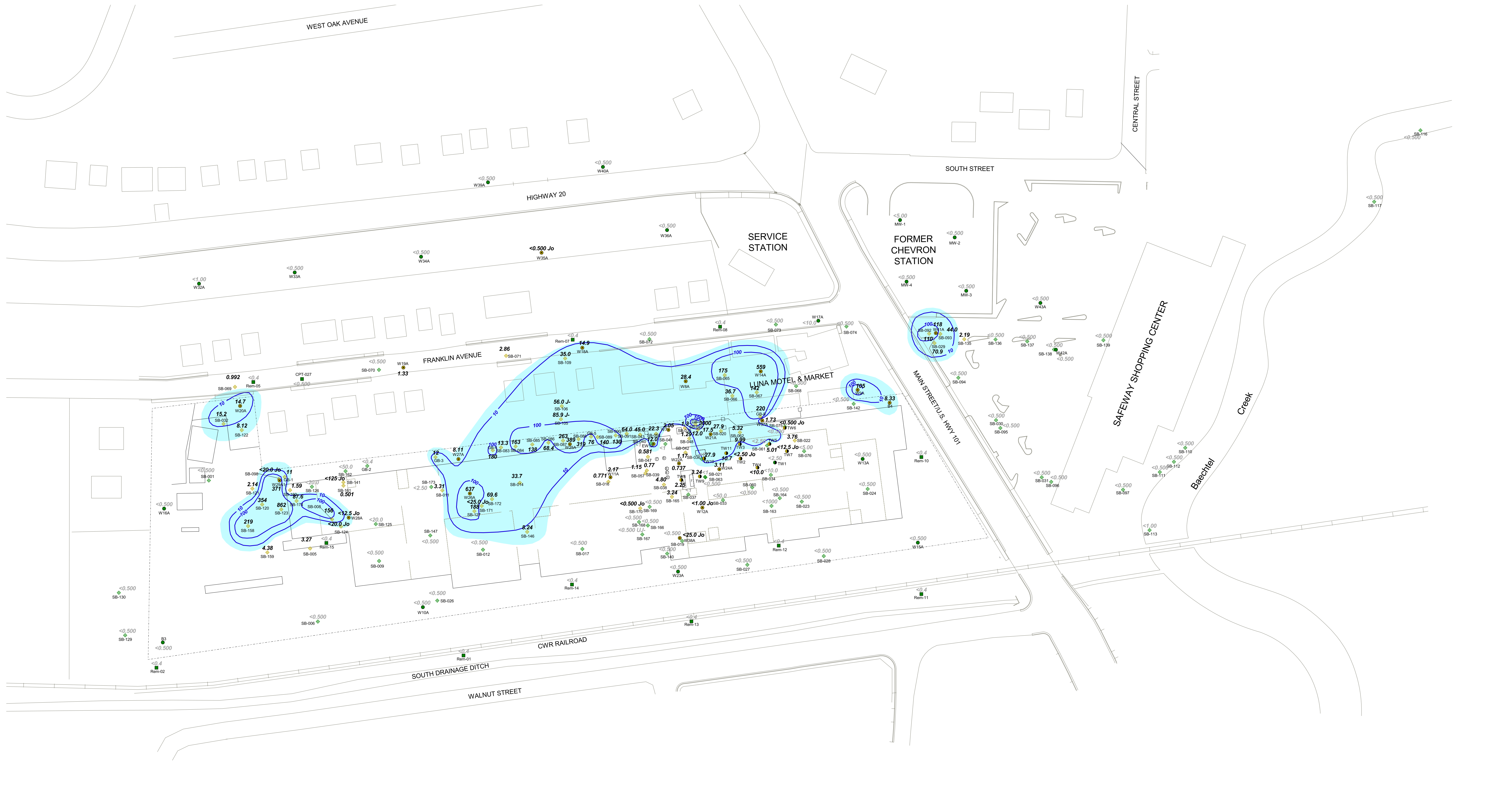
Sample Location SB-158

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**PCE CONCENTRATIONS
DETECTED in A-ZONE GROUNDWATER**

FIGURE 5-17



Legend

Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection

Chemical Abbreviations

TCE Trichloroethene
MCL Maximum Contaminant Level

TCE isoconcentration contours (ug/L)

Estimated area exceeding MCL for TCE of 5 ug/L (RWQCB, 2000).

NOTES:
Refer to Appendix 5-3 for qualifier definitions.
The maximum detection from each grab groundwater sample location was used.
Monitoring well samples collected Feb. 18th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000).
Temporary monitoring well samples collected April 2000 thru Sept. 25th, 2000; latest date reported where more than one sampling occurrence.

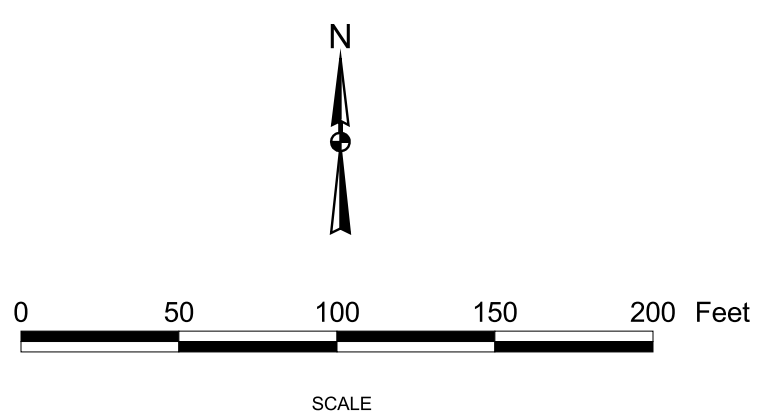
Result (ug/L)

219

Sample Location

SB-158

- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm System Catch Basin Drain
- Remco Facility Boundary



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**TCE CONCENTRATIONS
DETECTED in A-ZONE GROUNDWATER**

FIGURE 5-18



Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection

Aboveground Chrome Plating Tank
Underground Chrome Plating Tank
Storm System Catch Basin Drain
Remco Facility Boundary

Legend

10 1,1,1-TCA isoconcentration contours (ug/L)

Estimated area exceeding MCL for 1,1,1-TCA of 200 ug/L (RWQCB, 2000).

Chemical Abbreviations

1,1,1-TCA 1,1,1- Trichloroethane

Result (ug/L) 8.65

Sample Location SB-159

Notes: Refer to Appendix 5-3 for qualifier definition.

Monitoring well samples collected Feb. 19th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000).

Pilot study monitoring well samples collected from April 2000 through September 15, 2000; latest date reported when more than one sampling occurrence.

The maximum detection from each grab groundwater sample location was used.

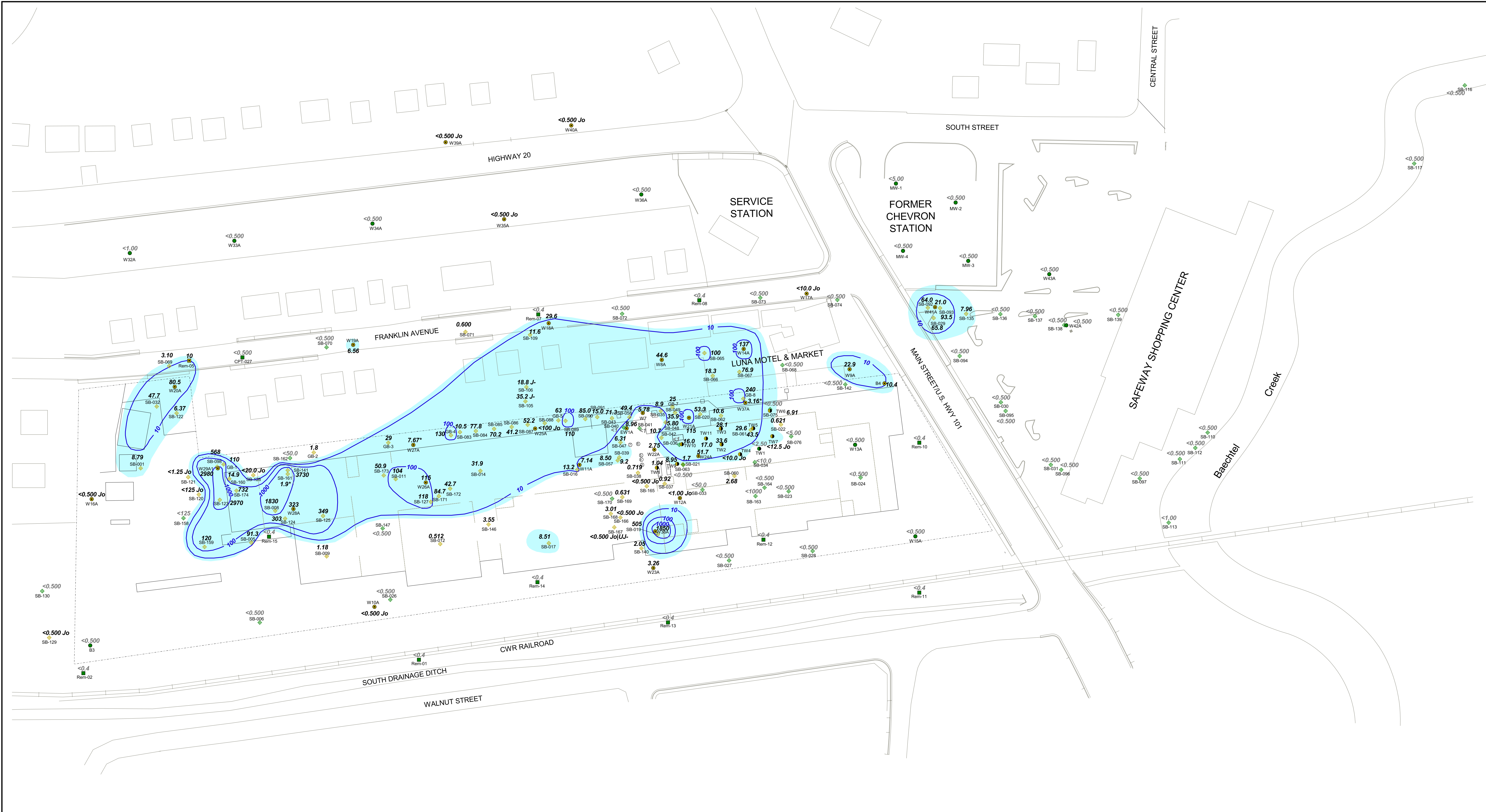
* Data not used in contouring

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**1,1,1-TCA CONCENTRATIONS
DETECTED IN A-ZONE GROUNDWATER**

FIGURE 5-19



Legend

Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection

Chemical Abbreviations

1,1-DCE 1,1-Dichloroethene

Notes: Refer to Appendix 5-3 for qualifier definitions.

Temporary monitoring well samples collected April 2000 thru Sept. 15, 2000; latest date reported when more than one sampling occurrence.

Monitoring well samples collected Feb. 18th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000). The maximum detection from each grab groundwater sample location was used.

Other Symbols:

- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm System Catch Basin Drain
- Remco Facility Boundary

Result (ug/L)

45.1

Sample Location

SB-047

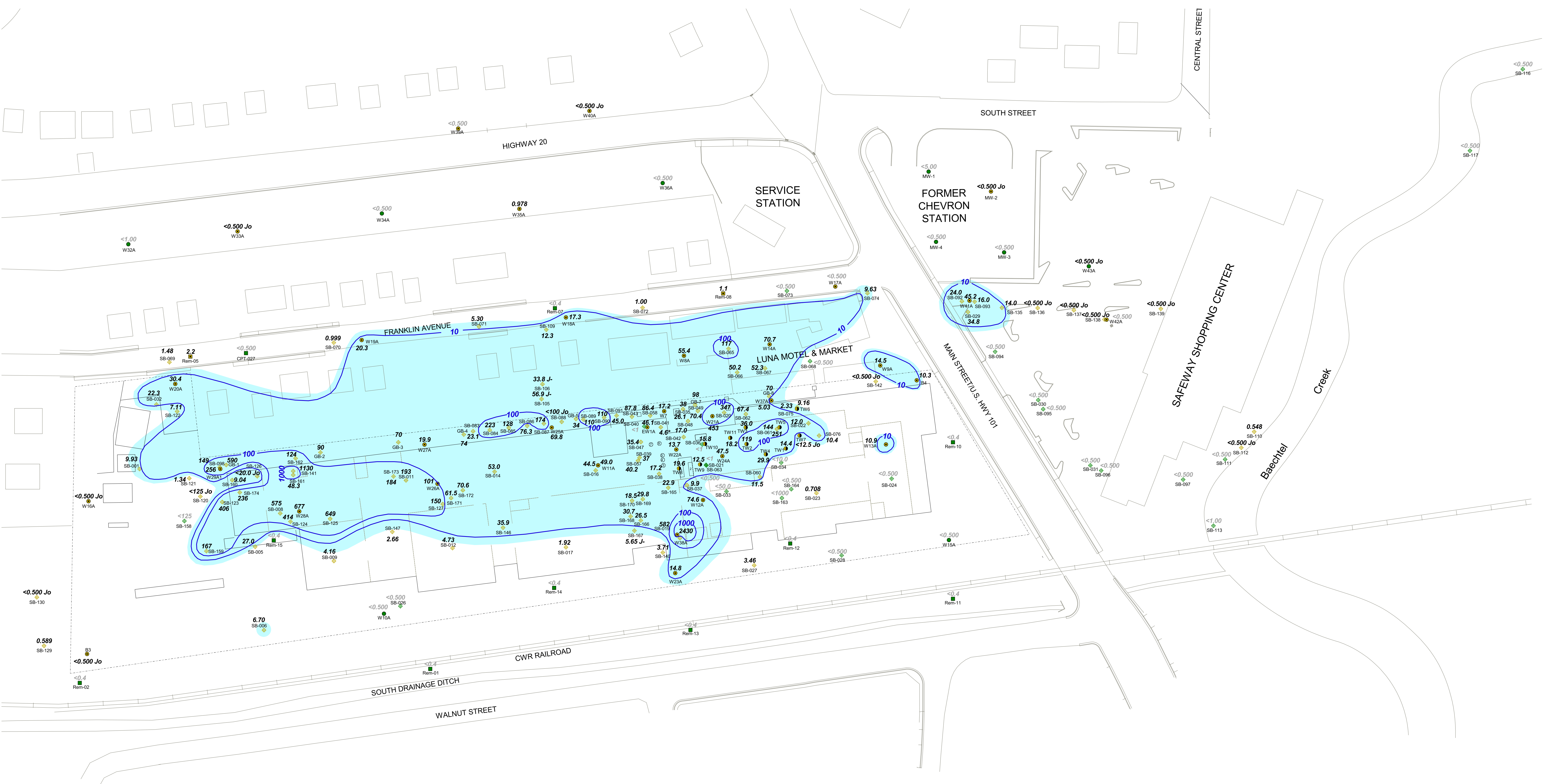
Data not used in contouring

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**1,1-DCE CONCENTRATIONS
DETECTED in A-ZONE GROUNDWATER**

FIGURE 5-21



Legend

Sampling Points

- Monitoring Well (A-Zone) - Detection
- Monitoring Well (A-Zone) - No Detection
- Soil Boring (A-Zone) - Detection
- Soil Boring (A-Zone) - No Detection
- Temporary Well (A Zone) - Detection
- CPT Water Sample (A Zone) - Detection
- CPT Water Sample (A Zone) - No Detection

Result (ug/L)

Sample Location

Abbreviations

1,1 - DCA MCL

1,1 - Dichloroethane Maximum Contaminant Level

Notes: Refer to Appendix 5-3 for qualifier definitions.

The maximum detection from each grab groundwater sample location was used.

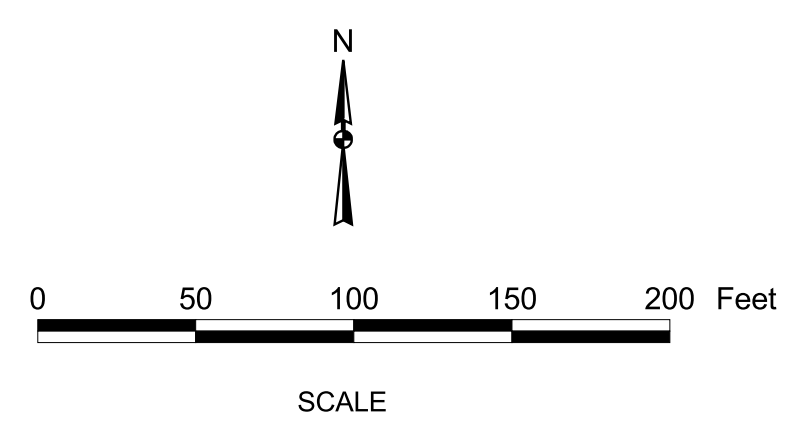
Monitoring well samples collected February 2001.

Pilot study monitoring well samples collected April through September 2000; latest date used when more than one sampling occurrence.

** Data not used in contouring*

10

Estimated area exceeding CA MCL for 1,1-DCA of 5.0 ug/L (RWQCB, 2000).



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**1,1-DCA CONCENTRATIONS
IN A-ZONE GROUNDWATER**

FIGURE 5-22



Legend

Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm Drain System Catch Basin
- Remco Facility Boundary

- 10 Freon 113 isoconcentration contour (ug/L)
- ? Where uncertain
- Estimated area exceeding CA MCL (1200 ug/L) for Freon 113 RWQCB, 2000

Abbreviation

MCL Maximum Contaminant Level

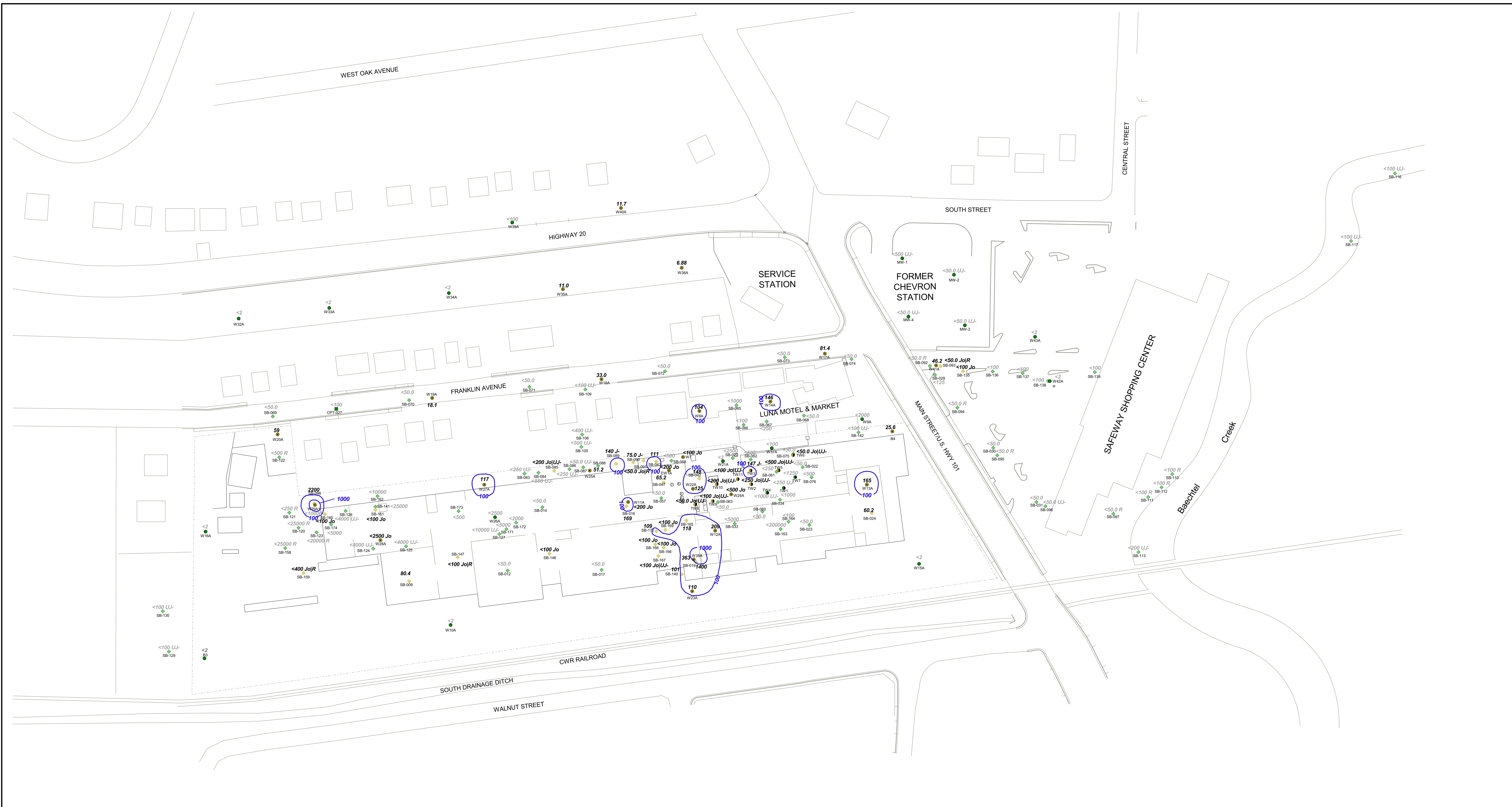
Notes: Refer to Appendix 5-3 for qualifier definitions.
The maximum detection from each grab groundwater sample location was used.
Monitoring well samples collected Feb. 19th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000).
Temporary monitoring well samples collected April 2000 through Sept. 15th, 2000; latest result used when more than one sampling occurrence.



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**FREON 113 CONCENTRATIONS DETECTED
IN A-ZONE GROUNDWATER**

FIGURE 5-24



Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm Drain System Catch Basin
- Remco Facility Boundary

Sample Location

Result (ug/L)

45.1

SB-047

Abbreviation

MCL

Maximum Contaminant Level

Notes: Refer to Appendix 5-3 for qualifier definitions.

The maximum detection from each grab groundwater sample location was used.

Monitoring well results posted for July/August 2001 low-level dioxane sampling event if available, or February 18 to 24, 2001 sampling event.

Temporary monitoring well samples collected April 2000 thru Sept. 15th, 2000; latest result used when more more than one sampling occurrence.

100

1,4 Dioxane isoconcentration contour (ug/L).

There is currently no MCL for 1,4 Dioxane.

0

50

100

150

200

Feet

N

SCALE

MWH

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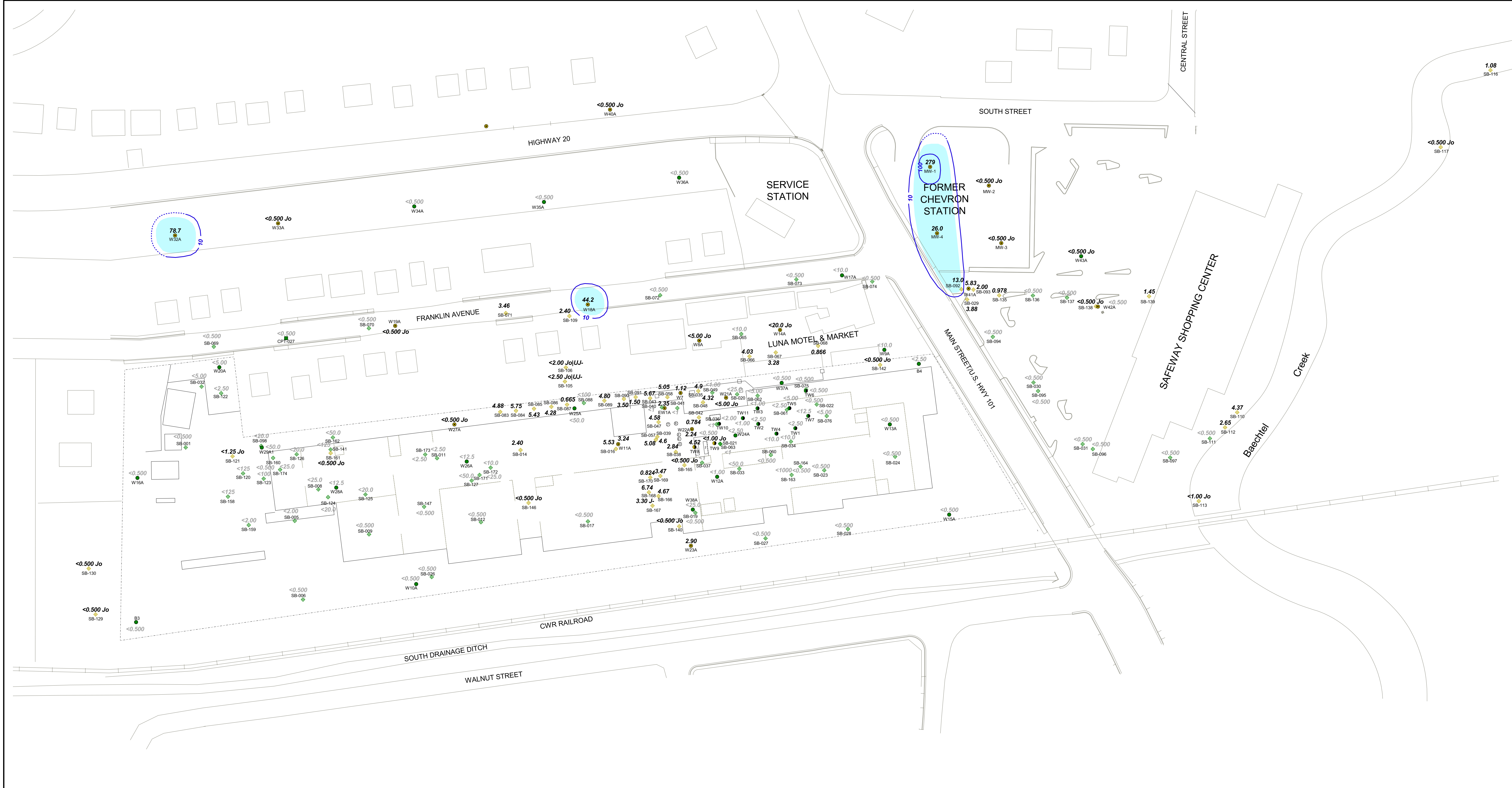
FORMER REMCO HYDRAULICS, INC. FACILITY

WILLITS, CALIFORNIA

1,4 DIOXANE CONCENTRATIONS DETECTED

IN A-ZONE GROUNDWATER

FIGURE 5-25



Legend

Sampling Points

- Monitoring Well (A-Zone) - Detection
- Monitoring Well (A-Zone) - No Detection
- Soil Boring (A-Zone) - Detection
- Soil Boring (A-Zone) - No Detection
- Temporary Well (A Zone) - Detection
- Temporary Well (A Zone) - No Detection
- CPT Water Sample (A Zone) - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm Drain System Catch Basin
- Remco Facility Boundary

Chemical Abbreviation

MTBE Methyl Tertiary Butyl Ether

10 MTBE isoc concentration contours (ug/L)

Dashed where approximate

Estimated area exceeding primary MCL for MTBE of 13 ug/L (RWQCB, 2000)

Result (ug/L): 2.4

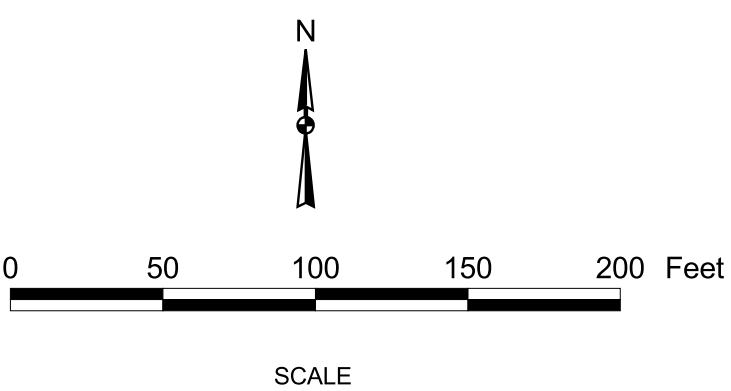
Sample Location: SB-014


NOTES: Refer to Appendix 5-3 for qualifier definitions.

The maximum detection from each grab groundwater sample location was used.

Monitoring well samples collected Feb. 18th through Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000).

Pilot study well samples collected April 2000 through September 15, 2000; latest date reported when more than one sampling occurrence.

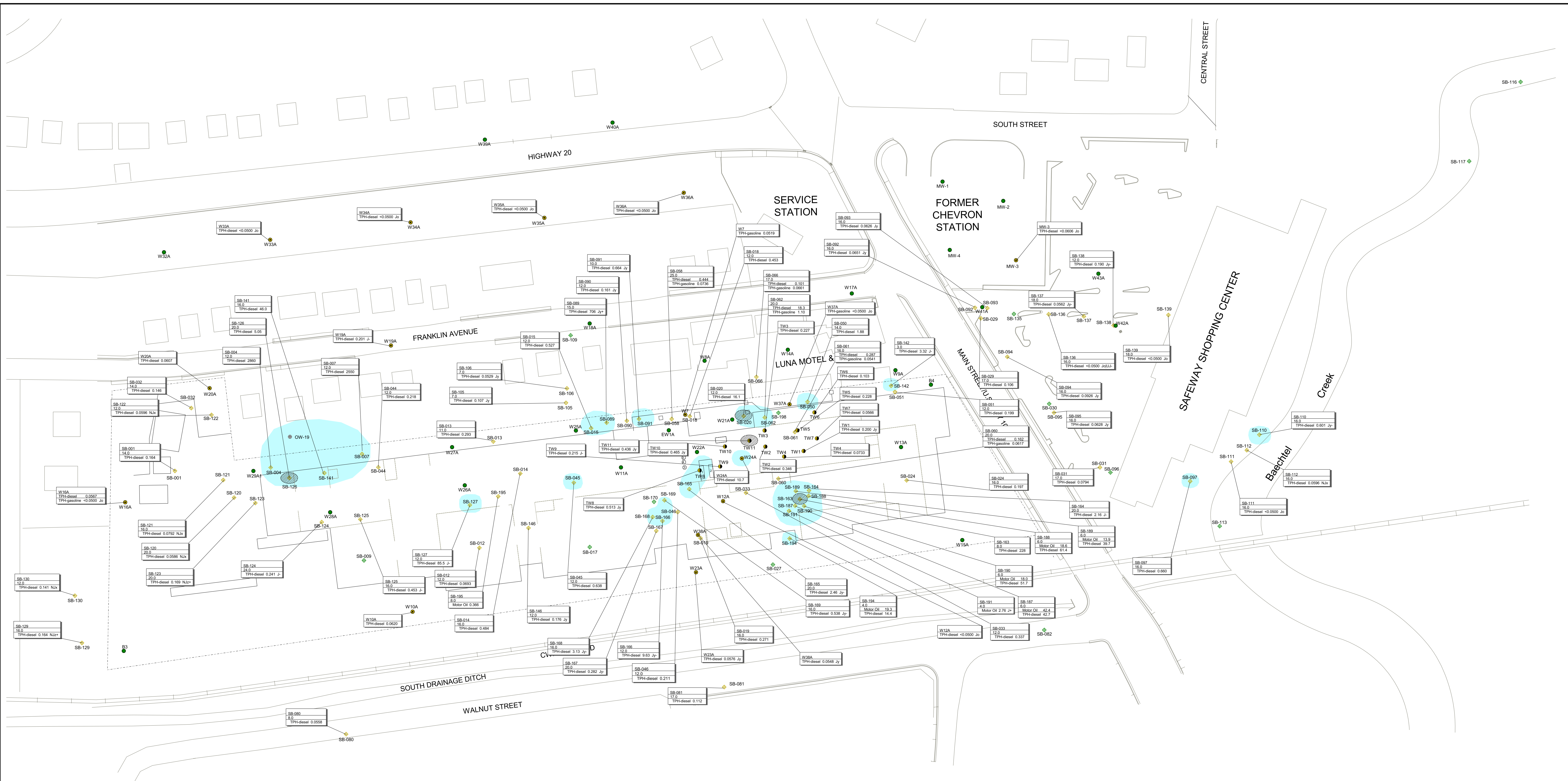


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**MTBE CONCENTRATIONS
IN A-ZONE GROUNDWATER**

FIGURE 5-26



Sampling Points

- Soil Boring - Detection
- Soil Boring - No Detection
- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Private Well
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Chemical Abbreviation

TPH-diesel Total Petroleum Hydrocarbons as Diesel

TPH-gasoline Total Petroleum Hydrocarbons as Gasoline

Estimated area with concentrations greater than or equal to 0.5 mg/L

Estimated area of separate-phase petroleum hydrocarbons observed in soils during drilling operations (note: no separate-phase hydrocarbons were observed in measurable thickness on the water table.)

Legend

Notes: Refer to Appendix 5-3 for qualifier definitions.
Monitoring well data collected from 02-18-01 through 02-24-01.
Temporary well data collected from 4 -00 through 9-15-00; latest date reported when more than one sampling occurrence.

Sample Location: W29A1		
TPH-diesel	0.166	Jy
TPH-gas	0.880	
Constituent	Result (mg/L)	Qualifier



Legend

Sampling Points

- A Zone Monitoring Well - No Detection
- Monitoring Well - Detection
- Piezometer - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection
- Soil Boring - Detection
- Soil Boring - No detection

Other Symbols

- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Sample Location

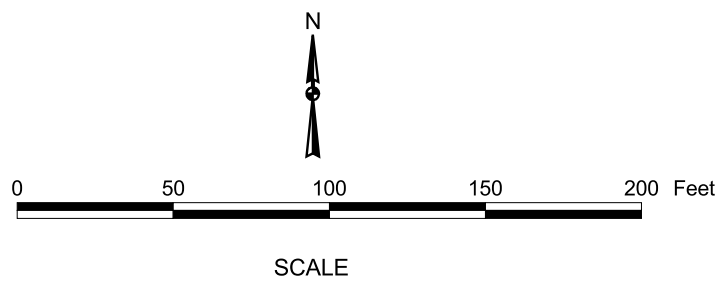
Sample Location	SB-163
Sample Depth (ft bgs)	8.0
Constituent	Naptha
Result (ug/L)	<1000 Jo

Chemical Abbreviations

Naptha	Napthalene
--------	------------

Notes: Refer to Appendix 5-3 for qualifier definitions.
Monitoring wells sampled from 2/18/01 through 2/24/01.
Temporary wells sampled April 2000 through 9/25/00; latest date reported when more than one sampling occurrence.

Note: Figure includes detected results from EPA Method 8310, and napthalene results from EPA Method 8260 analyses.



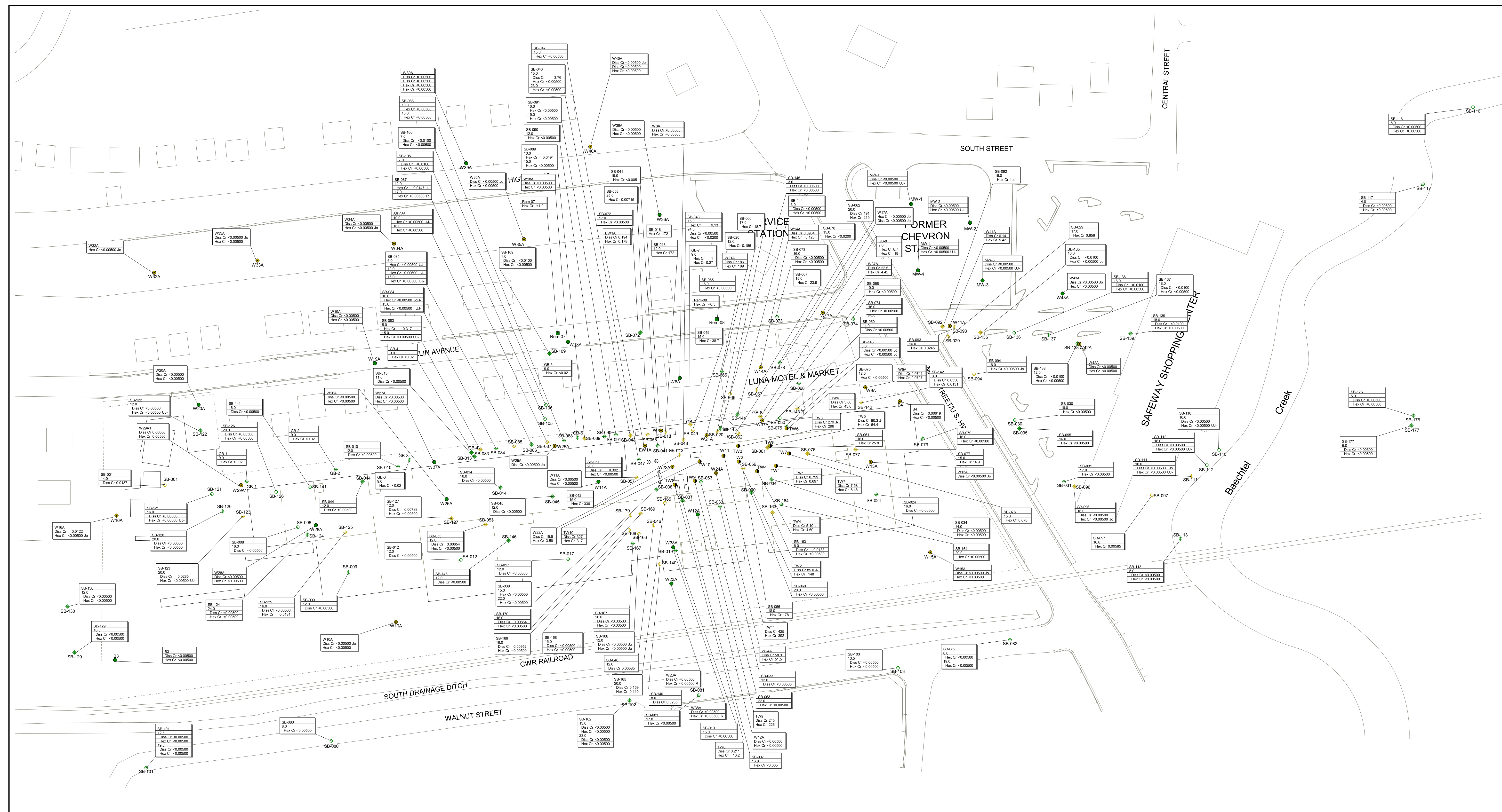
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WILLITS, CALIFORNIA

PAHs DETECTED IN A - ZONE GROUNDWATER

FIGURE 5-28


H:\Acis\Remco\RI_0501_G_apr 03\2002 AE.TC



- Sampling Points**
- Soil Boring - Detection
 - Soil Boring - No Detection
 - Piezometer - No Detection
 - Monitoring Well - Detection
 - Monitoring Well - No Detection
 - Temporary Well - Detection
 - Temporary Well - No Detection
- Legend**
- Aboveground Chrome Plating Tank
 - Underground Chrome Plating Tank
 - Storm-Drain System Catch Basin
 - Remco Facility Boundary

Sample Location	
SB-123	
Diss Cr 0.0285	
Hex Cr <0.00500 UJ	
Constituent	Result (mg/L)
Chemical Abbreviations	
Diss Cr	Dissolved Chromium
Hex Cr	Hexavalent Chromium

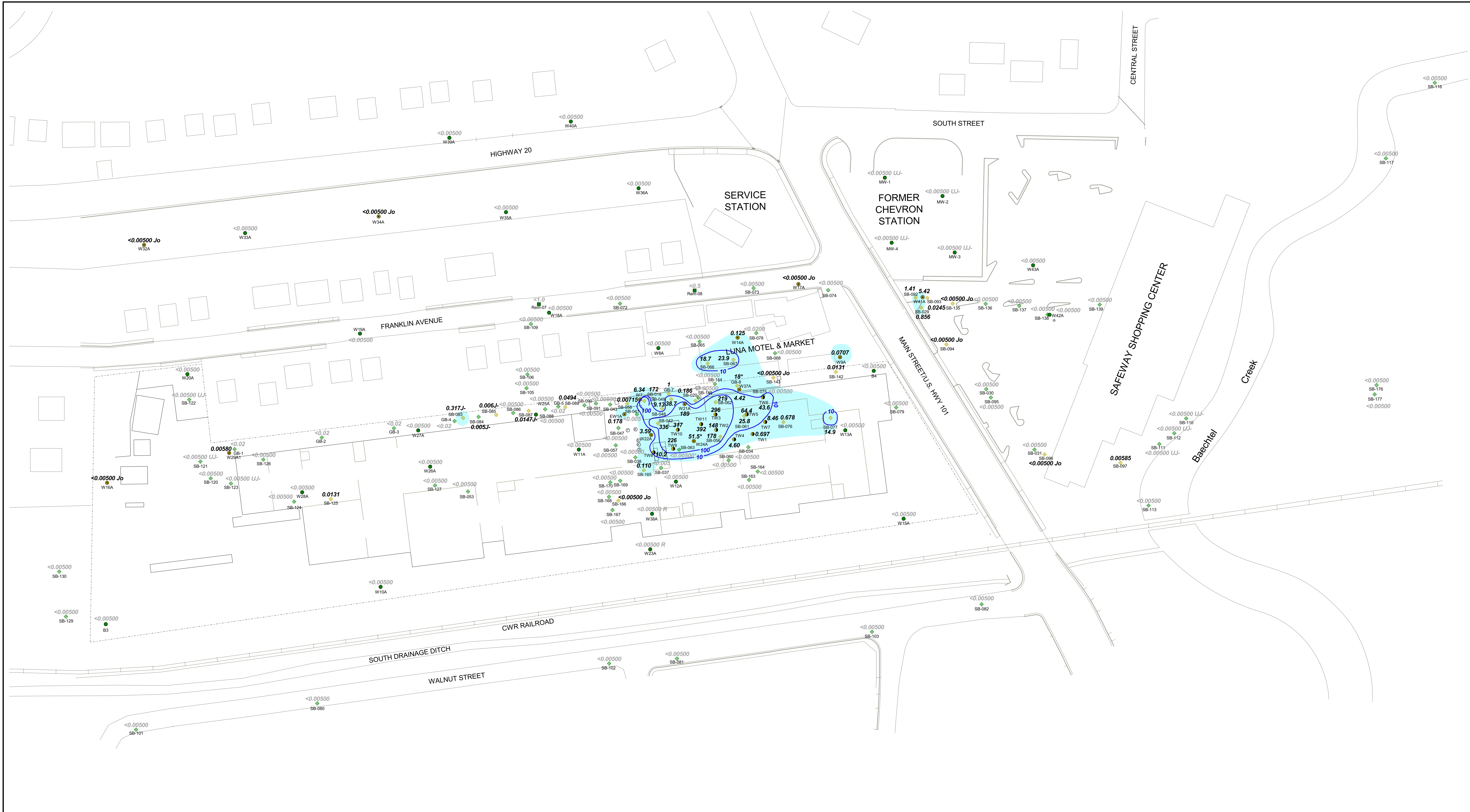
*Refer to Appendix 5-3 for complete list of qualifier definitions.
Note: Monitoring wells sampled 2/18/01 through 2/24/01, except for monitoring well W17A (collected Oct. 24th, 2000). Pilot study wells sampled 4/00 through 9/15/00; latest date used when more than one sampling occurrence.

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**DISSOLVED AND
HEXAVALENT CHROMIUM
IN A-ZONE GROUNDWATER**

FIGURE 5-30



Legend

Sample Locations

- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- CPT Water Sample - No Detection
- Soil Boring - Detection
- Soil Boring - No Detection
- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm Drain System Catch Basin
- Remco Facility Boundary

Result (mg/L) **45.1**

Sample Location SB-047

Abbreviation

MCL Maximum Contaminant Level

Notes: Refer to Appendix 5-3 for qualifier definitions.

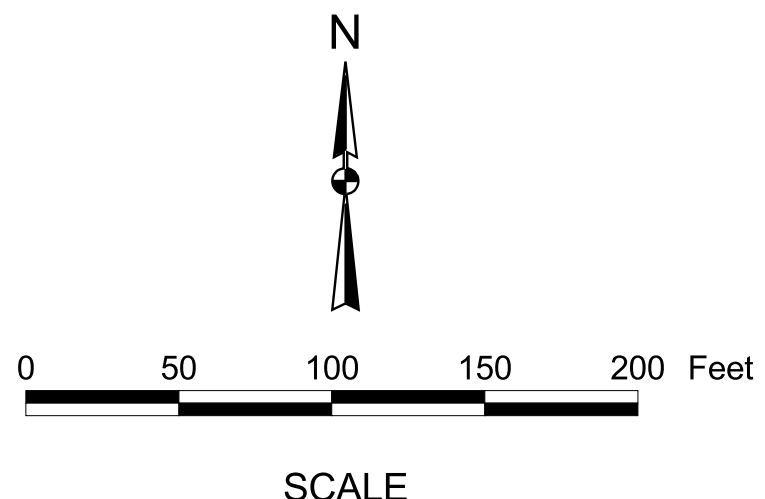
Monitoring well samples collected Feb. 18th thru Feb. 24th, 2001, except for monitoring well W17A (collected Oct. 24th, 2000).

Pilot study monitoring well samples collected April 2000 through September 15, 2000; latest date used when more than one sampling occurrence.

* Data not used in contouring.

10

Estimated area exceeding CA MCL for Dissolved Chromium of 0.050 mg/L (RWQCB, 2000)

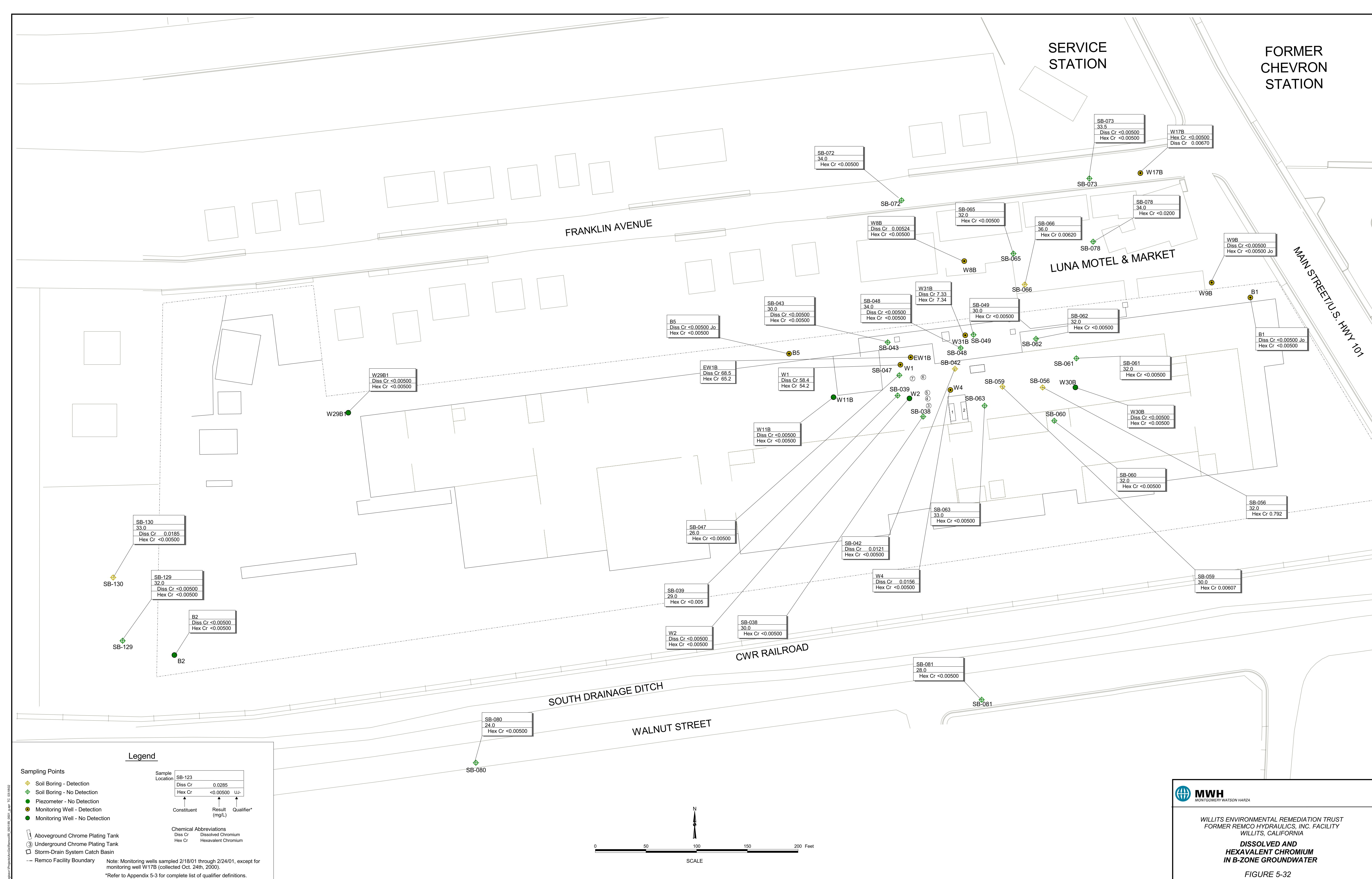


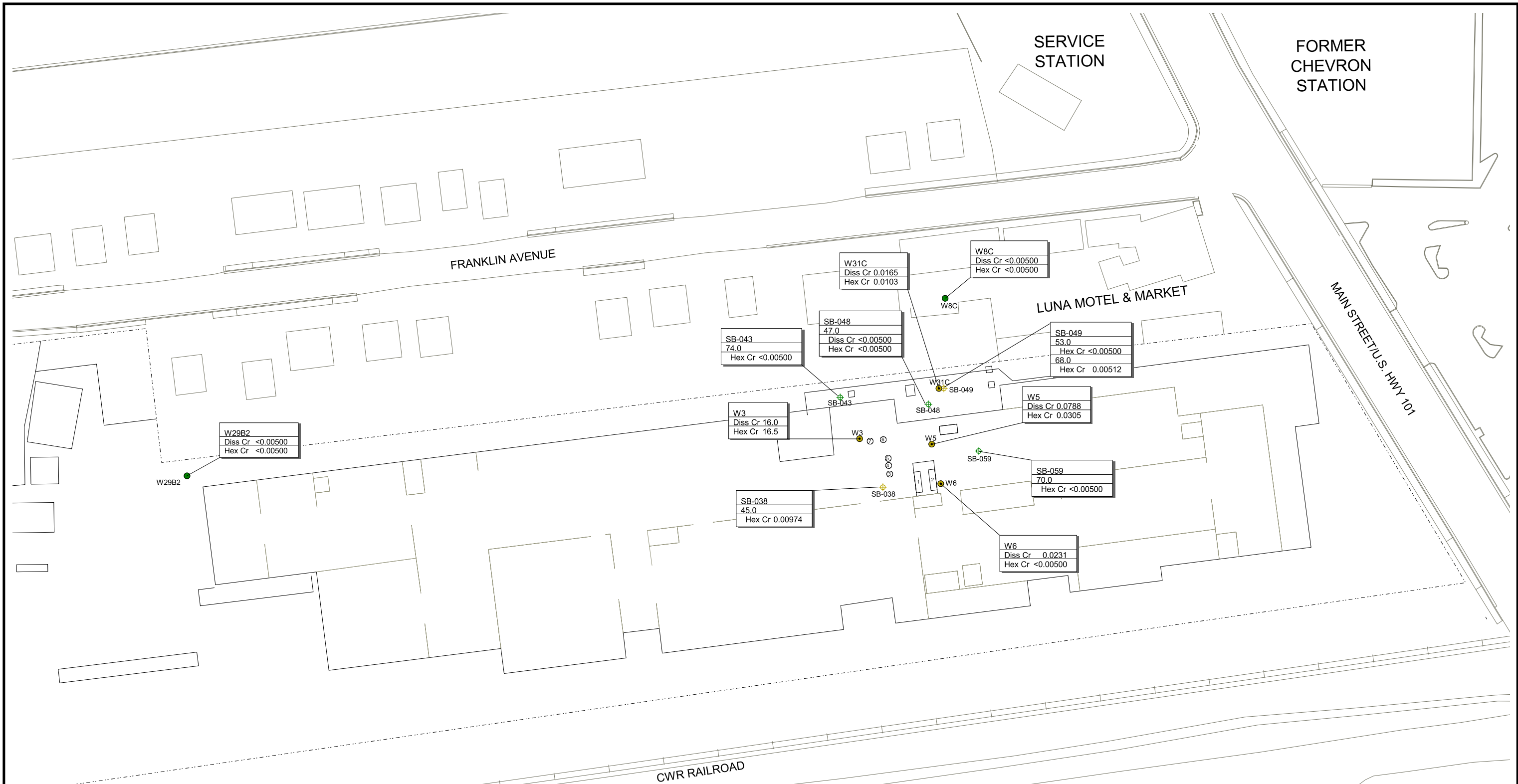
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WILLITS, CALIFORNIA

**HEXAVALENT CHROMIUM
IN A-ZONE GROUNDWATER**

FIGURE 5-31





Legend

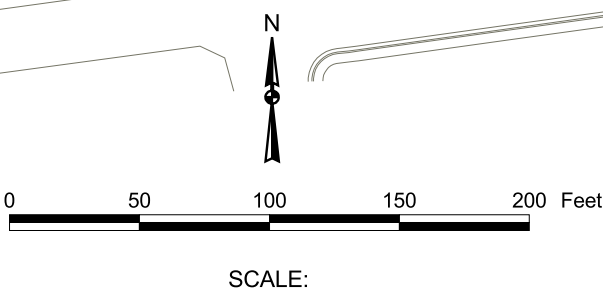
- Sampling Points**
- ⊕ Soil Boring - Detection
 - ⊕ Soil Boring - No Detection
 - Monitoring Well - Detection
 - Monitoring Well - No Detection

- ⌚ Aboveground Chrome Plating Tank
- ③ Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- - - Remco Facility Boundary

Sample Location Depth (ft bgs)	SB-043	
	74.0	
Constituent	Hex Cr	<0.00500

Chemical Abbreviations

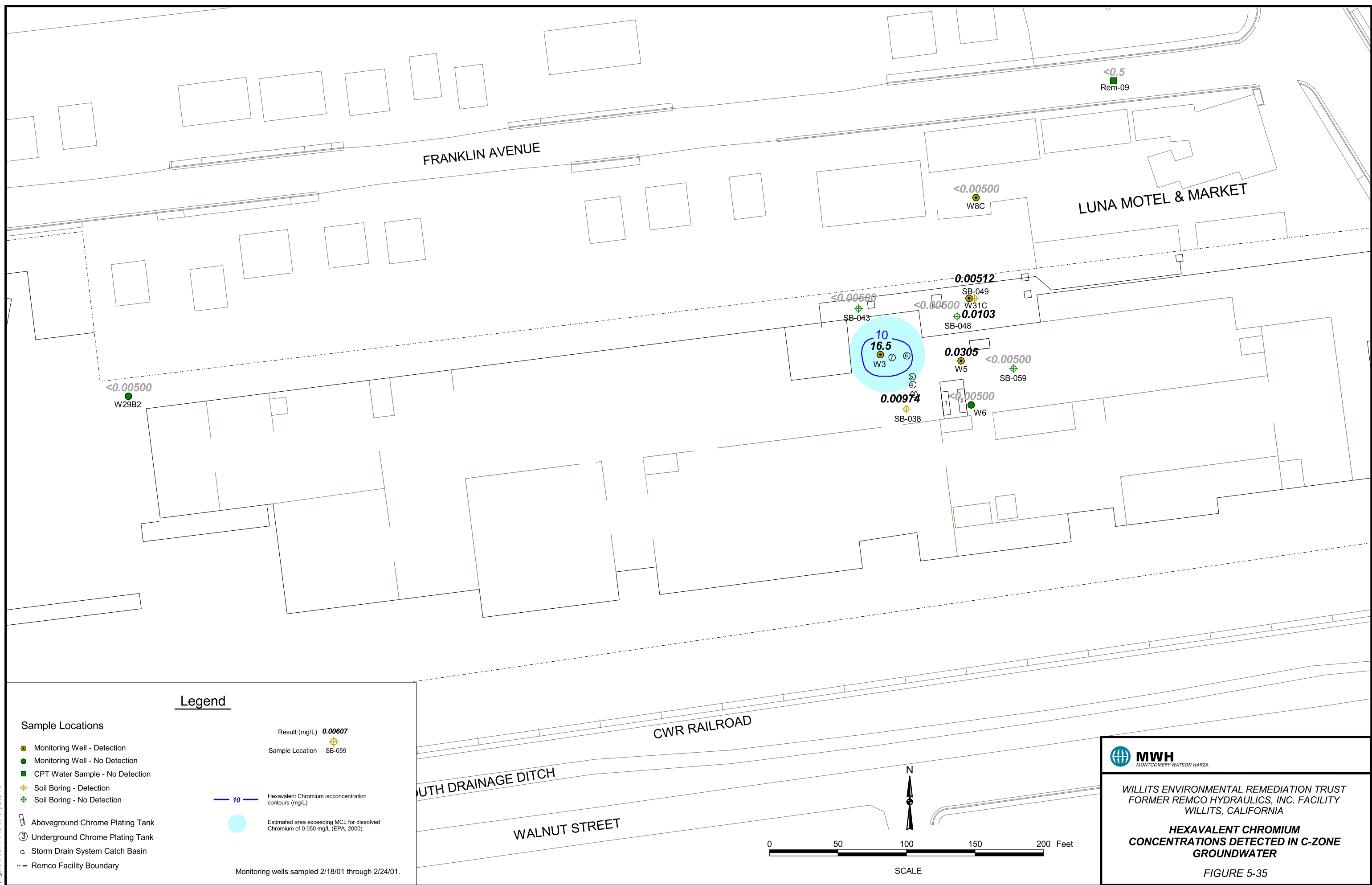
Diss Cr	Dissolved Chromium
Hex Cr	Hexavalent Chromium



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**DISSOLVED AND HEXAVALENT
CHROMIUM IN C-ZONE GROUNDWATER**
FIGURE 5-34

H:\ArcData\Remco\RE_0501_G_apr_404\02.GS





Legend

Sample Locations

- Soil Boring - Detection
- Soil Boring - No Detection
- Monitoring Well - Detection
- Monitoring Well - No Detection
- Temporary Well - Detection
- Temporary Well - No Detection

① Aboveground Chrome Plating Tank
③ Underground Chrome Plating Tank
Storm Drain System Catch Basin
Remco Facility Boundary

Chemical Abbreviations

Ag	Silver
As	Arsenic
Be	Beryllium
Cd	Cadmium
Cu	Copper
Ni	Nickel
Pb	Lead
Sb	Antimony
Zn	Zinc

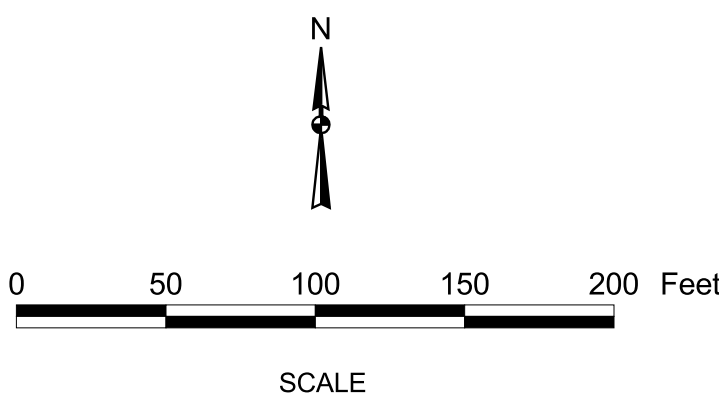
Sample Location ID

SB-127
12.0
As <0.00700 J ₀
Cu <0.01000 J ₀
Ni <0.03000 J ₀
Pb <0.00500 J ₀
Zn 0.0882

Constituent Result (mg/L) Qualifier*

Monitoring Well Samples Collected from 2-18-2001 to 2-24-2001, except for monitoring well W17A (collected Oct. 24th, 2000).

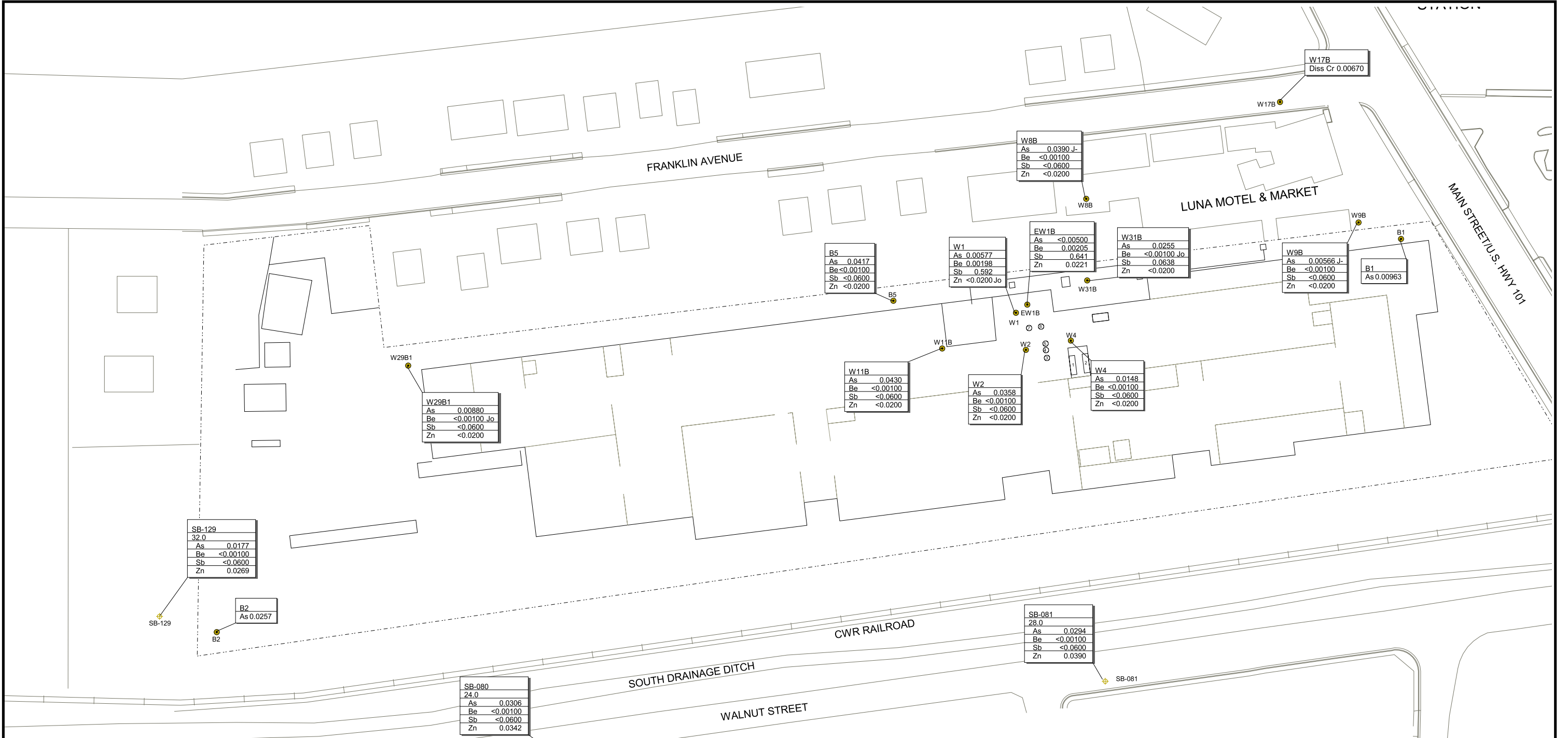
*Refer to Appendix 5-3 for complete list of qualifier definitions.



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**DISSOLVED METALS DETECTED
IN A-ZONE GROUNDWATER
SAMPLES**

FIGURE 5-36



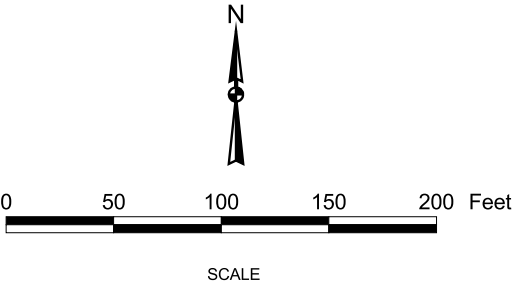
Legend

- Sampling Points**
- Monitoring Well - Detection
 - Monitoring Well - No Detection
 - Soil Boring - Detection
 - Soil Boring - No Detection

- Aboveground Chrome Plating Tank
- Underground Chrome Plating Tank
- Storm-Drain System Catch Basin
- Remco Facility Boundary

Sample Location	SB-124		
Sample Depth (ft. bgs.)	24.0		
	As	0.0291	
	Be	<0.00100	Jo
	Sb	<0.0060	
	Zn	0.0342	
	↑	↑	↑
Constituent	Result	Qualifier*	
	(ug/L)		
Chemical Abbreviations			
As	Arsenic		
Be	Beryllium		
Sb	Antimony		
Zn	Zinc		

*Refer to Appendix 5-3 for qualifier definitions.
Monitoring wells were sampled between 2/18/01 and 2/24/01, except for monitoring well W17B (collected Oct. 24th, 2000).

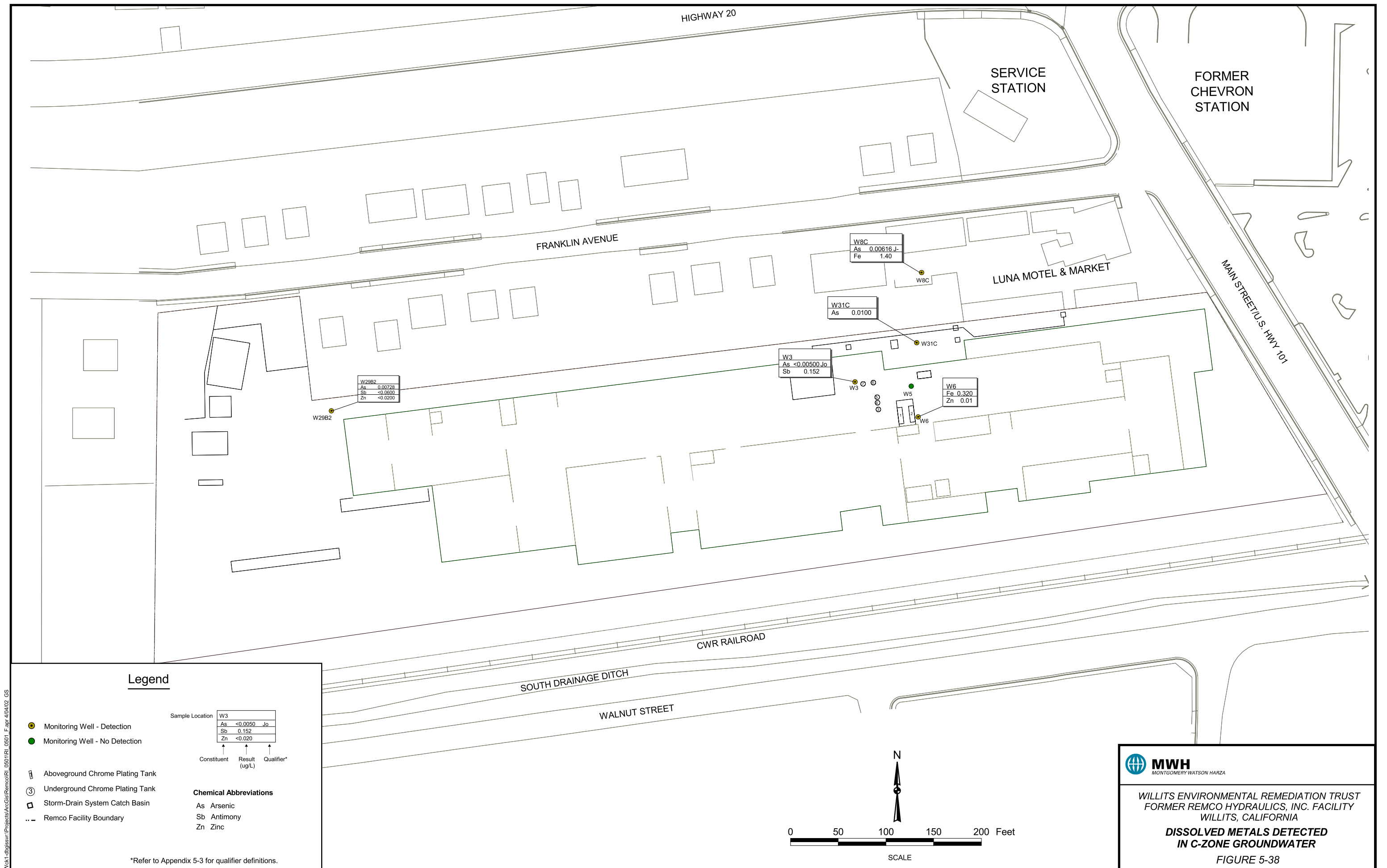


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DISSOLVED METALS DETECTED
IN B-ZONE GROUNDWATER

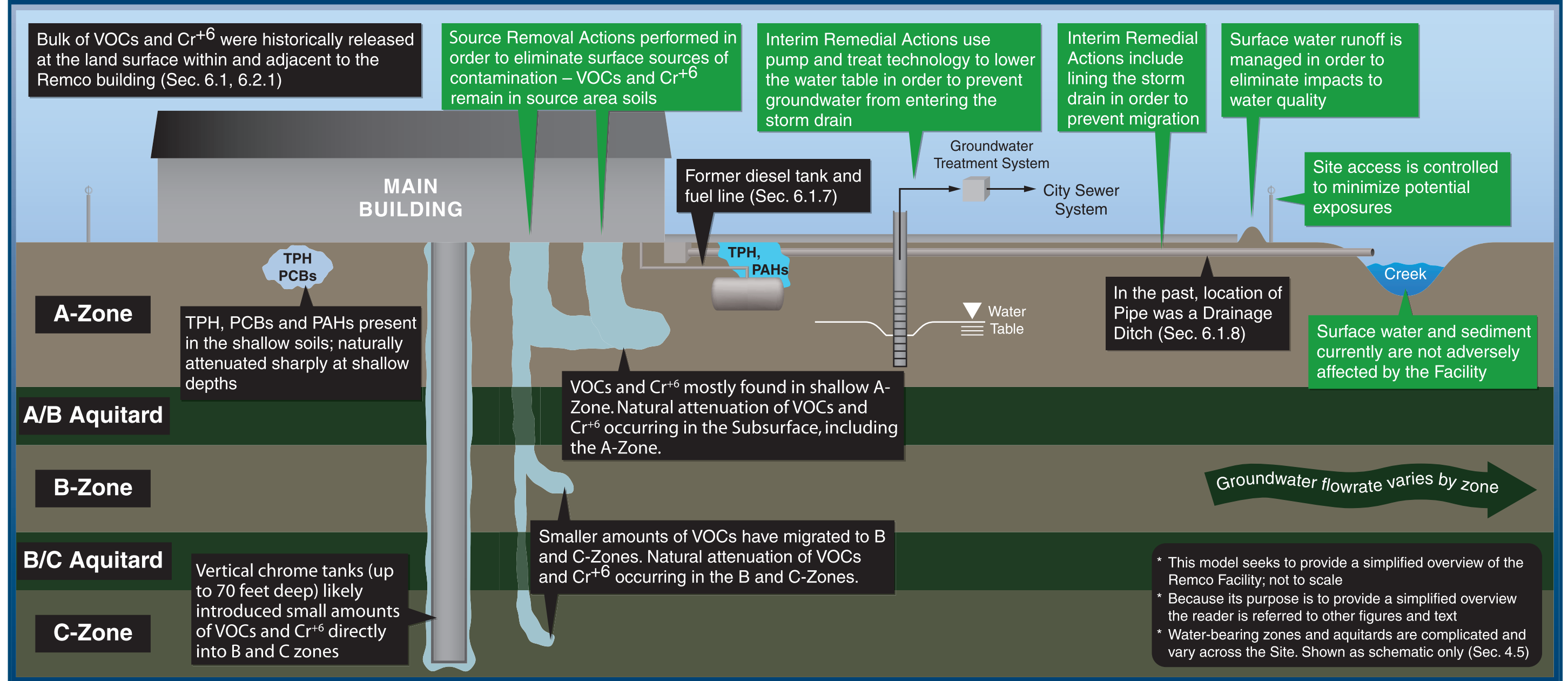
FIGURE 5-37

\\w01-dbgissvr\Projects\ArcGis\RemcoRI_0501\RI_0501_F.apr_404\02_GS



*Refer to Appendix 5-3 for qualifier definitions.

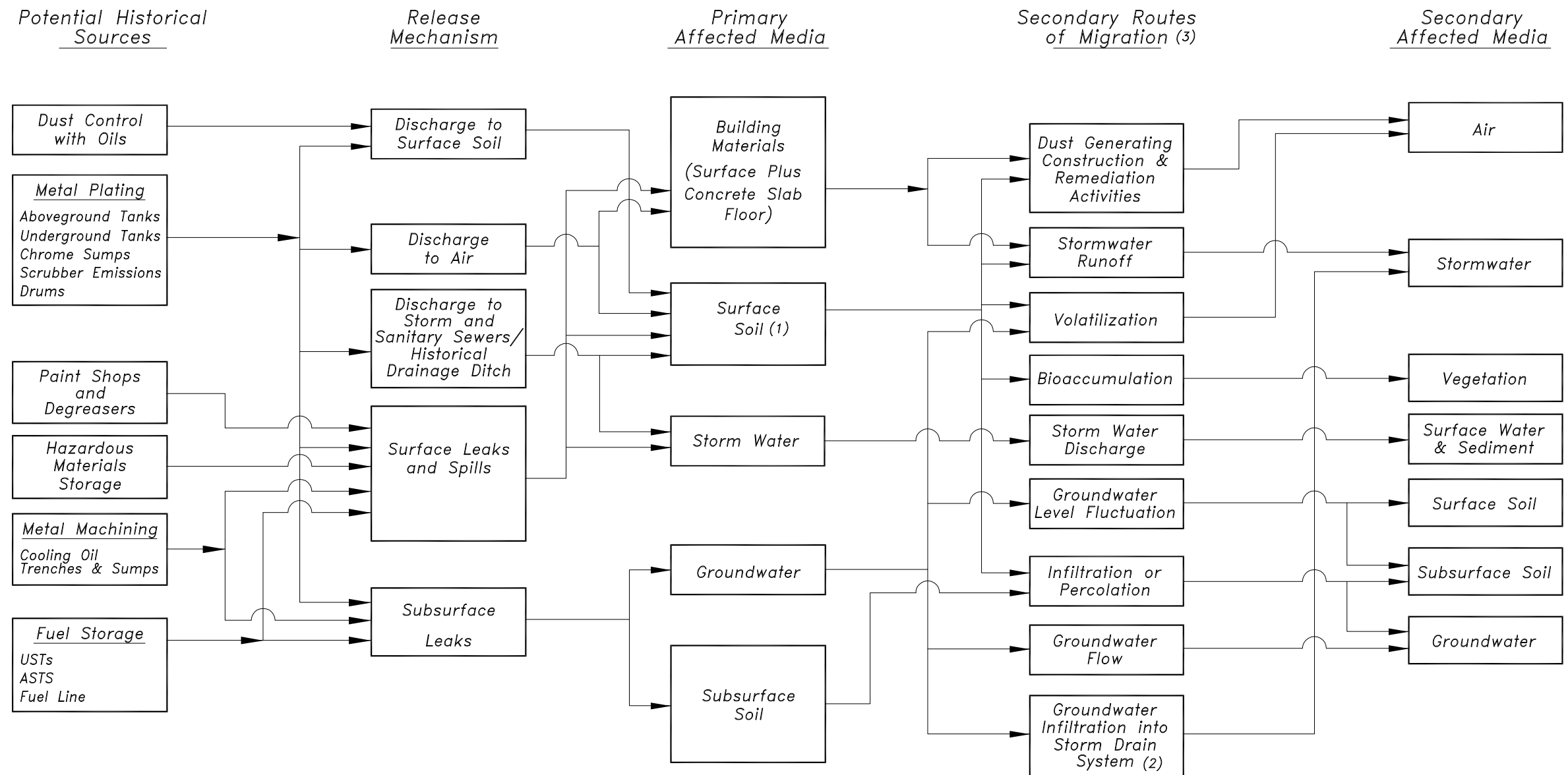
Simplified Schematic of Conceptual Site Model



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WILLITS, CALIFORNIA

SIMPLIFIED SCHEMATIC OF CONCEPTUAL SITE MODEL

FIGURE 6-1



Notes:

1. Surface soil is top 6 inches.
2. Infiltration of groundwater into the storm drain system was prior to interim remedial actions.
3. The secondary routes of migration relate to contaminant migration in the environment beyond the primary impacted media; they represent both migration routes that appear to have occurred based on the results of the RI and the routes of potential future migration.

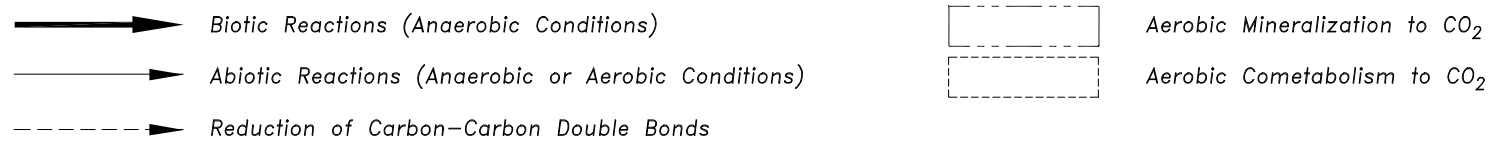
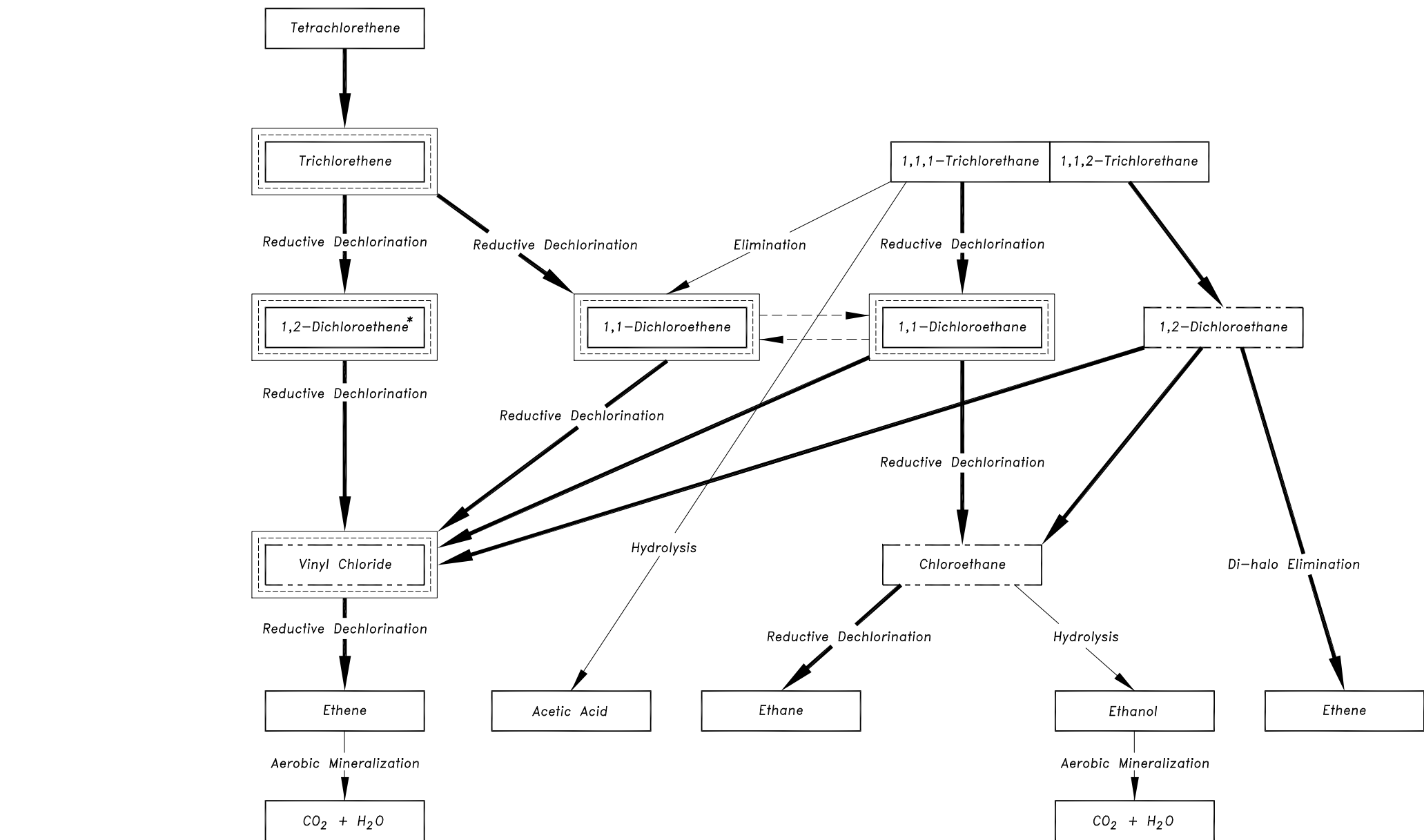


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CONCEPTUAL MIGRATION PATHWAYS

FIGURE 6-2



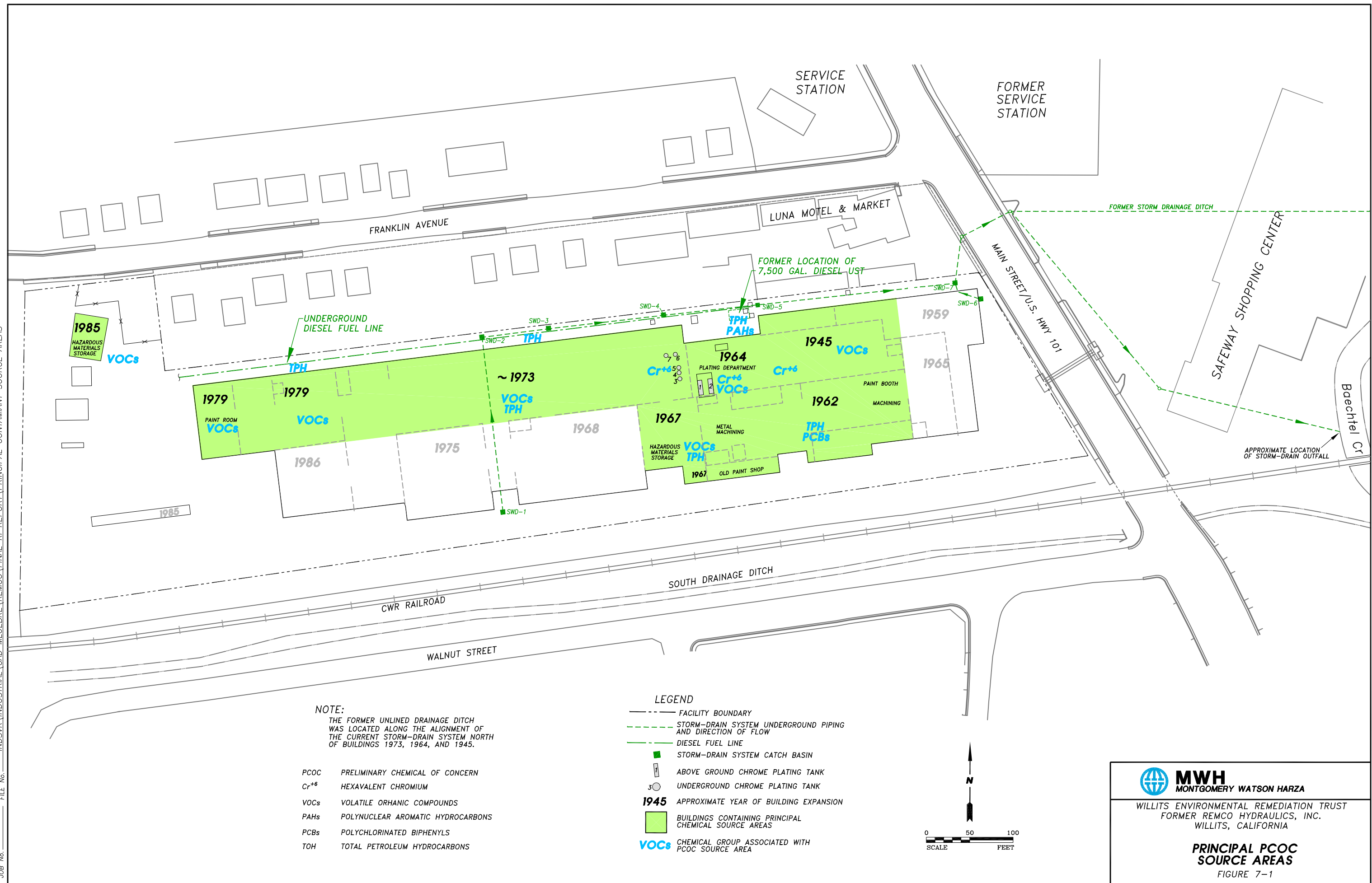
* Cis-1,2-DCE generated at approximately 30 times the concentration of trans-1,2-DCE (Kleopfer, R.D. et al. Environ. Sci. Technol. 1985. 19,277-280); their carbon-carbon double bonds can be reduced to form 1,2-DCA. (Dragun 1988)

Compilation from: Dragun 1988,
Davis and Olsen 1990, and
Beak International et al. 1997.



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**COMMON DEGRADATION PATHWAYS
FOR CHLORINATED
VOLATILE ORGANIC COMPOUNDS**
FIGURE 6-3



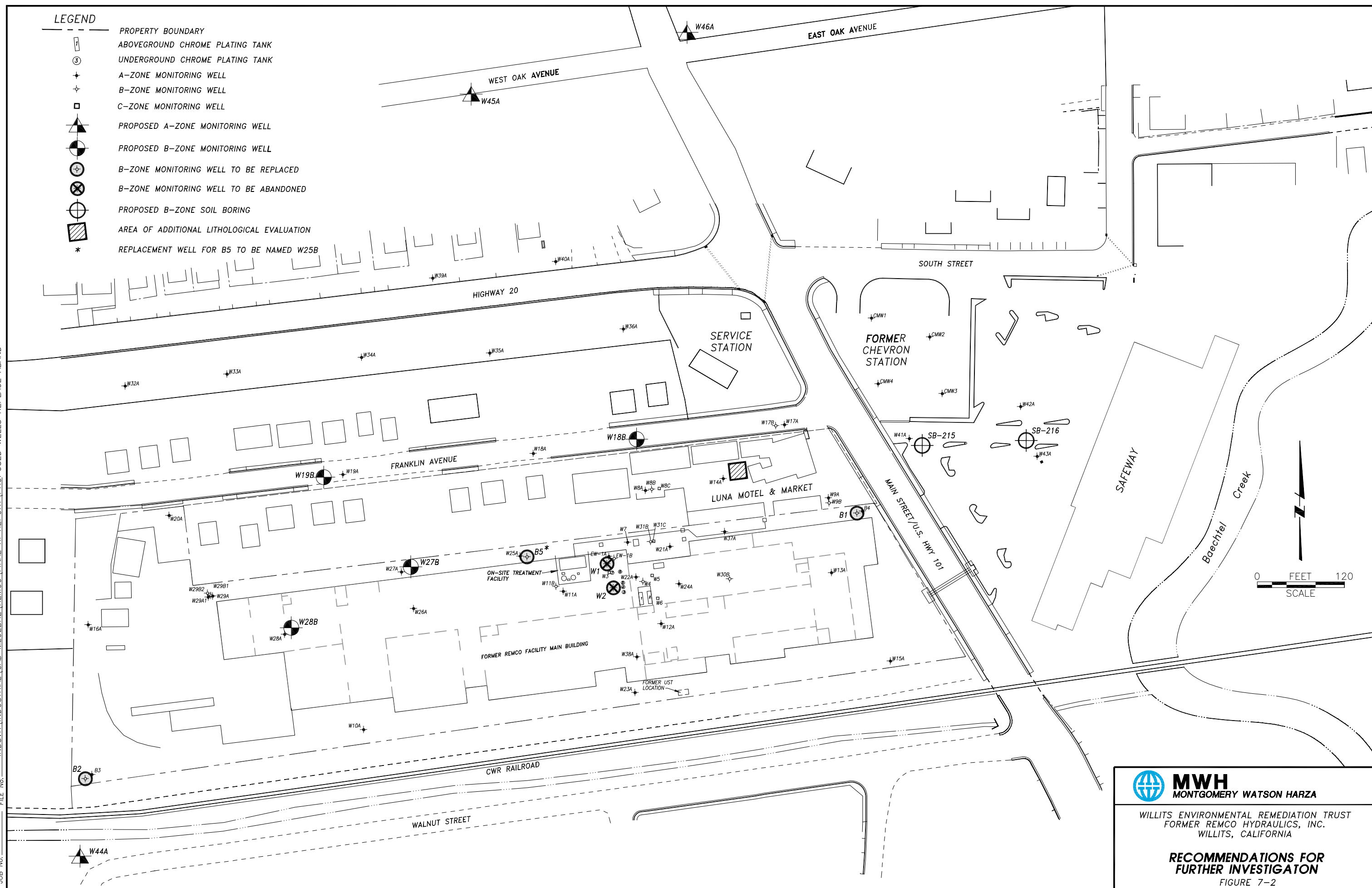


TABLE 2-1

MSDS SUMMARY
Willits Environmental Remediation Trust
Former Remco Hydraulics Facility
Willits, California
 (Page 1 of 9)

Product Name/Shipping Name	Ingredients
1,1,1-trichloroethane (methyl chloroform)	
2-butoxyethanol	
55 O-ring lubricant	dioctyl sebacate, lithium stearate, phenyl-alpha-naphthylamine,
7206 degreaser	(alkalinity expressed as)sodium oxide
acid reagent	potassium pyrosulfate
activator #1 solution	sulfuric acid
adhesive, quick set (404)	methyl cyanoacrylate, poly (methyl methacrylate), hydroquinone,
adhesive, sealant (222)	hydroperoxide, n,n-dialkyltoluidine, saccharin, cumene hydroperoxide, polyglycol dimethacrylates, polyglycol oleates, sulfimide, silicon dioxide
adhesive, sealant (271)	n,n-dialkyltoluidine, polyglycol dimethacrylates, bis-phenol A fumarate resin, sulfimide, hydroperoxide
adhesive, sealant (277)	n,n-dialkyltoluidine, polyglycol dimethacrylates, bis-phenol A fumarate resin, sulfimide, hydroperoxide
adhesive, sealant (PL-200 Contech)	hexane
aeroshell grease 6	paraffinic distillates, solvent refined: hydrotreated heavy-, inorganic clay, fatty acid amides
aerospace hydraulic fluid (brayco 756)	tri-phenyl phosphate
aerospace hydraulic fluid (brayco 783C)	tri-cresyl phosphate
aluminum sulfate, hydrate	anhydrous salt
amercoat (aliphatic polyurethane 450 HS cure)	butyl acetate, methyl n-amyl ketone, polyisocyanate adduct,
amercoat (aliphatic polyurethane 450 HS resn)	naphthanil red pigment, monoazo organic yellow, cycloaliphatic hydrocarbon solvent, pthalo blue, silica (quartz), methyl n-amyl ketone, oxohexyla acetate, carbon black, titanium dioxide, iron oxide, calcium silicate, chromium oxide, xylene, benzene
amercoat (aliphatic polyurethane 450 HS)	acrylic resin copolymer, acrylic resin, chromium oxide, yellow iron oxide, monoazo organic yellow, novoperm yellow, iron oxide, monastral red, calcium silicate, silica (quartz), oxohexyl acetate, methyl n-amyl ketone, flow control additive, azo yellow, silica (amorphous), colloidal silica, propylene glycol methyl ether acetate, butyl acetate, titanium dioxide, carbon black, phthalo blue, quinacridone violet
amercoat (aliphatic polyurethane 450GL cure)	polyisocyanate resin, toluene, xylene, n-butyl acetate
amercoat (cleaner)	toluene, acetone
amercoat (epoxy primer)	iron oxide, 1-T-butoxy-2-propanol, clay, high flash naphtha, talc, xylene, epoxy resin, titanium dioxide
amercoat (epoxy primer, cured 83HS resn)	magnesium silicate, zinc phosphate, methyl n-amyl ketone, epoxy resin, propylene glycol methyl ether, methyl isobutyl ketone, rheology additive, ethyl benzene, titanium dioxide, iron oxide, xylene, epoxy resin
amercoat (polyamide primer)	high flash naphtha, 1,2,4-trimethyl benzene, propylene glycol butyl ether, chromium oxide, carbon black, ethyl benzene
amercoat (polymide epoxy 383HS resn)	talc, xylene, epoxy resin, titanium dioxide
amercoat (polymide epoxy 385HS cure)	ethyl benzene, high flash naphtha, clay, 1,2,4-trimethyl benzene, propylene glycol butyl ether, chromium oxide, iron oxide, carbon black
amercoat (polymide epoxy 385 resn)	talc, xylene, epoxy resin, titanium dioxide
amercoat (polymide epoxy 385 cure)	magnesium silicate, xylene, high flash naphtha, heavy aromatic naphtha, polyamide resin nonyl phenol, 1,2,4-trimethyl benzene
amercoat (polymide epoxy 385 resn)	clay, high flash naphtha, methyl n-amyl ketone, propylene glycol t-butyl ether, epoxy resin, 1,2,4-trimethyl benzene, azo permanent yellow, phthalo blue, titanium dioxide, carbon black, chromium oxide, yellow iron oxide
amercoat (thinner 10)	methyl isobutyl ketone, toluene, xylene, VM&P naphtha
amercoat (thinner 7)	methyl n-amyl ketone, high flash naphtha, 1,2,4-trimethyl benzene, xylene
amercoat (universal primer)	1,2,4-trimethyl benzene, barium metaborate, ethyl ethoxypropionate, high flash naphtha, xylene, magnesium silicate, titanium dioxide, clay, butyl acetate

TABLE 2-1

MSDS SUMMARY
Willits Environmental Remediation Trust
Former Remco Hydraulics Facility

Willits, California

(Page 2 of 9)

Product Name/Shipping Name	Ingredients
amercoat (vinyl copolymer 33)	chromium oxide, carbon black, mica, chlorinated paraffin, methyl ethyl ketone, iron oxide, toluene, methyl isobutyl ketone, titanium dioxide, vinyl chloride resin
amercoate (thinner 101)	aromatic hydrocarbons, cycloparaffin
amerlock (epoxy, high-solids)	1,2,4-trimethyl benzene, rheological additive, phthalo blue, epoxy resin, magnesium silicate, titanium dioxide, chromium oxide, iron oxide, propylene glycol butyl ether, high flash naphtha, carbon black
amerlock (epoxy, high-solids, 400 cure)	barium sulfate, silicate, magnesium silicate, xylene, ethyl benzene, furfuryl alcohol, clay, amine carboxylate, polyamine, polyamide resin, monyl phenol
amershield (resin)	copper (fume, green), methyl n-amyl ketone, methyl ethyl ketone, 1 methoxy, 2-propanol acetate, calcium metasilicate titanium dioxide, lead chromate, iron oxide, carbon black
Bioact DG-1	terpene hydrocarbons
Bioact MC-1 metal cleaner	terpene hydrocarbons
Bioact MC-2	terpene hydrocarbons
Bioact MC-3	terpene hydrocarbons
Bioact VS-5	listed: non-haz
buffer solution, PH 4	potassium hydrogen, phthalate
buffer solution, PH 7	potassium phosphate, monobasic, sodium phosphate, dibasic
C-100 A / C-101 A	diphenylmethane diisocyanate, structurally similar isomers
C-410 B	diethylene glycol, chlorinated phosphate ester, trichlorofluoromethane
carboline 1037 WP	isopropyl alcohol, n-butyl alcohol, zinc chromate, phosphoric acid, xylene, methanol, ethanol
carboline 190 HB part A	MIBK, talc, color pigment, xylene, toluene
carboline 890 part A	silica, epoxy resin, color pigment, mica, toluene, isopropanol, methyl ethyl ketone, barium metaborate
carboline 890 part B	isopropanol, aromatic solvent, silica, xylene, cycloaliphatic amine, aliphatic amine
carboline 893 part A	silica, epoxy resin, color pigment, mica, toluene, isopropanol, methyl ethyl ketone, barium metaborate
carboline 893 part B	aromatic solvent, isopropanol, silica, aliphatic amine, toluene, quaternary ammonium
carboline urethane convertor 811	polymeric hdi, aromatic solvent, butyl acetate, hdi isocyanate
carboline zinc filler	ethyl alcohol, isopropanol, ethylene glycol mono butyl ether, methanol, zinc powder, lead
carbomastic 14 part A	silica, xylene, toluene,
carbomastic 14 part B	coal tar, silicate, xylene, aliphatic amine, TETA, pm solvent
carbon steel	iron, carbon, manganese, phosphorus, sulfur
carbozinc 11 HS Base	alkyl silicate, ethyl alcohol, silica amorphous, pm solvent, mica, color pigment
carbozinc HS activator	pm solvent, n-butanol, titanate, zinc chloride
carbozinc II SG (Green)	methanol, lead chromate as Cr, lead, zinc dust, ethanol, isopropanol, ethylene glycol mono butyl ether
caterpillar 5H2471 cement	aliphatic petroleum distillate*, methyl ethyl ketone (MEK), acetone, toluene cyclopentane, cyclohexane, magnesium oxide, phenolic resin, bisphenol, hexane, 2-methyl pentane, 3-methyl pentane, polychloroprene elastomer, zinc oxide, amine hardener, epichlorohydrin/, sodium acetate, (may contain up 0.5% benzene)
catho coat 302H clear converter	methyl n-amyl ketone, modified aliphatic amine, n-butyl alcohol, polyamide resin
cemented tungsten carbide	chromium, tungsten carbide, cobalt sulfate, tantalum carbide, chromium carbide
chloroform	chloroform, ethanol
chromaver 3	potassium pyrosulfate, magnesium sulfate heptahydrate
chromic acid	chromic trioxide

TABLE 2-1

MSDS SUMMARY
Willits Environmental Remediation Trust
Former Remco Hydraulics Facility
Willits, California
 (Page 3 of 9)

Product Name/Shipping Name	Ingredients
chromium 1 reagent	lithium hydroxide, lithium hypobromite, sodium sulfate, anhydrous,
chromium 2 reagent	5-sulfosalicylic acid, dihydrate, sodium sulfate, anhydrous, CDTA trisodium salt,
cimstar qual star	ethanolamine, nonylphenoxypolvetoxyethanol, mineral oil,
compenol	morpholine-diethylene oximide, poly glycol, azimidobenzene, diethylene imidoxide dye, silicon antioam polyoxyethylene phenyl ether phosphate, nitrilotriethanol, propane-diol, aryl carboxilate
corrosion inhibitor (CRC 3-36 aerosol)	1,1,1-trichloroethane, high flash aliphatic hydrocarbon, carbon dioxide (propellant), non VOC corrosion inhibitor in high flash paraffinic oil
corrosion preventive (brayco 137)	aliphatic petroleum dist
corrosion preventive (brayco 153)	aliphatic petroleum dist
corrosion preventive (brayco 194)	aliphatic petroleum dist
corrosion preventive (brayco 202)	organic calcium salt, petroleum hydrocarbon
crystal clear acrylic	propane isobutane, toluol, MEK, butyl cellosolve, methylene chloride
dimetcote	zinc dust, iron oxide, clay, ceramic, ethyl silicate polymer, ethyl silicate, iron oxide, isopropyl alcohol, sodium aluminosilicate, dibasic esters
dimetcote (12 liquid)	potassium hydroxide, magnesium aluminum, silicate,
dimetcote (12 powder)	zinc dust, calcium silicate
dimetcote (21-5 liqd)	potassium silicate, potassium hydroxide, silica (amorphous),
electrolyte alkaline chrome solution	chromium (III) compounds, ammonium hydroxide
electrolyte nickel/cobalt solution	nickel sulfate, cobalt sulfate, acetic acid, formic acid
electroplating cadmium solution	cadmium oxide, sulfuric acid
electroplating high speed copper	methane sulfonic acid, copper sulfate
enamel (gloss finish)	mineral spirits, xylene, lt aromatic naphtha,
enamel (mac yellow gloss)	alkyd resin solution, SC-150, VM&P naphtha,
enamel (mobilthane, curing agent)	polyisocyanate, cellosolve acetate, ethyl acetate,
enamel (mobilthane, endeavor blue)	ethylbenzene, VM&P naphtha, cyclohexanone, n-butyl acetate, n-propyl acetate, cellosolve acetate
enamel (mobilthane, plastic blue)	ethylbenzene, VM&P naphtha, cyclohexanone, n-butyl acetate, n-propyl acetate, cellosolve acetate
enamel (mobilthane, white base)	ethylbenzene, VM&P naphtha, n-butyl acetate, cyclohexanone, n-propyl acetate, cellosolve acetate
enamel (munsell blue)	calcium drier, rutile titanium dioxide, magnesium silicate, tinting colorant, silicone alkyd resin, montmorillonite silicon dioxide, nepheline syenite, aliphatic hydrocarbon, methyl alcohol
enamel (yellow lead-free)	mineral spirits, VM&P naphtha, xylol,
enamel black air dry	methyl ethyl ketone (MEK), carbon black, silica, talc, xylene
enamel black aqua fast dry	n-butyl alcohol, butyl cellosolve
enamel black caterpillar	calcium carbonate, methyl n-amyl ketone, xylene, n-butyl propionate, talc, ethylbenzene, 2-butoxyethyl acetate, carbon black
enamel centari acrylic	toluene, xylene, methyl ethyl ketone, VM&P naphtha, aromatic hydrocarbons, polyester resin, acrylic resin, mineral spirits
enamel white gloss aqua	metal soap driers, pigments, resin, butyl alcohol, aqua ammonia
endox Q576	sodium hydroxide, diethylene glycol monobutyl ether, sodium sulfite,
envirotech premium red oxide alkyd primer	aromatic hydrocarbon mixture, methyl n-amyl ketone, methyl propyl ketone, n-butyl acetate, barium sulfate, silicon dioxide, silica dust, hydrocarbon mixture, aromatic hydrocarbon, ester
envirotech premium red oxide alkyd primer (shop prime)	silicon dioxide, methyl n-amyl ketone, methyl propyl ketone, ester, xylene, n-butyl acetate
epoxy	butyl acetate, n-butyl alcohol, cyclohexanone, methyl ethyl ketone, strontium chromate crystalline silica-quartz
epoxy (bar rust 235 clear converter)	amine compound, high flash naphtha, n-butyl alcohol, toluene

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MSDS SUMMARY
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Product Name/Shipping Name	Ingredients
epoxy (bar rust 235 multi purpose coating)	cyrstalline silica, epoxy resin, high flash naphtha, hydrocarbon resin, iron oxide, magnesium silicate, methyl n-amyl ketone, mica n-butyl alcohol, plasticizer, titanium dioxide,
epoxy (devlan 229 clear converter)	high flash naphtha, phenolic ompound, polyamide resin, xylene
epoxy (lt. Gray)	n-butyl alcohol, methyl n-amyl ketone, alkyl glycidyl ether, epoxy resin
epoxy (modified)	butyl acetate, n-butyl alcohol, strontium chromate, cyclohexanone
epoxy (off-white hydrocarbon)	epoxy resin, xylene, aromatic petroleum solvent, methyl n-amyl ketone, feldspar
epoxy (primer green)	butyl acetate, n-butyl alcohol, methyl n-amyl ketone, methyl ethyl ketone, epoxy resin, strontium chromate, crystalline silica-quartz
epoxy 264T24 - Curing Agent	w/ (chloromethyl)oxirane, diisobutyl ketone, aromatic naphtha, epoxy resin, 4,4-(1-methylethylidene)bis-polymer, methyl amyl alcohol, heptanone, solvent naphtha (pet.), phenol pentanol, ethanol, 2-ethoxy
epoxy adhesive (gray)	amide, aluminum silicate pigment, carbon black,
epoxy adhesive part A (gray)	amine terminated polymer, kaolin, carbon black,
epoxy adhesive part B (gray)	epoxy resin, kaolin
epoxy amidoamine	propylene glycol monomethyl ether, methyl n-amyl ketone, fatty amidoamine resin,
epoxy component B activator (fast dri)	epoxy resin, xylene, cycol-sol 63, ethylene glycol monethyl ether
epoxy curing agent (891T1R VC HB)	naphtha, silicic acid, n-butyl alcohol, VM&P naphtha, toluene
epoxy gray base tank coating	cellosolve solvent, aromatic naphtha, VM&P naphtha, talc, titanium dioxide, epoxy resin
epoxy hi-build (curing agent)	ethanol, xylene, polyamide based res., toluene, n-butyl alcohol, naphtha
epoxy hi-build enamel (part A)	butyl acetate, magnesium silicate, titanium dioxide, modified diglycidyl ether of bisphenol A, alkyl glycidyl ether, PM solvent
epoxy hi-build enamel (part B)	polyamide resin, aromatic 100
epoxy hi-build white base	epoxy resin, butyl cellosolve, methyl ethyl ketone, n-butyl acetate, xylene
epoxy polyamide	solvent naphtha, xylene, propylene glycol methyl ether acetate, diacetone alcohol, xylol, solvent PM, butyl acetate
epoxy polyamide (385 cure)	magnesium silicate, xylene, high flash naphtha, heavy aromatic naphtha, polyamide resin, nonyl phenol, 1,2,4-trimethyl benzene
epoxy polyamide (gloss epoxy)	xylene, solvent naphtha, propylene glycol methyl ether acetate, diacetone alcohol
epoxy polyamide (rucker blue)	epoxy resin, xylene, methyl isobutyl ketone, propylene glycol methyl ether acetate, propylene glycol methyl ether
epoxy polyamide activator	ethyl benzene, toluene, isopropanol alcohol, xylene, polymide resin
epoxy polyamide activator (top coat)	polyamide polymer, xylene, cycol-sol 63, ethylene glycol monoethyl ether
epoxy polyamide curing agent	butyl alcohol, isopropanol alcohol, xylene, ethylene glycol butyl ether
epoxy polyamide primer	epoxy resin, strontium chromate, titanium dioxide, isopropyl alcohol, isopropyl alcohol, methyl ethyl ketone, toluene, xylene, ethyl benzene
epoxy polyamide primer (green)	n-butyl alcohol, epichlorhydrin/bisphenol epoxy, high flash naphtha,
epoxy primer	alkyl glycidyl ether, polyamide resin, PM solvent, butyl acetate, aromatic 100, titanium dioxide, silicon dioxide, magnesium silicate, titanium dioxide, modified diglycidyl ether of Bisphenol A
epoxy primer (part A)	alkyl glycidyl ether, PM solvent, butyl acetate, silicon dioxide, titanium dioxide, magnesium silicate, modified diglycidyl ether of Bisphenol A
epoxy primer (part B)	polyamide resin, aromatic 100
epoxy primer (green)	epoxy resin, butyl acetate, n-butyl alcohol, cyclohexanone, methyl ethyl ketone, strontium chromate, crystalline silica-quartz
epoxy primer (yellow)	diatomite, xylene, methyl isobutyl ketone, propylene glycol methyl ether, epoxy resin, chromium
epoxy reactor	methyl n-amyl ketone, mineral spirits, diethylenetriamine, amine compound, polyamine adduct, alkyl glycidyl ether
epoxy resin	alkyl glycidyl ether diluent, bisphenol, polyester acrylate,
epoxy thinner (4093)	xylol, butyl acetate, PM solvent,
epoxy thinner (5 part solvent T-605)	butyl alcohol, toluene, 2-butanone, methyl ethyl ketone, n-butyl acetate, propylene glycol methyl ether acetate

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Product Name/Shipping Name	Ingredients
epoxy thinner (type II)	methyl ethyl ketone, methyl isobutyl ketone, 2-ethoxyethanol
epoxy white base tank coating	epoxy resin, cellosolve solvent, aromatic naphtha, xylene, talc, titanium dioxide, epoxy resin
epoxy-amidoamine	propylene glycol monomethyl ether, methyl n-amyl ketone, fatty amidoamine resin,
ethyl silicate - zinc dust	isopropanol, solvent naphtha, lt. Arom., propylene glycol, zinc oxide, zinc dust, lead inorganic, xylene
fast dri epoxy	epoxy resin, xylene, ethylene glycol monoethyl ether, cycol-sol 63
fire resistant hydraulic fluid (brayco micronic 882)	triphenyl phosphate
fire resistant hydraulic fluid (pydraul 29E)	2-ethylhexyldiphenyl phosphate ester blend, triphenyl phosphate
flow control (series 1000)	toluene, cyclohexanone, ethyl ethoxypropionate, ketone
formula 20-L	aminotris (methylphosphonic acid)
formula 291	sodium hydroxide
fuser lubricant	polydimethylsiloxane
Garia G cutting oil	naphthenic base stocks, active sulfur, chlorine, fatty oils
gasket sealant (eliminator 515)	cumene hydroperoxide, saccharin, acetylphenylhydrazine, polyurethane methacrylate resins, polyglycol dimethacrylates, acrylic acid, silicon dioxide
genklene a	1,1,1-trichloroethane, 1,4-dioxane
Grade AVV	polyglycol dimethacrylates, bis-phenol A fumarate resin, hydroperoxide, N,N-dialkyltoluidines, sulfimide
heatlab	hexamethylenetetramine
high density toner for series III 30/40/50/60/70/85	acrylic copolymer, polymerized fatty acid amide, styrene copolymer, maleated resin, carbon black, silicon dioxide
honing stones	aluminum oxide, aluminum (metal), boron oxide, calcium oxide, copper (metal), fiberglass, fluorides (fluorine), silica, tin (metal, as inorganic)
houghto-safe 520	ethylene glycol, diethylethanolamine
hydranal	methanolic solution contains imidazole & sulfur
hydranal solvent	methanolic solution, w/imidazole & sulfur dioxide
hydraulic fluid (AM1)	solu. Ref. Petroleum base stock
inconel steel	nickel, manganese, iron, chromium, trace elements
Inorganic salt	ferous sulfate
interthane PU curing agent	hexamethylene diisocyanate, xylene, aromatic petroleum solvent, n-butyl acetate, homopolymer of hexamethylene diisocyanate
isopropyl 99	isopropanol
isopropyl alcohol	
Kleer-Aid 5A	listed: non-haz
korofon curing solution	phosphoric acid, isopropyl alcohol, toluene, n-propanol, aliphatic amine, organosilane ester
kronofloc 62-A	sodium acrylate, acrylamide, mineral oil,
low alloy steel grades	nickel, carbon, manganese, iron, chromium
lubricant mist oil	listed: non-haz
lubricating oil	petroleum hydrocarbons, organic zinc dithiophosphate, polymethacrylate, substituted calcium benzoates
magnesium perchlorate	possible traces of perchloric acid
marine oil (brayco 495)	listed: non-haz
metals alloy steel grades	nickel, carbon, manganese, iron, chromium, aluminum, chromium, cobalt, copper, iron manganese, molybdenum, nickel niobium, silicon, titanium, tungsten,
metco flame spray masking tape	fiberglass, polysiloxane
metco gearlube	sodium stearate, calcium complex

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Product Name/Shipping Name	Ingredients
metco seal SA (acrylic silicone)	isobutyl acetate, diacetone alcohol, xylene, butyl cellosolve, methyl ethyl ketone, denatured ethyl alcohol, toluene, skelly-solv S
metco seal ST-1	isopropyl alcohol anhydro, methyl isobutyl ketone, diisobutyl ketone, toluene
methyl ethyl ketone	
methylphenylpolysiloxane fluid	listed: non-haz
Mil-H-5606F...	petroleum base
Mobilarma 355	listed: non-haz
monel steel grade K-500	nickel, carbon, manganese, iron, sulfur
MP lithium grease grade 2	disclosure available to physician in emergency
nickel base alloys	Fe, Cr, Cu, Mn, Mo, Ni, Cb, Ti, Al W, Co
nonylphenoxypoly ethanol	
Nox rust VCI 10	petroleum oil, morpholine, amine soaps, esters
Nu-Klad	silica (quartz)
oil screening kit	ethanol, sodium dispersion, ethyl diglyme, naphthalene, mercuric nitrate
paint	n-butyl alcohol
paint (2533 gray primer)	talc, T102, black, chromate, vicron pigments, VM&P naphtha, calcium, lead, cobalt driers,
paint (541 terex green)	yellow, green, T102 pigments, VM&P naphtha, lead, calcium, cobalt driers,
paint (603 gray primer)	mineral spirits, VM&P naphtha, non-toxic solvent,
paint (alkyd primer, red oxide 6533)	alkyd resin solution, aliphatic hydrocarbon, pigments, zinc potassium chromate, zinc oxide, magnesium silicate
paint (am-e-pox white)	titanium dioxide, 2-butoxyethanol, methyl amyl ketone, xylene
paint (aqua red oxide)	pigments, resin, butyl alcohol,
paint (caterpillar yellow)	titanium dioxide, 1,2,4-trimethyl benzene, heavy aromatic naphtha, mineral spirits, VM&P naphtha, xylene, yellow iron oxide, lt. Aromatic naphtha, ethylbenzene
paint (caterpillar yellow-Molina Co.)	titanium dioxide, hvy aromatic naphtha, aliphatic petroleum distillates, xylene, lt aromatic naphtha, mineral spirits, iron oxide
paint (green gray primer)	epoxy resin, polycalcium silicate, barium sulfate, zinc dust, methyl n-amyl ketone, cyclohexanone, n-butyl alcohol
paint (green primer)	n-butyl alcohol, 1-butanol, polyamide resin,
paint (Huber)	aluminum silicate, methanol, mica, ethyl silicate, ethyl alcohol, silica, isopropanol, 2-butoxy ethanol, methyl silicate
paint (koroetch primer base)	isopropyl alcohol, zinc chromate, n-butyl alcohol,
paint (lac. Dark green)	mineral spirits, lead chromate as Pb, lead chromate as Cr, xylene, methyl propyl ketone, VM&P naphtha, toluene
paint (locquic primer aerosol)	1,1,1-trichloroethane, carbon dioxide, tert-butyl alcohol, methylal, 2-ethylhexanoic acid, organo-copper compound, trialkylammonium carboxylate
paint (locquic primer-T)	1,1,1-trichloroethane, isopropyl alcohol, n,n-diakyltoluidine, thiol
paint (no. 5807)	n-butyl alcohol, 1-butanol, polyamide resin, palyamide resin
paint (organic zn rich primer)	toluene, propylene glycol monomethyl ether acetate
paint (poly #11136 red)	butyl acetate, methyl isobutyl ketone, polyester resin, methyl n-amyl ketone, methyl propyl ketone, polyester resin, red iron oxide, manganese carbonate, toluene, titanium dioxide, methyl ethyl ketone
paint (poly #17875 tinted)	butyl acetate, methyl isobutyl ketone, polyester resin, ethyl acetate, titanium dioxide
paint (poly activator)	aliphatic polyisocyanate, methyl n-amyl ketone cyclohexanone, xylene, ethyl benzene, toluene
paint (red oxide aqua primer)	cellosolve, butyl cellosolve, dimethyl ethanolamine,
paint (red oxide primer, alkyd air dry)	methyl isobutyl ketone, methyl n-amyl ketone, ethyl benzene, xylene, methyl n-propyl ketone
paint (red primer)	ester, silicon dioxide, n-butyl acetate,

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Product Name/Shipping Name	Ingredients
paint (red)	red iron oxide, manganese carbonate
paint (rucker blue)	acrylic resin, epoxy resin, hexyl acetate, n-butyl acetate, n-butyl alcohol, propylene glycol monomethylether acetate, propylene oxide, xylene
paint (sd curing solution)	butyl acetate, aliphatic polyisocyanate, methyl n-amyl ketone, xylene, ethyl benzene, methyl ethyl ketone
paint (shell yellow)	xylene, propylene glycol monomethyl ether acetate, proprietary ester,
paint (super D curing solution)	aliphatic polyisocyanate, hexane, methyl ethyl ketone, xylene, ethyl benzene, 2-ethoxyethyl acetate
paint (tile red)	butyl acetate, n-butyl acetate, butyl cellosolve, methyl ethyl ketone, VM&P naphtha, talc, iron oxide, epoxy resin
paint (vinyl wash -Simpson Co.)	butyl alcohol, isopropanol, anhydrous, phosphoric acid,
paint (white copon)	2-ethoxyethanol, butanol, 2-butoxyethanol, isopropanol, toluene, 2-butanone, naphtha
paint (white)	titanium dioxide, 2-butoxyethanol, methyl amyl ketone, xylene
paint (x-4959 red synthetic lacquer proof primer)	xylene, mineral spirits, toluene, phenylethane
paint (yellow oxide inhibitized primer)	alkyd resin, mineral spirits, xylene, manganese drier
paint (yellow)	iron oxide, dipropylene monoethyl ether, aqua ammonia, metal soap driers, xylene, mineral spirits, VM&P naphtha, titanium dioxide
paint (zinc chromate primer)	mineral spirits, lead alkanoate, titanium dioxide, iron oxide, zinc oxide, magnesium silicate, manganese alkanoate
paint (zinc chromate primer-Simpson Co.)	zinc chromate, potassium chromate, super VM&P naphtha, mineral spirits, lead naphthenate
paint (zinga)	trimethyl benzenes, ethyl toluenes, zinc,
petroleum (braycote 194)	aliphatic hydrocarbon
petroleum hydrocarbon solvent (brayco 900)	
PF degreaser	listed: non-haz
phenoline 368 finish	diethylene triamine, methyl isobutyl ketone, xylene, isopropanol, toluene
phenoline finish (part A)	aluminum silicate, color pigment, MIBK, glycidyl ether, dibutyl phthalate, toluene, VM&P naphtha, xylene
phenoline finish (part B)	isopropanol, MIBK, TMBDA, propyldiamine, nonyl phenol, aromatic solvent, phenol, polyamine adduct, deta, pm solvent, VM&P naphtha
phenoline primer (part A)	color pigment, aluminum silicate, MIBK, xylene, toluene, solvent
phenoline primer (part B)	ethoxyethanol, MIBK, isopropanol, VM&P naphtha, polyamine adduct, deta, epoxy resin, phenol, propyldiamine, TMBDA
phosphoric acid	
pipe sealant w/Teflon (592)	1-octanol, polytetrafluoroethylene, titanium dioxide, silicon dioxide, hydroperoxide, polyglycol dimethacrylates, bis-phenol A fumarate resin, MICA, polyglycol octoates
polyamide resin	n-butanol
potassium ferricyanide	nonylphenoxypropyl ethanol
quintolubric 822-220	listed: non-haz
reactor (Arex Corp.)	aromatic petroleum solvent, solvent naphtha, lt. Arom., epoxy resin,
reactor (F-150)	aromatic petroleum solvent, epoxy resin
reactor (MIL-P-24441)	aromatic petroleum solvent, epoxy resin
reducer (AM-E-POX)	acetone, toluene, lacquer diluent, isopropyl alcohol
reducer (AM-E-POX)	xylene, VM&P naphtha, n-butyl acetate,
reducer (solvent)	methyl n-amyl ketone
reducers (enamels, DuPont)	butyl acetate, n-butyl alcohol, toluene, isopropyl alcohol, diethylene glycol monobutyl ether, dibasic esters, ethyl acetate, propylene glycol methyl ether, xylene, aromatic hydrocarbon, VM&P naphtha
remover and thinner (dykem co.)	denatured alcohol, butyl acetate
resin component (P-15328D)	butyl alcohol, magnesium silicate, carbon black, isopropyl alcohol, organophilic clay
rust preventative (CRC 3-36)	high flash aliphatic hydrocarbon, 1,1,1-trichloroethane

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Product Name/Shipping Name	Ingredients
rust preventative (Nalco 6222)	hydrotreated heavy paraffinic dist., hydrotreated light dist.
rust spray thinner (inhibo)	aliphatic hydrocarbon
sand (crystal amber and monterey)	silica (quartz), crystalline quartz, free silica,
Shell motor oil (petrol.hyd)	sol. Ref. Hydrotreated, dewaxed hvy paraffinic dist., sol. Ref. Hydrotreatd residual oil, additive package,
Shell alvania EP grease 2	solvent refined petroleum distillates, lithium hydroxystearate
Shell hydraulic oil (petrol.hyd)	tellus oil 32, sol. Ref. Hydrotreated hvy paraffinic dist., minor additives,
Shell lubricating oil (petrol.hyd)	ashless dispersant, substituted calcium benzoates, calcium sulfonates, organic zinc dithiophosphate, fatty acid, modified benzotriazole petroleum hydrocarbons, hydrocarbon polymer, sulfurized oil, sulfurized fatty acids, polyether alcohol, polymethacrylate, polymethacrylate
Shell solvent 140 HT	solvent naphtha (petrol.), medium aliphatic
Shell transmission fluid (petrol.hyd. 53006)	donax TF fluid, sol. Ref. Hydrotreatd middle distillate, severely hydrotreated lt naphthenic dist., additive package
Shell transmission fluid (petrol.hyd. 53026)	donax TF fluid, sol. Ref. Hydrotreated dewaxed hvy. Paraffinic dist., severely hydrotreated hvy naphthenic dist., zinc dialkyl dithiophosphate
Shell turbine oil (petrol.hyd)	turbo oil 100, sol. Ref. Hydrotreated dewaxed hvy. Paraffinic dist., minor additives,
silastic	dibutyltindilaurate
silicon	dimethyl, methyl hydrogen copolymer, methyl hydrogen polysiloxane,
silicon rubber sealant	methyltriacetoxysilane
silicon sealant	methyltriacetoxysilane
sodium meta bisulfite	
solvent (140 66/3)	lt. Hydrotreated dist.
solvent (cellosolve)	2-ethoxyethanol
solvent (PF degreaser)	listed: non-haz
solvent (safety-kleen 105)	mineral spirits, dye, anti-static agent,
spray gun cleaner (#1012)	ethyl acetate, toluene
stainless oil AAA	mineral oil
stainless steel alloys	Fe, Cr, Cu, Mn, Mo, Ni, Si, Al, nickel, cobalt, manganese, iron, chromium
sulfuric acid	
tectyl 511 M	aliphatic petroleum distillates, ethylene glycol monobutyl ether
tectyl 900	barium petroleum sulfonate neutral, aliphatic petroleum distillate
tectyl rust preventative	aliphatic petroleum distillates
thinner (10)	xylene, methyl n-amyl ketone, n-butyl alcohol,
thinner (15)	xylene, pm solvent
thinner (2)	toluene, methyl ethyl ketone
thinner (21)	isopropanol, VM&P naphtha, mineral spirits,
thinner (310-117)	mineral spirits
thinner (5130)	aromatic solvent, alcohol, esters, glycol ethers, propylene glycol ether esters, aliphatic
thinner (5143)	solvent naphtha, xylene
thinner (7140)	methyl ethyl ketone
thinner (7T30)	cellosolve acetate
thinner (7-T-35)	isopropylacetate, cellosolve solvent, 2-heptanone, xylene, toluene, VM&P naphtha, n-butyl alcohol
thinner (carboline 21)	mineral spirits, petroleum hydrocarbon fraction, isopropanol,
thinner (carboline 26)	ethylene glycol mono ethyl ether

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Product Name/Shipping Name	Ingredients
thinner (carboline 33)	aromatic hydrocarbon, ethylene glycol mono ethyl ether
thinner (international)	xylene, propylene glycol methyl ether, methyl n-amyl ketone,
thinner (MIL-T-91772)	butyl acetate, methyl ethyl ketone, toluene, xylene
thinner (T-15)	propylene glycol monomethyl ether
thinner (T-3)	diacetone alcohol, xylene, propylene glycol monomethyl ether, ethylbenzene
thinner (T-5)	xylene
thinner (zinga)	trimethyl benzenes, ethyl toluenes, xylene, C-10 aromatics
thinners (lacquers) & cleaning solvents (DuPont)	butyl acetate, n-butyl alcohol, acetone, methyl alcohol, ethylene glycol monobutyl ether acetate, xylene, aromatic hydrocarbon, nonylphenoxypoly ethanol, toluene, isopropyl alcohol, dibasid esters, propylene glycol methyl ether, VM&P naphtha
toluene	
tool steel grade H-13	nickel, carbon, manganese, iron, chromium
tripoxy clear (tinted blue)	xylene, methyl isobutyl ketone, propylene glycol methyl ether acetate, propylene glycol methyl ether
Turco Dy-Chek Developer NA	isopropanol, silica amorphous (dust), calcium carbonate (dust), alumina
Turco Dy-Chek Developer NA PSU	isopropanol, trichlorotrifluoroethane, chlorodifluoromethane, dimethyl ether
Turco Dy-Chek Penetrant PSU	trichlorotrifluoroethane, linear alkylbenzene, solvent refined hydrotreated-, middle (petroleum) distillate
VL-64	terpene hydrocarbons
VS 902 metalworking fluid	sodium tetraborate
xylene	
zep super flash	ethyl glycol monobutyl ether, nonylphenoxypoly (ethyleneoxy) ethanol, sodium metasilicate, trisodium orthophosphate, sodium carbonate, sodium dodecylbenzene sulfonate
Zeparade Stripper	monoethanolamine, alkylaryl phosphate ester, nonylphenoxypoly ethanol, tetrasodium ethylenediamine-tetraacetate
zepcinch	nonylphenoxypoly ethanol

TABLE 2-2

CHROME PLATING TANK CONSTRUCTION SPECIFICATIONS
Former Remco Hydraulics Facility
Willits, California

Horizontal Chrome Plating Tanks				
Tank No.	Dimensions	Measured Depth (feet)	Approximate Capacity (gallons)	Date Constructed
1	14 ft. long by 5 ft. wide by 7 ft. deep	Not Available	3,500	~1964
2	12 ft. long by 5.5 ft. wide by 6.8 ft. deep	Not Available	3,200	~1964

Vertical Chrome Plating Tanks				
Tank No.	Dimensions	Measured Depth (feet)	Approximate Capacity (gallons)	Date Constructed
3	3 ft. in diameter and 32 ft. deep	32.11	1,600	1968
4	4 ft. in diameter and 38 ft. deep	38.25	3,500	1973
5	3 ft. in diameter and 20.5 ft. deep	20.21	1,000	1972
6	4 ft. in diameter and 48' 8" ft. deep	48.80	4,700	1977
7	4 ft. in diameter and 70 ft. deep*	59.85	6,400	~1981
"Anode Tank"	2.5 ft. in diameter	37.60	Unknown	Unknown
"Alkali Tank"	3 ft. in diameter	31.70	Unknown	Unknown

Notes:

Horizontal chrome plating tank dimensions and construction dates are based on former employee testimony.

Vertical chrome plating tank dimensions and construction dates are based on "Monitoring Well Installation Report",

ERM-West, March 29, 1991

Measured Depths from 8/30/01.

* In approximately 1981, a 20 ft. rod spacer was reportedly installed at the base of a tank and a new 50 ft. inner tank was installed.

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
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Event Date	Reference	Description	Comments
Historical	RWQCB Interoffice Memorandum 11/16/81	Describes the RWQCB's understanding of chrome plating operations as follows: "a piece to be plated was cleaned with caustic, laid into a bath, direct current was applied and in a few hours it was plated. Then you dragged it out, rinsed it off and polished to finish. Liquids from 'drag-out' and 'rinse' steps soaked into the ground or otherwise went away. Besides chrome solutions, acids and caustics, we know that chlorinated organic solvents, zinc chromate, and diesel fuels have been used and spilled (probably and certainly) on the site."	Does not indicate basis for information. Specific dates are not available.
9/70	Department of Fish and Game Memorandum 11/18/70	Memorandum summarizes the Dept of Fish and Game investigation of complaints received regarding alleged Remco discharges to Baechtel Creek. The memorandum states that Remco president, Reinhardt, stated that "'small' spills from acid vats or wash-down operations did enter the discharge stream and that chromic acid was among the chemicals spilled."	Specific dates of spills were not available.
1/71	Remco Hydraulics, Inc. letter to RWQCB 1/20/71	States that the "drag-out" from various processing tanks enters the drainage ditch on the north side of the Facility's property. The letter further states that: "The contents of all tanks are never pumped directly into the ditch. However, drag-out and rinse from tank No. 3 and the occasional overflow or pumping of sump has gone into the 'ditch'."	Contents of unspecified "processing tanks" is said to include: "1) Black oxide 'Houghto Black 15' 10 pounds per gallon 2) Alkali cleaner Q547 3) Rinse clear water 4) Sulfuric acid 15% solution 5) Rinse clear water 6) Zinc phosphate 'Granodraw No. 6' 3.6% solution 7) Manganese phosphate 10% solution 8) Rinse chromic acid hardener 2% chromic acid 9) Organic soap" Contents of Tank No. 3 are not specifically stated.
8/4/71	County of Mendocino Department of Public Health, letter to the RWQCB 8/5/71	States that: 'Yesterday I inspected the stream (Baechtel Creek at Willits) where the industrial waste from Remco discharges. The stream is yellow and as you probably know, the wastes contain hexavalent chromium.'" No samples were obtained.	Indicates possible release of chromic acid at Facility resulting in storm water discharge to creek.

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
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Event Date	Reference	Description	Comments
5/17/73	County of Mendocino, Division of Environmental Health, Complaint Investigation Report 5/17/73	Indicates that the County received complaints from residents in area of Remco, stating that "Remco is dumping the acid, etc. from tanks into Baechtel Creek, " and that there were "a lot of fish - (dead) on the bank."	Complaint Investigation Reports are poor copies and almost illegible.
8/7/73	RWQCB Chronology of Events 8/7/73	RWQCB inspection of Remco discharge and facility. Samples were taken (unspecified) and the discharge from the Remco facility was yellow. The actual inspection log was not available. Analytical reports were not found.	Yellow discharge (may suggest possible release of wastewater that may have contained chromium) into a drainage ditch running along the north side the Facility by which surface flow could have taken such materials to Baechtel Creek when it rained.
12/20/73	RWQCB Inspection Report of Remco 12/20/73	Cooling water noted to be yellow indicating a leak in the cooling water line.	Cooling water may have discharged onto ground surface. Bleed off was documented to have discharged to ground prior to discharging through storm drain.
1/14 and 1/18/74	RWQCB Interoffice Memorandum 1/22/74	Describes inspection of "outside chrome waste holding tank" on January 14, 1974 and January 18, 1974. On January 14, RWQCB stated the "the tank was full and still received rainwater." On January 18, RWQCB stated that "the outside tank was still full." Based on these observations, the memorandum further states: "Heavy rains continuously fell since my visit on the 14th [January 14, 1974]. Rainfall on the outside chroming area is collected by a drain and sent into the outside tank. I, therefore, suspect that the outside tank discharge continuously during the week of January 14. In addition, Remco has reported a discharge of 400 gallons of chromic acid occurs each operating day. This amounts to a 2,000 gallon discharge."	Indicates specific release of chromium from sump for period of five days.
1/18/74	Laboratory Report Breije and Race 1/29/74	Sampled contents of sump and cooling water discharge on January 18, 1974. Submitted to laboratory on January 21, 1974. Lab reported 67.0 mg/L hexavalent chromium in outside sump sample and 9.6 mg/L in cooling water discharge.	

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
Willits, California
(Page 3 of 6)

Event Date	Reference	Description	Comments
9/13/74	RWQCB Interoffice Memorandum 10/7/74	Memorandum reports that Mrs. Barker had noted milky substance floating on Baechtel Creek on September 13, 1974. On September 16, 1974, Mr. Clark (Remco) claimed that a diesel line had been ruptured and diesel flowed into the drainage ditch.	No specific dates on diesel release.
9/14/74	RWQCB Interoffice Memorandum 10/7/74	Memorandum indicates that the City Fire Marshall observed chromic acid discharge on September 14, 1974 and summarizes September 14 observations of others.	Specific release of chromic acid onto ground surface at Facility.
9/16/74	County of Mendocino letter to RWQCB 9/23/74	RWQCB (Mr. Dunbar) conducted site inspection and observed that "the outside chromic acid sump was full and had flowed onto the ground surface." Mr. Dunbar inspected Baechtel Creek and did not observe any evidence of discharges.	
9/19/74	County of Mendocino letter to RWQCB 9/23/74 and RWQCB chronology of inspection notes and 10/7/74 letter	An investigation by the Health Department of September 19, 1974, revealed the water surface coated with yellow oily substance at the bridge on Railroad Avenue. Mrs. Barker reported to RWQCB that "the discharge had occurred every day since about Labor Day."	
12/15/75	RWQCB Interoffice Memorandum 1/26/76	Discusses December 15, 1975 inspection of the former Remco facility, stating "In general, it looked good except for oil dripping from barrels in the lubrication oil storage area. Some of the drippings were slowly draining into the storm water drainage culvert."	
6/76	RWQCB letter to Remco 8/18/76	States that: "In review of past Monitoring Reports, [the RWQCB] find[s] that chromium levels have been detected in the storm water runoff. The June 1976 report indicates high chromium and oil and grease levels." RWQCB suggests Remco consider construction of "a roof over the barrel oil storage area outside."	

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
Willits, California
(Page 4 of 6)

Event Date	Reference	Description	Comments
11/76 to 5/77	RWQCB letter to Remco 5/22/77	Letter states that: "I have reviewed recent monitoring reports for storm water runoff at your plant in Willits. Five monthly report have been submitted for the period of November 1, 1976 through March 30, 1977. Those reports show excessive values of both chromium and oil and grease on several occasions." The letter further states that 4/11/77 inspection revealed that "[e]ighteen oil drums were mounted in an uncovered area with four drip pans under the spigots. Three of the pans did not have plugs in place, thus permitting drainage of oil onto the pavement into the drainage system."	Indicates release of oil related wastes in oil storage areas.
1/18/77 and 3/30/77	RWQCB letter to Remco 4/4/77	This letter states: "On January 18, 1977 and March 30, 1977, you experienced oil discharges which left visible sheens on Baechtel Creek. I have noted during my frequent inspections of the premises that lubricating oils and hydraulic fluids are used extensively in your machine shops and testing areas. In view of the large number of employees, extensive storm water drain system, and varied activities, I must conclude that consistent compliance with grease and oil effluent limitations can only be met with the installation of an oil/water separator at the northeast corner of your property prior to discharge to Baechtel Creek."	Indicates possible release of oil and grease in shop areas and testing areas.
5/23/77	Stan Ray letter to RWQCB 5/23/77	Suspected fuel oil leak was investigated by Remco. Discovered fuel oil in storm sewer at one of the seams located 37 feet into the storm drain pipe close to the cooling tower.	Remco plans to dig up area on 5/24/77.
5/77	Remco letter to RWQCB 6/2/77	Letter reports on "progress in removing contaminants from our storm drains." The fuel line was replaced and three new couplings were installed.	Remco plans to seal seams in storm drain.
4/81	Department of Fish and Game letter to Abex 5/4/81	Describes inspection of Remco on April 4, 1981, approximately one week after reported oil spill at the Facility. Oil sheen observed in discharge to Baechtel Creek at outfall. Mr. Berry (Remco) stated that the source of diesel was a "underground leak . . in a fuel transfer pipe . ."	

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
Willits, California
(Page 5 of 6)

Event Date	Reference	Description	Comments
4/81	Abex letter to Department of Fish and Game 5/19/81	Letter summarizes identification and remedy of diesel leak. Discovered 4/10/81 during excavation for jib crane footing. Shut off diesel line and excavated line. Discovered pin hole leaks in couplings. Storm drain line cleaned and wastes removed by "industrial waste hauler truck", 4/12 through 5/19. Diesel fuel line in replaced with above ground line. Diesel Recovery 'well' installed near location of leaks.	
8/10/81	Remco letter to RWQCB 8/19/81	Letter states "On the 10th of August we had a Chromic Acid spill. This was due to Chromic Acid getting into our cooling water from a pin hole in the heating-cooling coil in the chrome tank. From there it went to our outside holding tank and then was pumped to the cooling tower. The cooling tower has an overflow system that allows water to flow into the drainage culvert, there is also an overflow in the holding tank that lets water go into the drainage culvert. The culvert runs along the north side of the plant across the street under the Safeway stores parking lot and dumps into Baechtel Creek."	Cooling tower bleed off water containing small amounts of chromic acid from a leaking cooling tube was discharged to the drainage ditch running along the north side of the property which contained surface water when it rained. Samples of ponded water in Baechtel Creek were collected on 8/11, 8/12, 8/14, 8/17, 8/18 and 8/19 and analyzed for chromium.
6/14/82	Abex letter to RWQCB 6/25/82	Regarding June 14, 1982 "sodium hydroxide/boiler blowdown water spill into Baechtel Creek." States that the spill was caused by break in 2-inch PVC line from the boiler blowdown reservoir to the sewer, causing water to "perk up through the sandy soil".	Specific release of caustic wash water containing small amounts of chromium to the drainage ditch running along the north side of the property which contained surface water when it rained.
10/15/82	RWQCB Inspection of Remco Plant and Storage Yard 10/20/82	Discusses the 10/15/82 inspection of Remco storage yard at Bob Peters "Yard" and discussion regarding sorting and sampling of barrels: "Of the 261 barrels reported to be at the storage yard, 11 are empty, 2 are of the turquoise oil that was found to have 18 ppm PCB's, approximately 50 are of weak chromic acid solutions recovered from Aug '81 and June '82 chrome spills. The remainder are coolant and cutting oils. Dick took 12 samples of various barrels to be submitted that day (10/15) to Multitech for heavy metal, PCB + halogenated compounds." RWQCB further states that there was "[s]ome discussion on solvents. Kerosene was used and is still used, but it is now called premium diesel . . . TCA is used for the same type of cleaning and it also evaporates. No TCE was used at Remco."	
11/13/87	RWQCB letter to Abex 11/13/87	This letter describes the concrete well which originally was designed to clean up the diesel spill from 1982. "The surface of the water was visibly oily and there were several spent sorbent pads floating in the well."	

TABLE 2-3
CHEMICAL SPILLS, RELEASES
Former Remco Hydraulics Facility
Willits, California
(Page 6 of 6)

Event Date	Reference	Description	Comments
2/22/89	County of Mendocino, Division of Environmental Health, Complaint Investigation Report 2/22/89	Indicates that the County of Mendocino was contacted by an anonymous caller complaining that "waste oil that 'burns your nose' is being 'dumped' on the ground behind shop area. Chrome plating shop has had a [illegible] equipment -- no ventilation, both employees and neighbors are complaining of smell. Discharges of plating solution and chromium on ground behind shop area."	No actual release was confirmed by County.
1/3/90	RWQCB Interoffice Memorandum 1/3/90	Discusses RWQCB "inspection of extraction well, used for the 1982-83 diesel spill cleanup," and states that inspection "revealed water at a depth of 2.5 feet below ground surface with a slight sheen on the free water surface. There was also an odor of diesel from the well. I suggested they place absorbent pads on the surface and visually monitor the well more frequently."	

Source: RI/FS Work Plan (Henshaw, 1998a)

Notes:

RWQCB = Regional Water Quality Control Board

mg/L = milligrams per liter

ppm = parts per million

PCBs = polychlorinated biphenyls

TCA = trichloroethane

TCE = trichloroethene

TABLE 2-4
SUMMARY OF INVESTIGATIONS CONDUCTED BY REMCO AND CITY OF WILLITS
Former Remco Hydraulics Facility
Willits, California
(Page 1 of 4)

Date of Activity	Investigating Party	Activity	Report	In Response To:
January 1982	Alvin L. Franks (for Remco Hydraulics/Abex)	Completion of several borings by hand augering (northwestern corner of existing structure, in front of the lots to the north of the Remco property); Installation of extraction well CW	Petroleum Products in Groundwater, Abex Corporation Plant, Willits, California, January, 1982.	Diesel release identified by REMCO employees
February 1982	Alvin L. Franks (for Remco Hydraulics/Abex)	Installation of monitoring wells B-1 through B-4	Monitoring Wells, Abex Corporation, Remco Hydraulics, Willits California, 1982.	RWQCB letter dated November 16, 1981
April 1982	Alvin L. Franks (for Remco Hydraulics/Abex)	B-Zone Water Level Recovery Test on wells B-1 and B-2; Groundwater Sampling of wells B-1, B-2, B-3, and B-4 (dissolved metal, PCB's and pesticide compounds)	Abex Corporation-Remco Hydraulic, Willits, California, Technical Report, Geohydrology, Groundwater Quality Monitoring and Structural Integrity, April 1982.	RWQCB letter dated November 16, 1981
November 1982	Alvin L. Franks (for Remco Hydraulics/Abex)	Installation of well B-5 in B-Zone; Collection of groundwater samples from wells B-1, B-2, B-3, B-4 and B-5	Abex Corporation-Remco Hydraulic, Willits, California, Technical Report, Geohydrology Supplement, November 1982.	RWQCB's comments on April, 1982 Report
September 1990	ERM-West, Inc. (for Remco Hydraulics / M-C Industires)	Installation of seven groundwater monitoring wells, W-1 through W-7; Soil and groundwater samples collected at each well boring (W1-W-7)	Monitoring Well Installation Report, Remco Hydraulics, Inc., Willits, CA, March 28, 1991.	RWQCB Waste Discharge Requirements (WDR) Order 90-10
February 1991	ERM-West, Inc. (for Remco Hydraulics / M-C Industires)	Groundwater sampling from wells W-1 through W-7 and wells B-1 through B-5	Monitoring Well Installation Report, Remco Hydraulics, Inc., Willits, CA, March 28, 1991.	RWQCB Waste Discharge Requirements (WDR) Order 90-10

TABLE 2-4
SUMMARY OF INVESTIGATIONS CONDUCTED BY REMCO AND CITY OF WILLITS
Former Remco Hydraulics Facility
Willits, California
(Page 2 of 4)

Date of Activity	Investigating Party	Activity	Report	In Response To:
April 1991	RWQCB	Collection of upstream and downstream samples from Baechtel Creek; Sampling of domestic wells located at 92 Franklin Street and 62 Fort Bragg Road	Off-Site Sampling and Status Report, Remco Hydraulics, Inc., Willits, CA, ERM-West, Inc., July 1991,	RWQCB request (Revisions to WDR Order 90-10)
June 1991 and August 1991	ERM-West, Inc. (for Remco Hydraulics / M-C Industires)	Soil vapor samples (53 locations); Three groundwater samples (HS-1, HS-2 and HS-3)	Soil Vapor Survey, March 19, 1992.	Detection of VOC's in groundwater sampling events, June 1991 and August 1991 (ERM-West)
July 1991	ERM-West, Inc. (for Remco Hydraulics / M-C Industires)	Groundwater sampling using Hydropunch (H-1 through H-7); Off-property well survey; Groundwater sample taken from one domestic well	Off-Site Sampling and Status Report, Remco Hydraulics, Inc., Willits, CA, ERM-West, Inc., July 1991,	RWQCB request (Revisions to WDR Order 90-10)
May 1991	ERM-West, Inc. (for Remco Hydraulics / M-C Industires)	Sampling of domestic well located off-site at 37 Franklin Street	Off-Site Sampling and Status Report, Remco Hydraulics, Inc., Willits, CA, ERM-West, Inc.,	RWQCB request (Revisions to WDR Order 90-10)
1991 through 1995	Employees (for Remco Hydraulics / M-C Industires)	Groundwater quality and water level monitoring on quarterly basis B4, W7, B1 and W1	Off-Site Sampling and Status Report, Remco Hydraulics, Inc., Willits, CA, ERM-West, Inc., July 1991,	WDR Order 90-10 (Revised March 1991)
April 1994	GeoSyntec (for Abex)	Collection of nine stormwater samples taken at different surface drain locations; Eight soil borings (grab groundwater samples collected):GB-1 through GB-8; Video survey of storm drain pipeline	Report on Investigations of Storm Water Runoff, November 4, 1994	CAO No. 93-104 (RWQCB, 1993)
September 16, 1994	GeoSyntec (for Abex)	Installation and sampling of wells W8A, W8B, W8C, W9A and W9B	Report on Investigations of Chromium in Groundwater, February 8, 1995	CAO No. 93-104 (RWQCB, 1993)

TABLE 2-4
SUMMARY OF INVESTIGATIONS CONDUCTED BY REMCO AND CITY OF WILLITS
Former Remco Hydraulics Facility
Willits, California
(Page 3 of 4)

Date of Activity	Investigating Party	Activity	Report	In Response To:
October 1995	GeoSyntec (for Abex)	Sampling of 17 groundwater wells (B1 through B5, W1 through W7, W8A, W8B, W8C, W9A, W9B); 15 Cone Penetration Tests (CPT's) (labeled REM) conducted with groundwater samples taken adjacent to CPT's	Report on Investigations of Volatile Organic Compounds in Groundwater, January 1996	CAO No. 93-104 (RWQCB, 1993)
April 1996	GeoSyntec (for Abex)	Groundwater sampling of 18 wells; B1 through B5, W-1 through W-7, W8A, W8B, W8C, W9A, W9B and WU	April 1996 Results of Groundwater Monitoring, July 19, 1996	CAO No. 93-104 (RWQCB, 1993)
January 1997	Henshaw Associates (for Abex)	Extraction wells EW-1A and EW-1B installed, developed and extraction tests performed; Soil samples, SB2A-S1 and EW1B-S2 taken from borings SB-2A and EW-1B; Five soil samples taken from borings SB2A and EW-1B for physical analyses: SB2A-S1, EW1A-S1, EW1B-S2, EW1B-S3 and EW1B-S4	Interim Remedial Measures, Technical Memorandum, March 26, 1997	CAO No. 93-104
April - June 1997	Henshaw Associates (for Abex)	Measuring groundwater levels at 17 monitoring wells and collecting groundwater samples from 9 monitoring wells located at downgradient side of former plating tanks. Groundwater levels collected at two newly installed extraction wells (EW-1A and EW-1B) and groundwater samples collected from EW-1B.	Groundwater Monitoring Report, Second Quarter 1997, July 31, 1997.	CAO No. 95-94 and Groundwater and Surface Water Monitoring Program No. 90-10.

TABLE 2-4
SUMMARY OF INVESTIGATIONS CONDUCTED BY REMCO AND CITY OF WILLITS
Former Remco Hydraulics Facility
Willits, California
(Page 4 of 4)

Date of Activity	Investigating Party	Activity	Report	In Response To:
May and June 1997	Henshaw Associates (for Abex)	Treatability studies included three bench-scale and one pilot-scale study performed by four potential equipment suppliers and technologies analyzed included: chemical reduction, chemical precipitation, traditional filtration, micro-filtration, sludge dewatering, and ion exchange	September 9, 1997 Results of Treatability Studies and Evaluation and Recommendation of Proposed Interim Remedial Systems	CAO No. 93-104
1998	Versar (for City of Willits)	Performed domestic well survey; Sampling of 20 domestic wells; Collection of 9 surface/stormwater runoff samples, 13 Surface soil/sediment samples and three wipe samples	Preliminary Removal Site Evaluation Report, Remco Hydraulics, Inc. Site, January 15, 1998	For City of Willits, Department of Public Works
February 1998	Versar (for City of Willits)	Performed Remco Facility inspection and field oversight of the February 1998 groundwater/stormwater sampling events	Remco Facility Inspection and Groundwater/Stormwater Sampling Oversight Report, March 9, 1998	For City of Willits, Department of Public Works

TABLE 2-5
SUMMARY OF PRE-RI INVESTIGATIONS CONDUCTED FOR WILLITS TRUST
Former Remco Hydraulics
Willits, California
Page (1 of 1)

Date of Activity	Investigating Party	Activity	Report	In Response To:
April 24, 1998	Henshaw Associates (for Willits Trust)	Collection of sand blast grit grab samples	Summary Report, Facility Characterization Sampling, 1998	Characterization of site residuals in effort to prepare for sump closure and disposition of sump contents
September 1998	Henshaw Associates (for Willits Trust)	Presents proposed interim remedial actions intended to improve environmental conditions at the Site: 1) a groundwater pump-and-treat system for the A- and B-Zones, 2) a storm-drain backfill pump-and-treat system, and 3) closure of sumps and trenches at the Facility	Interim Remedial Action Work Plan, 1998	RWQCB Order 98-59
October 1998	Henshaw Associates (for Willits Trust)	Presents closure plan for the sumps, pits, trenches, and tank at the Facility.	Sump, Pit, Trench, and Tank Closure Plan, 1998	RWQCB Order 98-59
December 1998	Henshaw Associates (for Willits Trust)	Presents a design plan including a description of the treatment system and system monitoring program.	Interim Remedial Action Design Plan, 1998	RWQCB Order 98-59
April through November 1998	Henshaw Associates (for Willits Trust)	Sump, pit, trench, and tank closure activities including observation and characterization of sump, pit, trench, and tank contents and removal and cleaning activities.	Summary Report - Interim Remedial Action, Sump, Pit, Trench, and Tank Closure Activities, 1999	RWQCB Order 98-59
May 1999	Henshaw Associates (for Willits Trust)	Presents the Operation and Maintenance Manual (IRA System O&M manual) for the Interim Remedial Action carbon adsorption treatment system at the Facility	Operation and Maintenance Manual, Interim Remedial Action Carbon Adsorption System and Shallow Groundwater Extraction System	RWQCB Order 98-59

Notes:

RWQCB = Regional Water Quality Control Board

TABLE 2-6
SUMP DATA (IRA System)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

Location ID	ES-1	ES-2	ES-2	ES-3	ES-3
Date	3/8/99	2/16/00	3/8/99	2/16/00	3/8/99
General Minerals					
pH (pH units)	---	---	---	---	---
Specific Conductance (EC) (µs/cm)	---	529	---	180	---
Metals (mg/L)					
Hexavalent Chromium	---	---	---	---	---
Total Chromium	22.0	---	0.180	---	0.0400
TPH (mg/L)					
Extractable Range Organics (C10-C24)	<0.0500	---	<0.0500	---	<0.0500
Jet Fuel	<0.0500	---	<0.0500	---	<0.0500
Kerosene	<0.0500	---	<0.0500	---	<0.0500
Motor Oil	0.280	---	<0.250	---	<0.250
TPH-diesel	<0.0500	---	<0.0500	---	<0.0500
TPH-gasoline	<0.0500	---	<0.0500	---	<0.0500
Volatile Organic Compounds (µg/L)					
1,1,1,2-Tetrachloroethane	<1.00	---	<2.50	---	<0.500
1,1,1-Trichloroethane (1,1,1-TCA)	8.00	---	<2.50	---	<0.500
1,1,2,2-Tetrachloroethane	<1.00	---	<2.50	---	<0.500
1,1,2-Trichloroethane	<1.00	---	<2.50	---	<0.500
1,1-Dichloroethane (1,1-DCA)	9.00	---	<2.50	---	<0.500
1,1-Dichloroethene (1,1-DCE)	<1.00	---	<2.50	---	<0.500
1,1-Dichloropropene	<1.00	---	<2.50	---	<0.500
1,2,3-Trichlorobenzene	<4.00	---	<10.0	---	<2.00
1,2,3-Trichloropropane	<1.00	---	<2.50	---	<0.500
1,2,4-Trichlorobenzene	<4.00	---	<10.0	---	<2.00
1,2,4-Trimethylbenzene	<4.00	---	<10.0	---	<2.00
1,2-Dibromo-3-chloropropane	<4.00	---	<10.0	---	<2.00
1,2-Dibromoethane (EDB)	<4.00	---	<10.0	---	<2.00
1,2-Dichlorobenzene	<1.00	---	<2.50	---	<0.500
1,2-Dichloroethane	<1.00	---	<2.50	---	<0.500
1,2-Dichloropropane	<1.00	---	<2.50	---	<0.500
1,3,5-Trimethylbenzene	<4.00	---	<10.0	---	<2.00
1,3-Dichlorobenzene	<1.00	---	<2.50	---	<0.500
1,3-Dichloropropane	<1.00	---	<2.50	---	<0.500
1,4-Dichlorobenzene	<1.00	---	<2.50	---	<0.500
1,4-Dioxane	---	---	---	---	---
2,2-Dichloropropane	<1.00	---	<2.50	---	<0.500
2-Butanone (MEK)	<10.0	---	<25.0	---	14.0
2-Chloroethyl Vinyl Ether	---	---	---	---	---
2-Chlorotoluene	<4.00	---	<10.0	---	<2.00
2-Hexanone	<10.0	---	<25.0	---	<5.00
4-Chlorotoluene	<4.00	---	<10.0	---	<2.00
4-Methyl-2-pentanone	<10.0	---	<25.0	---	<5.00
Acetone	12.0	---	<25.0	---	<5.00
Acrolein	<10.0	---	<25.0	---	<5.00
Acrylonitrile	<10.0	---	<25.0	---	<5.00

Notes:

µg/L = micrograms per liter

mg/L = milligrams per liter

µs/cm = micro siemens per centimeter

-- = Not analyzed

Bold value indicates a detection.

TABLE 2-6
SUMP DATA (IRA System)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 2

Location ID	ES-1	ES-2	ES-2	ES-3	ES-3
Date	3/8/99	2/16/00	3/8/99	2/16/00	3/8/99
Volatile Organic Compounds (µg/L)					
Benzene	<1.00	---	<2.50	---	<0.500
Bromobenzene	<1.00	---	<2.50	---	<0.500
Bromochloromethane	<1.00	---	<2.50	---	<0.500
Bromodichloromethane	<1.00	---	<2.50	---	<0.500
Bromoform	<1.00	---	<2.50	---	<0.500
Bromomethane	<1.00	---	<2.50	---	<0.500
Carbon disulfide	<1.00	---	<2.50	---	<0.500
Carbon tetrachloride	<1.00	---	<2.50	---	<0.500
Chlorobenzene	<1.00	---	<2.50	---	<0.500
Chloroethane	<1.00	---	<2.50	---	<0.500
Chloroform	<1.00	---	<2.50	---	<0.500
Chloromethane	<1.00	---	<2.50	---	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	21.0	---	<2.50	---	<0.500
cis-1,3-Dichloropropene	<1.00	---	<2.50	---	<0.500
Dibromochloromethane	<1.00	---	<2.50	---	<0.500
Dibromomethane	<1.00	---	<2.50	---	<0.500
Dichlorodifluoromethane	<1.00	---	<2.50	---	<0.500
Ethylbenzene	<1.00	---	<2.50	---	<0.500
Hexachlorobutadiene	<4.00	---	<10.0	---	<2.00
Iodomethane	<1.00	---	<2.50	---	<0.500
Isopropylbenzene	<4.00	---	<10.0	---	<2.00
m,p-Xylene	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	---	---	---	---	---
Methylene chloride	120	---	420	---	14.0
n-Butylbenzene	<4.00	---	<10.0	---	<2.00
n-Propylbenzene	<4.00	---	<10.0	---	<2.00
Naphthalene	<4.00	---	<10.0	---	<2.00
o-Xylene	---	---	---	---	---
p-Isopropyltoluene	<4.00	---	<10.0	---	<2.00
sec-Butylbenzene	<4.00	---	<10.0	---	<2.00
Styrene	<1.00	---	<2.50	---	<0.500
tert-Butylbenzene	<4.00	---	<10.0	---	<2.00
Tetrachloroethene (PCE)	11.0	---	<2.50	---	<0.500
Toluene	<1.00	---	<2.50	---	<0.500
trans-1,2-Dichloroethene	<1.00	---	<2.50	---	<0.500
trans-1,3-Dichloropropene	<1.00	---	<2.50	---	<0.500
Trichloroethene (TCE)	3.00	---	<2.50	---	<0.500
Trichlorofluoromethane	<1.00	---	<2.50	---	<0.500
Trichlorotrifluoroethane (Freon 113)	---	---	---	---	---
Vinyl Acetate	<10.0	---	<25.0	---	<5.00
Vinyl Chloride (VC)	<1.00	---	<2.50	---	<0.500
Xylenes (total)	<1.00	---	<2.50	---	<0.500

Notes:

µg/L = micrograms per liter

mg/L = milligrams per liter

µs/cm = micro siemens per centimeter

-- = Not analyzed

Bold value indicates a detection.

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 1 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	GB-1	9		X						
Soil	GB-2	9		X						
Soil	GB-3	9		X						
Soil	GB-4	9		X						
Soil	GB-5	9		X						
Soil	GB-6	9		X						
Soil	GB-7	9		X						
Soil	GB-8	9		X						
Soil	SB-001	2		X	X	X			X	
Soil	SB-001	9	X	X	X	X			X	X
Soil	SB-002	2			X				X	
Soil	SB-003	1		X	X				X	
Soil	SB-004	10							X	
Soil	SB-005	6								X
Soil	SB-006	2			X				X	
Soil	SB-006	8								X
Soil	SB-007	1		X	X				X	
Soil	SB-007	10.5		X					X	
Soil	SB-008	13		X	X				X	X
Soil	SB-008	2			X				X	
Soil	SB-009	11		X	X				X	X
Soil	SB-009	2		X	X	X			X	
Soil	SB-010	12		X	X				X	
Soil	SB-010	2.5		X	X				X	
Soil	SB-011	15								X
Soil	SB-012	10		X	X				X	X
Soil	SB-013	10.5		X					X	
Soil	SB-013	12		X					X	X
Soil	SB-013	2.5		X	X				X	
Soil	SB-014	12.5		X	X				X	X
Soil	SB-015	10.5		X					X	
Soil	SB-015	3.5			X				X	
Soil	SB-016	12.5								X
Soil	SB-017	1.5		X	X				X	
Soil	SB-017	10.5		X	X				X	X
Soil	SB-018	9.5		X	X				X	
Soil	SB-019	13		X	X				X	X
Soil	SB-019	2		X	X				X	
Soil	SB-020	10			X				X	X
Soil	SB-020	2		X	X	X			X	
Soil	SB-020	7							X	X
Soil	SB-021	11		X						X
Soil	SB-021	2		X					X	X
Soil	SB-021	20		X						X
Soil	SB-021	27		X						X
Soil	SB-021	31		X						X
Soil	SB-022	6								X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 2 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-023	18								X
Soil	SB-024	12.5		X	X				X	X
Soil	SB-025	2		X	X	X			X	
Soil	SB-026	2.5		X	X				X	
Soil	SB-026	7								X
Soil	SB-027	11.5	X						X	X
Soil	SB-027	2		X	X				X	
Soil	SB-027	8								X
Soil	SB-028	4		X	X				X	
Soil	SB-028	5.5								X
Soil	SB-029	7		X					X	X
Soil	SB-030	6.5		X					X	X
Soil	SB-031	11		X					X	X
Soil	SB-032	2		X	X				X	
Soil	SB-032	8		X	X				X	X
Soil	SB-033	1.5			X				X	
Soil	SB-033	10.5		X	X				X	X
Soil	SB-034	14		X						X
Soil	SB-035	10		X						X
Soil	SB-035	2							X	
Soil	SB-035	22		X						X
Soil	SB-035	24		X						X
Soil	SB-035	3		X						X
Soil	SB-035	31		X						X
Soil	SB-036	19		X						X
Soil	SB-036	2		X					X	X
Soil	SB-036	24		X						X
Soil	SB-036	30		X						X
Soil	SB-036	32		X						X
Soil	SB-036	35		X						X
Soil	SB-037	14		X						X
Soil	SB-037	16		X						X
Soil	SB-037	27		X						X
Soil	SB-037	3		X						X
Soil	SB-037	35		X						X
Soil	SB-038	14.5		X						
Soil	SB-038	19.5	X	X						
Soil	SB-038	27.5	X	X						X
Soil	SB-038	31		X						
Soil	SB-038	46	X	X						
Soil	SB-038	6.5	X	X						X
Soil	SB-038	84		X						
Soil	SB-039	1		X	X	X			X	X
Soil	SB-039	14		X						X
Soil	SB-039	21		X						X
Soil	SB-039	29		X						X
Soil	SB-039	45		X						X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-039	52		X						X
Soil	SB-040	16		X						X
Soil	SB-040	24		X						X
Soil	SB-040	29		X						X
Soil	SB-040	34		X						X
Soil	SB-040	52		X						X
Soil	SB-040	8		X						X
Soil	SB-041	19		X						X
Soil	SB-041	24		X						X
Soil	SB-041	30		X						X
Soil	SB-041	33		X						X
Soil	SB-041	46		X						X
Soil	SB-041	5.5		X						X
Soil	SB-041	62		X						X
Soil	SB-042	10	X	X						X
Soil	SB-042	21		X						
Soil	SB-043	13	X							
Soil	SB-043	17.5		X						
Soil	SB-043	23.5	X	X						
Soil	SB-043	26	X							
Soil	SB-043	26.5	X	X						X
Soil	SB-043	30.5	X	X						
Soil	SB-043	40.5	X	X						
Soil	SB-043	42.5	X							
Soil	SB-043	62.5	X	X						X
Soil	SB-043	67	X	X						X
Soil	SB-043	8	X	X						X
Soil	SB-044	10.5		X	X				X	
Soil	SB-045	11		X	X				X	
Soil	SB-046	8.5		X	X				X	
Soil	SB-047	12	X	X						
Soil	SB-047	21		X						
Soil	SB-047	6							X	X
Soil	SB-048	10	X	X						X
Soil	SB-048	20		X						
Soil	SB-048	23	X	X						
Soil	SB-048	25		X						
Soil	SB-048	32	X	X						X
Soil	SB-048	34		X						
Soil	SB-048	45	X	X						
Soil	SB-049	16	X	X						
Soil	SB-049	19	X	X						
Soil	SB-049	27.5	X	X						X
Soil	SB-049	31.5		X						
Soil	SB-049	42.5	X	X						
Soil	SB-049	62.5	X	X						X
Soil	SB-049	71		X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-049	9	X	X						X
Soil	SB-050	13		X	X				X	
Soil	SB-051	10.5		X	X				X	
Soil	SB-052	1.5		X						
Soil	SB-053	8		X						
Soil	SB-054	2.5		X	X				X	
Soil	SB-055	3		X	X				X	
Soil	SB-056	11		X						
Soil	SB-056	15		X						
Soil	SB-056	23		X						
Soil	SB-056	27.5		X						
Soil	SB-057	2		X						
Soil	SB-058	2		X					X	X
Soil	SB-059	2		X						
Soil	SB-060	2		X					X	X
Soil	SB-061	2		X					X	X
Soil	SB-062	2		X	X				X	X
Soil	SB-065	3		X						
Soil	SB-066	3		X	X				X	X
Soil	SB-067	3		X						
Soil	SB-068	3		X						
Soil	SB-080	19		X						
Soil	SB-080	23.5		X						
Soil	SB-080	5		X					X	
Soil	SB-081	10		X					X	
Soil	SB-081	23		X						
Soil	SB-081	27		X						
Soil	SB-082	27		X						
Soil	SB-082	7		X					X	
Soil	SB-083	10		X						X
Soil	SB-083	16		X						X
Soil	SB-083	5		X						X
Soil	SB-084	14		X						X
Soil	SB-084	3		X						X
Soil	SB-084	8		X						X
Soil	SB-085	10		X						X
Soil	SB-085	14		X						X
Soil	SB-085	4		X						X
Soil	SB-086	10		X						X
Soil	SB-086	14		X						X
Soil	SB-086	3		X						X
Soil	SB-087	10		X						X
Soil	SB-087	12		X						X
Soil	SB-087	16		X						X
Soil	SB-087	3		X						X
Soil	SB-088	16		X						X
Soil	SB-088	3		X						X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 5 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-088	9		X						X
Soil	SB-089	10		X					X	X
Soil	SB-089	2		X					X	X
Soil	SB-089	6		X					X	X
Soil	SB-090	10		X					X	X
Soil	SB-090	2		X					X	X
Soil	SB-090	6		X					X	X
Soil	SB-091	10		X					X	X
Soil	SB-091	3		X					X	X
Soil	SB-091	6		X					X	X
Soil	SB-092	7		X					X	X
Soil	SB-093	9		X					X	X
Soil	SB-094	7		X					X	X
Soil	SB-095	6		X					X	X
Soil	SB-096	11		X					X	X
Soil	SB-097	15		X					X	X
Soil	SB-101	12.5		X						
Soil	SB-101	3		X						
Soil	SB-102	13		X						
Soil	SB-102	3		X						
Soil	SB-103	13.5		X						
Soil	SB-103	2.5		X						
Soil	SB-104	3		X					X	X
Soil	SB-104	7		X					X	X
Soil	SB-105	3		X					X	X
Soil	SB-105	7		X					X	X
Soil	SB-106	3		X					X	X
Soil	SB-106	7		X					X	X
Soil	SB-107	2		X						X
Soil	SB-107	6		X						X
Soil	SB-109	3		X					X	X
Soil	SB-109	7		X					X	
Soil	SB-110	15		X					X	X
Soil	SB-110	6		X					X	X
Soil	SB-112	12		X					X	X
Soil	SB-113	2		X					X	X
Soil	SB-113	5		X					X	X
Soil	SB-114	2		X					X	X
Soil	SB-115	2		X					X	X
Soil	SB-116	2		X					X	X
Soil	SB-116	5		X					X	X
Soil	SB-117	2		X					X	X
Soil	SB-117	4		X					X	X
Soil	SB-120	3		X					X	X
Soil	SB-120	6		X						X
Soil	SB-121	3		X					X	X
Soil	SB-121	6		X					X	X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 6 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-122	3		X					X	X
Soil	SB-122	6		X					X	X
Soil	SB-123	3		X					X	X
Soil	SB-123	6		X					X	X
Soil	SB-124	3		X					X	X
Soil	SB-124	6		X					X	X
Soil	SB-125	3		X					X	X
Soil	SB-125	6		X					X	X
Soil	SB-126	3		X					X	X
Soil	SB-126	6		X					X	X
Soil	SB-126	9		X					X	X
Soil	SB-127	3		X					X	X
Soil	SB-127	6		X					X	X
Soil	SB-129	2		X					X	X
Soil	SB-129	6		X					X	X
Soil	SB-130	2		X					X	X
Soil	SB-130	6		X					X	X
Soil	SB-131	2		X						X
Soil	SB-131	6		X						X
Soil	SB-132	2		X						X
Soil	SB-132	6		X						X
Soil	SB-133	2		X						X
Soil	SB-133	6		X						X
Soil	SB-134	2		X						X
Soil	SB-134	6		X						X
Soil	SB-135	10		X					X	
Soil	SB-135	5		X					X	X
Soil	SB-136	10		X					X	X
Soil	SB-136	5		X					X	X
Soil	SB-137	10		X					X	X
Soil	SB-137	7		X					X	X
Soil	SB-138	10		X					X	X
Soil	SB-138	5		X					X	X
Soil	SB-139	10		X					X	X
Soil	SB-139	5		X					X	X
Soil	SB-140	2		X						X
Soil	SB-140	6		X						X
Soil	SB-141	10		X					X	X
Soil	SB-141	13		X					X	X
Soil	SB-141	2		X					X	X
Soil	SB-142	2		X					X	X
Soil	SB-142	3		X					X	X
Soil	SB-143	2		X						
Soil	SB-143	3		X						
Soil	SB-144	2		X						
Soil	SB-144	3		X						
Soil	SB-145	2		X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 7 of 22)

Sample Group	Location	Depth (feet)	Gen	Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-145	3			X						
Soil	SB-146	10									X
Soil	SB-146	2									X
Soil	SB-147	11	X		X						X
Soil	SB-147	2	X		X						X
Soil	SB-148	1	X		X						
Soil	SB-149	1	X		X						
Soil	SB-150	1	X		X						
Soil	SB-151	1	X		X						
Soil	SB-152	1	X		X						
Soil	SB-153	1	X		X						
Soil	SB-160	2								X	X
Soil	SB-160	6								X	X
Soil	SB-161	2								X	X
Soil	SB-161	6								X	X
Soil	SB-162	2								X	X
Soil	SB-162	6								X	X
Soil	SB-163	2			X		X			X	X
Soil	SB-163	6			X		X			X	X
Soil	SB-164	2			X					X	X
Soil	SB-164	7			X					X	X
Soil	SB-165	2			X					X	X
Soil	SB-165	7			X					X	X
Soil	SB-166	10			X		X			X	X
Soil	SB-166	4			X		X			X	X
Soil	SB-167	10			X					X	X
Soil	SB-167	2			X					X	X
Soil	SB-169	10			X					X	X
Soil	SB-170	2			X					X	X
Soil	SB-171	12									X
Soil	SB-172	2									X
Soil	SB-172	6									X
Soil	SB-173	2									X
Soil	SB-173	7									X
Soil	SB-174	2									X
Soil	SB-174	6									X
Soil	SB-175	5			X						
Soil	SB-176	5			X						
Soil	SB-177	5			X						
Soil	SB-178	5			X						
Soil	SB-179	5			X						
Soil	SB-180	5			X						
Soil	SB-181	0.5			X						
Soil	SB-181	1			X						
Soil	SB-182	0.5			X						
Soil	SB-182	1			X						
Soil	SB-183	0.5			X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 8 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	SB-183	1		X						
Soil	SB-184	0.5		X						
Soil	SB-184	1		X						
Soil	SB-185	0.5		X						
Soil	SB-185	1		X						
Soil	SB-186	5		X						
Soil	SB-187	2				X			X	
Soil	SB-187	6				X			X	
Soil	SB-188	2				X			X	
Soil	SB-188	6				X			X	
Soil	SB-189	2				X			X	
Soil	SB-189	6				X			X	
Soil	SB-190	2				X			X	
Soil	SB-190	6				X			X	
Soil	SB-191	2.5				X			X	
Soil	SB-192	2				X			X	
Soil	SB-192	6				X			X	
Soil	SB-193	2				X			X	
Soil	SB-193	6				X			X	
Soil	SB-194	2				X			X	
Soil	SB-195	1				X			X	X
Soil	SB-195	6				X			X	X
Soil	SB-196	2				X			X	
Soil	SB-196	6				X			X	
Soil	SB-197	2				X			X	
Soil	SB-198	2				X			X	
Soil	SB-198	6				X			X	
Soil	SB-199	2				X			X	
Soil	TW11	3		X					X	X
Soil	W1	14		X						
Soil	W1	23.5		X						
Soil	W1	28.5		X						
Soil	W1	35.5		X						
Soil	W1	36		X						
Soil	W1	4				X			X	
Soil	W1	45.5		X						
Soil	W1	60		X						
Soil	W1	70		X						
Soil	W1	9		X						
Soil	W2	13.5		X						
Soil	W2	19		X						
Soil	W2	26		X						
Soil	W2	3				X			X	
Soil	W2	32.5		X						
Soil	W2	4		X						
Soil	W21A	10.5	X	X						X
Soil	W21A	14.5		X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 9 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Soil	W21A	19	X	X						
Soil	W22A	12	X	X						X
Soil	W22A	17		X						
Soil	W22A	20		X						
Soil	W22A	23	X	X						X
Soil	W24A	17		X						
Soil	W24A	22	X	X						
Soil	W24A	6	X	X					X	X
Soil	W3	19.5		X						
Soil	W3	30		X						
Soil	W3	5				X			X	
Soil	W3	9		X						
Soil	W37A	3		X					X	X
Soil	W39A	5		X						
Soil	W4	10		X						
Soil	W4	20		X						
Soil	W4	25		X						
Soil	W4	33		X						
Soil	W4	4				X			X	
Soil	W40A	5		X						
Soil	W5	10		X						
Soil	W5	22		X						
Soil	W5	30.5		X						
Soil	W5	35.5		X						
Soil	W5	45		X						
Soil	W5	58		X						
Soil	W5	6.5				X			X	
Soil	W5	61.5		X						
Soil	W6	20		X						
Soil	W6	35.5		X						
Soil	W6	45		X						
Soil	W6	5.5				X			X	
Soil	W6	55		X						
Soil	W6	58.5		X						
Soil	W6	9.5		X						
Soil	W7	11.5		X						
Soil	W7	16.5		X						
Soil	W7	6				X			X	
Soil	W7	7		X						
Surface Soil	DD-5	0		X					X	
Surface Soil	SB-175	0.2		X						
Surface Soil	SB-176	0.2		X						
Surface Soil	SB-177	0.2		X						
Surface Soil	SB-178	0.2		X						
Surface Soil	SB-179	0.2		X						
Surface Soil	SB-180	0.2		X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Surface Soil	SB-181	0.2		X						
Surface Soil	SB-182	0.2		X						
Surface Soil	SB-183	0.2		X						
Surface Soil	SB-184	0.2		X						
Surface Soil	SB-185	0.2		X						
Surface Soil	SB-186	0.2		X						
Surface Soil	SS-05	0		X						
Surface Soil	SS-06	0		X						
Surface Soil	SS-07	0		X						
Surface Soil	SS-08	0		X						
Surface Soil	SS-09	0		X						
Surface Soil	SS-10	0		X						
Surface Soil	SS-11	0		X						
Surface Soil	SS-12	0		X						
Surface Soil	SS-13	0		X						
Surface Soil	SS-14	0		X						
Surface Soil	SS-15	0		X						
Surface Soil	SS-16	0		X						
Surface Soil	SS-17	0		X						
Surface Soil	SS-19	0		X						
Surface Soil	SS-20	0		X						
Surface Soil	SS-21	0		X						
Surface Soil	SS-23	0		X						
Surface Soil	SS-25	0		X						
Surface Soil	SS-26	0		X						
Surface Soil	SS-27	0		X						
Surface Soil	SS-28	0		X						
Surface Soil	SS-29	0		X						
Surface Soil	SS-30	0		X						
Surface Soil	SS-31	0		X						X
Surface Soil	SS-32	0		X						X
Surface Soil	SS-33	0		X						X
Surface Soil	SS-34	0		X						X
Surface Soil	SS-35	0		X						X
Surface Soil	SS-36	0		X						X
Grabwater	CPT-019	28								X
Grabwater	CPT-019	42								X
Grabwater	CPT-019	50								X
Grabwater	CPT-021	34								X
Grabwater	CPT-021	41								X
Grabwater	CPT-021	50								X
Grabwater	CPT-024	41								X
Grabwater	CPT-026	33								X
Grabwater	CPT-027	23								X
Grabwater	CPT-027	28								X
Grabwater	CPT-027	38								X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen	Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	CPT-028	47									X
Grabwater	CPT-029	28									X
Grabwater	CPT-029	40									X
Grabwater	CPT-030	34									X
Grabwater	CPT-030	44									X
Grabwater	CPT-031	28									X
Grabwater	CPT-031	34									X
Grabwater	CPT-032	30									X
Grabwater	CPT-032	35									X
Grabwater	GB-1	9			X						X
Grabwater	GB-2	9			X						X
Grabwater	GB-3	9			X						X
Grabwater	GB-4	9			X						X
Grabwater	GB-5	9			X						X
Grabwater	GB-7	9			X						X
Grabwater	GB-8	9			X						X
Grabwater	H-1	10			X						
Grabwater	H-1	25			X						
Grabwater	H-2	10			X						
Grabwater	H-2	25			X						
Grabwater	H-3	10			X						
Grabwater	H-3	25			X						
Grabwater	H-4	10			X						
Grabwater	H-4	25			X						
Grabwater	H-5	10			X						
Grabwater	H-5	25			X						
Grabwater	H-6	10			X						
Grabwater	H-6	25			X						
Grabwater	H-7	10			X						
Grabwater	H-7	25			X						
Grabwater	Rem-01	22									X
Grabwater	Rem-01	40									X
Grabwater	Rem-02	23									X
Grabwater	Rem-02	35									X
Grabwater	Rem-03	35									X
Grabwater	Rem-04	37									X
Grabwater	Rem-05	11									X
Grabwater	Rem-05	33									X
Grabwater	Rem-06	36									X
Grabwater	Rem-07	18			X						X
Grabwater	Rem-07	37			X						X
Grabwater	Rem-08	21			X						X
Grabwater	Rem-08	40			X						X
Grabwater	Rem-09	48.6			X						X
Grabwater	Rem-10	22									X
Grabwater	Rem-10	33									X
Grabwater	Rem-11	20									X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	Rem-11	33								X
Grabwater	Rem-12	19								X
Grabwater	Rem-12	31								X
Grabwater	Rem-13	24								X
Grabwater	Rem-13	40								X
Grabwater	Rem-13	66								X
Grabwater	Rem-14	20								X
Grabwater	Rem-14	36								X
Grabwater	Rem-14	65								X
Grabwater	Rem-15	22								X
Grabwater	Rem-15	41.5								X
Grabwater	SB-001	14	X	X	X				X	X
Grabwater	SB-004	12							X	
Grabwater	SB-005	13								X
Grabwater	SB-006	13								X
Grabwater	SB-007	12		X					X	
Grabwater	SB-008	16		X	X					X
Grabwater	SB-009	12		X	X				X	X
Grabwater	SB-010	12		X	X					
Grabwater	SB-011	15.5								X
Grabwater	SB-012	12		X	X				X	X
Grabwater	SB-013	11		X					X	
Grabwater	SB-014	16		X	X				X	X
Grabwater	SB-015	12		X					X	
Grabwater	SB-016	16								X
Grabwater	SB-017	12		X	X				X	X
Grabwater	SB-018	12		X	X				X	
Grabwater	SB-019	16		X	X				X	X
Grabwater	SB-020	12		X	X				X	X
Grabwater	SB-021	16		X						X
Grabwater	SB-021	28		X						X
Grabwater	SB-022	8								X
Grabwater	SB-023	20								X
Grabwater	SB-024	16		X	X				X	X
Grabwater	SB-026	16								X
Grabwater	SB-027	12							X	X
Grabwater	SB-028	8								X
Grabwater	SB-029	17		X					X	X
Grabwater	SB-030	16		X					X	X
Grabwater	SB-031	17		X					X	X
Grabwater	SB-032	14		X	X				X	X
Grabwater	SB-033	12		X	X				X	X
Grabwater	SB-034	14		X						X
Grabwater	SB-035	16		X						X
Grabwater	SB-035	31		X						X
Grabwater	SB-036	19		X						X
Grabwater	SB-036	34		X						X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	SB-037	16		X						X
Grabwater	SB-037	35		X						X
Grabwater	SB-038	15	X	X						X
Grabwater	SB-038	22		X						
Grabwater	SB-038	30	X	X						X
Grabwater	SB-038	45		X						
Grabwater	SB-039	14		X						X
Grabwater	SB-039	29		X						X
Grabwater	SB-040	16		X						X
Grabwater	SB-040	25		X						X
Grabwater	SB-040	34		X						X
Grabwater	SB-040	52								X
Grabwater	SB-041	19		X						X
Grabwater	SB-041	34		X						X
Grabwater	SB-041	46								X
Grabwater	SB-042	15	X	X						X
Grabwater	SB-042	23		X						
Grabwater	SB-043	15	X	X						X
Grabwater	SB-043	23		X						
Grabwater	SB-043	30	X	X						X
Grabwater	SB-043	74	X	X						X
Grabwater	SB-044	12		X	X				X	
Grabwater	SB-045	12		X	X				X	
Grabwater	SB-046	12		X	X				X	
Grabwater	SB-047	15	X	X						X
Grabwater	SB-047	26	X	X						X
Grabwater	SB-048	15	X	X						X
Grabwater	SB-048	24		X						
Grabwater	SB-048	34	X	X						X
Grabwater	SB-048	47		X						
Grabwater	SB-049	15	X	X						X
Grabwater	SB-049	30	X	X						X
Grabwater	SB-049	53		X						
Grabwater	SB-049	68	X	X						X
Grabwater	SB-050	14		X	X				X	
Grabwater	SB-051	12		X	X				X	
Grabwater	SB-053	12		X						
Grabwater	SB-056	18		X						
Grabwater	SB-056	32		X						
Grabwater	SB-057	20		X						X
Grabwater	SB-058	25		X					X	X
Grabwater	SB-059	30		X						X
Grabwater	SB-059	70		X						X
Grabwater	SB-060	20		X					X	X
Grabwater	SB-060	32		X						X
Grabwater	SB-061	16		X					X	X
Grabwater	SB-061	32		X						X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	SB-062	20		X	X				X	X
Grabwater	SB-062	32		X						X
Grabwater	SB-063	22		X						X
Grabwater	SB-063	33		X						X
Grabwater	SB-065	15		X						X
Grabwater	SB-065	32		X						X
Grabwater	SB-066	17		X	X				X	X
Grabwater	SB-066	36		X						X
Grabwater	SB-067	15		X						X
Grabwater	SB-068	10		X						X
Grabwater	SB-069	10								X
Grabwater	SB-070	17								X
Grabwater	SB-071	15								X
Grabwater	SB-072	17		X						X
Grabwater	SB-072	34		X						X
Grabwater	SB-073	16		X						X
Grabwater	SB-073	33.5		X						X
Grabwater	SB-074	16		X						X
Grabwater	SB-075	12		X						X
Grabwater	SB-076	15		X						X
Grabwater	SB-077	15		X						
Grabwater	SB-078	15		X						
Grabwater	SB-078	34		X						
Grabwater	SB-079	16		X						
Grabwater	SB-080	24		X						
Grabwater	SB-080	8		X					X	
Grabwater	SB-081	17		X					X	
Grabwater	SB-081	28		X						
Grabwater	SB-082	19		X						
Grabwater	SB-082	8		X					X	
Grabwater	SB-083	15		X						X
Grabwater	SB-083	5		X						X
Grabwater	SB-084	10		X						X
Grabwater	SB-084	15		X						X
Grabwater	SB-085	10		X						X
Grabwater	SB-085	16		X						X
Grabwater	SB-085	6		X						X
Grabwater	SB-086	10		X						X
Grabwater	SB-086	16		X						X
Grabwater	SB-087	12		X						X
Grabwater	SB-087	17		X						X
Grabwater	SB-088	10		X						X
Grabwater	SB-088	16		X						X
Grabwater	SB-089	10		X					X	X
Grabwater	SB-089	15		X					X	X
Grabwater	SB-090	12		X					X	X
Grabwater	SB-091	10		X					X	X

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SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	SB-091	15		X					X	X
Grabwater	SB-092	16		X					X	X
Grabwater	SB-093	16		X					X	X
Grabwater	SB-094	16		X					X	X
Grabwater	SB-095	16		X					X	X
Grabwater	SB-096	16		X					X	X
Grabwater	SB-097	16		X					X	X
Grabwater	SB-098	16								X
Grabwater	SB-098	24								X
Grabwater	SB-098	32								X
Grabwater	SB-098	42								X
Grabwater	SB-098	50								X
Grabwater	SB-098	61								X
Grabwater	SB-098	69								X
Grabwater	SB-098	76								X
Grabwater	SB-098	87								X
Grabwater	SB-101	12.5		X						
Grabwater	SB-101	19		X						
Grabwater	SB-102	13		X						
Grabwater	SB-102	23		X						
Grabwater	SB-103	13.5		X						
Grabwater	SB-105	7		X					X	X
Grabwater	SB-106	7		X					X	X
Grabwater	SB-109	7		X					X	X
Grabwater	SB-110	16		X					X	X
Grabwater	SB-111	16		X					X	X
Grabwater	SB-112	16		X					X	X
Grabwater	SB-113	5		X					X	X
Grabwater	SB-116	5		X					X	X
Grabwater	SB-117	4		X					X	X
Grabwater	SB-120	20		X					X	X
Grabwater	SB-121	16		X					X	X
Grabwater	SB-122	12		X					X	X
Grabwater	SB-123	20		X					X	X
Grabwater	SB-124	24		X					X	X
Grabwater	SB-125	16		X					X	X
Grabwater	SB-126	20		X					X	X
Grabwater	SB-127	12		X					X	X
Grabwater	SB-129	16		X					X	X
Grabwater	SB-129	32		X					X	X
Grabwater	SB-130	12		X					X	X
Grabwater	SB-130	33		X					X	X
Grabwater	SB-135	16		X					X	X
Grabwater	SB-136	16		X					X	X
Grabwater	SB-137	18		X					X	X
Grabwater	SB-138	12		X					X	X
Grabwater	SB-139	18		X					X	X

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SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Grabwater	SB-140	8		X						X
Grabwater	SB-141	16		X					X	X
Grabwater	SB-142	3		X					X	X
Grabwater	SB-143	3		X						
Grabwater	SB-144	3		X						
Grabwater	SB-145	3		X						
Grabwater	SB-146	12		X					X	X
Grabwater	SB-147	16								X
Grabwater	SB-158	16								X
Grabwater	SB-159	16								X
Grabwater	SB-160	8								X
Grabwater	SB-161	8								X
Grabwater	SB-162	8								X
Grabwater	SB-163	8		X		X			X	X
Grabwater	SB-164	20		X					X	X
Grabwater	SB-165	20		X					X	X
Grabwater	SB-166	12		X		X			X	X
Grabwater	SB-167	20		X					X	X
Grabwater	SB-168	16		X					X	X
Grabwater	SB-169	16		X					X	X
Grabwater	SB-170	16		X					X	X
Grabwater	SB-171	12								X
Grabwater	SB-172	8								X
Grabwater	SB-173	16								X
Grabwater	SB-174	8								X
Grabwater	SB-176	5		X						
Grabwater	SB-177	5		X						
Grabwater	SB-187	6				X			X	
Grabwater	SB-188	6				X			X	
Grabwater	SB-189	6				X			X	
Grabwater	SB-190	6				X			X	
Grabwater	SB-191	4				X			X	
Grabwater	SB-194	4				X			X	
Grabwater	SB-195	8				X			X	
Grabwater	SB-198	16				X			X	
Grabwater	W19A	40								X
Grabwater	W21A	15	X	X						X
Grabwater	W22A	17	X	X						X
Grabwater	W22A	24		X						
Grabwater	W24A	15	X	X					X	X
Grabwater	W24A	24	X	X					X	X
Grabwater	W39A	15		X						
Grabwater	W40A	16		X						
Water	27 Franklin	--								X
Water	B1	--	X	X		X	X		X	X
Water	B2	--		X		X	X		X	X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Water	B3	--		X		X	X		X	X
Water	B4	--	X	X		X	X		X	X
Water	B5	--		X					X	X
Water	CW	--		X	X			X	X	X
Water	EW1A	--	X	X					X	X
Water	EW1B	--	X	X					X	X
Water	MW-1	--		X					X	X
Water	MW-2	--		X					X	X
Water	MW-3	--		X					X	X
Water	MW-4	--		X					X	X
Water	OW-01	--	X	X					X	X
Water	OW-03	--	X	X					X	X
Water	OW-04	--	X	X					X	X
Water	OW-05	--	X	X					X	X
Water	OW-07	--	X	X					X	X
Water	OW-09	--	X	X					X	X
Water	OW-10	--	X	X					X	X
Water	OW-11	--	X	X					X	X
Water	OW-14	--	X	X					X	X
Water	OW-17	--	X	X					X	X
Water	OW-21	--	X	X					X	X
Water	OW-22	--	X	X					X	X
Water	OW-23	--	X	X					X	X
Water	OW-24	--	X	X					X	X
Water	OW-25	--	X	X					X	X
Water	OW-28	--	X	X					X	X
Water	OW-29	--	X	X					X	X
Water	OW-30	--	X	X					X	X
Water	OW-32	--	X	X					X	X
Water	OW-33	--	X	X					X	X
Water	OW-34	--	X	X					X	X
Water	OW-35	--		X					X	X
Water	OW-36	--	X	X					X	X
Water	P-1	--	X	X					X	X
Water	P-2	--	X	X					X	X
Water	P-3	--	X	X					X	X
Water	P-4	--	X	X					X	X
Water	P-5	--	X	X					X	X
Water	P-6	--	X	X					X	X
Water	TW1	--	X	X					X	X
Water	TW10	--	X	X					X	X
Water	TW11	--	X	X					X	X
Water	TW2	--	X	X			X		X	X
Water	TW3	--	X	X			X		X	X
Water	TW4	--	X	X			X		X	X
Water	TW5	--	X	X			X		X	X
Water	TW6	--	X	X			X		X	X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Water	TW7	--	X	X			X		X	X
Water	TW8	--	X	X					X	X
Water	TW9	--	X	X					X	X
Water	W1	--	X	X					X	X
Water	W10A	--		X					X	X
Water	W11A	--		X				X	X	X
Water	W11B	--		X	X				X	X
Water	W12A	--	X	X					X	X
Water	W13A	--		X	X				X	X
Water	W14A	--		X	X				X	X
Water	W15A	--		X					X	X
Water	W16A	--		X					X	X
Water	W17A	--		X	X				X	X
Water	W17B	--		X	X				X	X
Water	W18A	--		X					X	X
Water	W19A	--		X					X	X
Water	W2	--		X					X	X
Water	W20A	--		X		X			X	X
Water	W21A	--	X	X				X	X	X
Water	W22A	--	X	X					X	X
Water	W23A	--	X	X	X				X	X
Water	W24A	--	X	X				X	X	X
Water	W25A	--		X		X		X	X	X
Water	W26A	--		X				X	X	X
Water	W27A	--		X		X		X	X	X
Water	W28A	--		X				X	X	X
Water	W29A	--		X				X	X	X
Water	W29A1	--		X		X			X	X
Water	W29B1	--		X					X	X
Water	W29B2	--		X					X	X
Water	W3	--		X					X	X
Water	W30B	--		X	X				X	X
Water	W31B	--		X	X				X	X
Water	W31C	--		X	X				X	X
Water	W32A	--		X					X	X
Water	W33A	--		X					X	X
Water	W34A	--		X					X	X
Water	W35A	--		X					X	X
Water	W36A	--		X					X	X
Water	W37A	--	X	X	X	X	X		X	X
Water	W38A	--	X	X	X				X	X
Water	W39A	--		X					X	X
Water	W4	--		X					X	X
Water	W40A	--		X					X	X
Water	W41A	--		X					X	X
Water	W42A	--		X					X	X
Water	W43A	--		X					X	X

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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Water	W5	--		X					X	X
Water	W6	--		X					X	X
Water	W7	--	X	X		X		X	X	X
Water	W8A	--	X	X		X			X	X
Water	W8B	--	X	X					X	X
Water	W8C	--	X	X					X	X
Water	W9A	--	X	X					X	X
Water	W9B	--	X	X					X	X
Water	WU	--		X	X			X	X	X
Storm Water System Influent	Runoff-1	--		X						
Storm Water System Influent	Runoff-2	--		X						
Storm Water System Influent	SWD-1	--	X	X					X	X
Storm Water System Influent	SWD-2	--	X	X					X	X
Storm Water System Influent	SWD-3	--	X	X					X	X
Storm Water System Influent	SWD-4	--	X	X					X	X
Storm Water System Influent	SWD-5	--	X	X					X	X
Storm Water System Influent	SWD-6	--	X	X					X	X
Storm Water System Influent	SWD-7	--	X	X					X	X
Storm Water System Influent	SWD-A-A	--		X						
Storm Water System Influent	SWD-B-A	--		X						
Storm Water System Influent	SWD-C-A	--		X						
Stormwater	C1	--	X	X						X
Stormwater	C2	--	X	X						X
Stormwater	CR7	--		X						
Stormwater	OUTFALL	--		X						X
Stormwater	R1	--	X	X						X
Stormwater	R7W	--		X						
Stormwater	RW-1	--		X						X
Stormwater	RW-2	--		X						X
Stormwater	Storm Water	--		X						X
Stormwater	Stormwater Runoff	--		X						X
Stormwater	SWD	--		X					X	X
Stormwater	SWD-1	--	X	X					X	X
Stormwater	SWD-2	--	X	X					X	X
Stormwater	SWD-3	--	X	X					X	X
Stormwater	SWD-4	--	X	X					X	X
Stormwater	SWD-5	--	X	X					X	X
Stormwater	SWD-6	--	X	X					X	X
Stormwater	SWD-7	--	X	X					X	X
Stormwater	SWD-8	--		X						X
Stormwater	SWD-9	--		X					X	X
Surface Water	DD-3	--		X					X	
Surface Water	S-09	--		X					X	X
Surface Water	S-10	--		X					X	X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Surface Water	SDD-1	--	X	X					X	X
Surface Water	SDD-2	--	X	X					X	X
Surface Water	Southwest Corner	--		X						X
Surface Water	SW-01	--		X	X	X			X	X
Surface Water	SW-02	--		X	X	X			X	X
Surface Water	SW-03	--		X	X	X			X	X
Surface Water	SW-04	--		X	X	X			X	X
Surface Water	SW-05	--		X	X	X			X	X
Surface Water	SW-06	--		X	X	X			X	X
Surface Water	SW-07	--		X	X	X			X	X
Surface Water	SW-08	--		X	X	X			X	X
Surface Water	SW-09	--		X					X	
Surface Water	SW-10	--		X					X	
Surface Water	SW-11	--		X					X	
Surface Water	SWBA-1	--	X	X					X	X
Surface Water	SWBA-2	--	X	X					X	X
Surface Water	SWBR-1	--	X	X					X	X
Surface Water	SWBR-2	--	X	X					X	X
Surface Water	WBDN	--		X						
Surface Water	WBUP	--		X						
Sediment	BC-1	0		X	X	X			X	X
Sediment	BC-2	0		X	X	X			X	X
Sediment	BC-3	0		X	X	X			X	X
Sediment	BC-4	0		X	X	X			X	X
Sediment	BC-5	0		X	X	X			X	X
Sediment	DD-1	0		X					X	
Sediment	DD-2	0		X					X	
Sediment	DD-3	0		X					X	
Sediment	DD-4	0		X					X	
Sediment	S-01	0.1		X						
Sediment	S-02	0.1		X						
Sediment	S-03	0.1		X						
Sediment	S-04	0.1		X						
Sediment	S-05	0.1		X						
Sediment	S-06	0.1		X						
Sediment	S-07	0.1		X						
Sediment	S-08	0.1		X						
Sediment	S-09	0		X					X	X
Sediment	S-10	0		X					X	X
Sediment	SB-113	0		X					X	X
Sediment	SB-114	0		X					X	X
Sediment	SB-115	0		X					X	X
Sediment	SB-116	0		X					X	X
Sediment	SB-117	0		X					X	X
Sediment	SB-118	0		X					X	X
Sediment	SB-119	0		X		X			X	X

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
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Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Sediment	SB-128	0		X					X	X
Sediment	SDD-1	0	X	X					X	X
Sediment	SDD-2	0	X	X					X	X
Sediment	SDD-6	0		X	X	X			X	X
Sediment	SDD-7	0		X	X	X			X	X
Sediment	SDD-8	0		X	X	X			X	X
Sediment	SWBA-1	0	X	X					X	X
Sediment	SWBA-2	0	X	X					X	X
Sediment	SWBR-1	0	X	X					X	X
Sediment	SWBR-2	0	X	X					X	X
Air	AS-01	--								X
Air	AS-02	--								X
Air	AS-03	--								X
Air	AS-04	--								X
Air	AS-05	--								X
Air	AS-06	--		X						X
Air	AS-07	--		X						X
Air	AS-08	--		X						X
Air	AS-09	--								X
Air	AS-10	--								X
Air	AS-11	--								X
Air	AS-12	--								X
Air	AS-13	--								X
Air	AS-14	--								X
Air	PB-1012-01	--		X						
Air	PB-1012-02	--		X						
Air	PB-1012-04	--		X						
Air	PEL-1	--		X						
Air	PEL-2	--		X						
Air	PEL-3	--		X						
Air	PEL-4	--		X						
Wipe	BW-01	--		X						
Wipe	BW-02	--		X						
Wipe	BW-03	--		X						
Wipe	BW-04	--		X						
Wipe	BW-06	--		X						
Wipe	BW-07	--		X						
Wipe	BW-08	--		X						
Wipe	BW-09	--		X						
Wipe	BW-10	--		X						
Wipe	BW-11	--		X						
Wipe	BW-12	--		X						
Wipe	BW-13	--		X						
Wipe	BW-14	--		X						
Wipe	BW-15	--		X						

TABLE 3-1
SUMMARY OF RI SAMPLING CONDUCTED
Former Remco Hydraulics Facility
Willits, California
(Page 22 of 22)

Sample Group	Location	Depth (feet)	Gen Min	Metals	PAH	PCB	Pest	SVOC	TPH	VOC
Wipe	BW-16	--		X						
Wipe	BW-17	--		X						
Wipe	WS-1	--		X						
Wipe	WS-2	--		X						
Wipe	WS-3	--		X						
Wipe	WS-4	--		X						

Gen Min = General Minerals

PAH = Polynuclear-aromatic hydrocarbons

PCB = Poly-chlorinated biphenyls

Pest = Pesticides

SVOC = Semi-volatile organic compounds

TPH = Total petroleum hydrocarbons

VOC = Volatile organic hydrocarbons

TABLE 3-2
WELL VAULT BOX SAMPLES
Former Remco Hydraulics Facility
Willits, California

Location ID	W1	W2	W5	W8A	W8C	W9A	W9B
Date	5/19/98	5/19/98	5/19/98	5/19/98	5/19/98	5/19/98	5/19/98
Metals (mg/L)							
Hexavalent Chromium	2.5	0.57	---	<0.005	<0.005	---	---
Total Chromium	4.1	1.8	89.5	0.0022	0.0012	---	---
Volatile Organic Compounds (µg/L)							
1,1,1-Trichloroethane (1,1,1-TCA)	<5	36	10	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	<5	6.9	7.6	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	<10	<10	<10	<10	<10	<10	<10
Acetone	<10	<10	<10	<10	<10	<10	<10
Benzene	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5
Bromoform	<5	<5	<5	<5	<5	<5	<5
Bromomethane	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<10	<10	<10	<10	<10	<10	<10
Chloroform	<5	<5	<5	<5	<5	<5	<5
Chloromethane	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5
Methyl tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene (PCE)	<5	<5	<5	<5	<5	<5	<5
Toluene	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5
Trichloroethene (TCE)	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride (VC)	<10	<10	<10	<10	<10	<10	<10
Xylenes (total)	<5	<5	<5	<5	<5	<5	<5

Notes:

µg/L = micrograms per liter

mg/L = milligrams per liter

-- = Not analyzed

Bold value indicates a detection.

TABLE 4-1
SUMMARY OF WELL CONSTRUCTION DETAILS
Former Remco Hydraulics Facility
Willits, California
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Saturated Zone	Well ID	Date Installed	Well Casing Depth (ft. bgs)	Well Casing Diameter (inches)	Ground Surface Elevation	Top of Casing Elevation (ft. msl.)	Borehole Depth (ft. bgs)	Borehole Diameter (inches)	Top of Screen (ft bgs)	Elevation Top of Screen (ft msl)	Bottom of Screen (ft bgs)	Elevation Bottom of Screen (ft msl)	Top of Filter Pack (ft bgs)	Elevation Top of Filter Pack (ft msl)	Bottom of Filter Pack (ft bgs)	Elevation Bottom of Filter Pack (ft msl)
A-Zone	B3 (1)	2/5/82	12	6	NA	1385.49	12	24	2	NA	12	NA	1	NA	12	NA
	B4 (1)	2/5/82	15	6	NA	1376.16	15	24	2	NA	15	NA	1	NA	15	NA
	EW-1A	1/13/97	23	4	1377.88	1379.27	23	12	10	1367.88	20	1357.88	8	1369.88	23	1354.88
	MW-1 (2)	9/15/97	26	2	1376.02	1375.76	26.5	8	3	1373.02	26	1350.02	2.5	1373.52	26.5	1349.52
	MW-2 (2)	9/15/97	25	2	1375.48	1375.16	26.5	8	3	1372.48	25	1350.48	2.5	1372.98	25	1350.48
	MW-3 (2)	9/15/97	25	2	1375.52	1375.29	26.5	8	3	1372.52	25	1350.52	2.5	1373.02	25	1350.52
	MW-4 (2)	9/15/97	25	2	1376.24	1376.03	26.5	8	3	1373.24	25	1351.24	2.5	1373.74	25	1351.24
	P-1	3/3-4/99	4.5	1	1377.20	1377.20	4.6	6	2	1375.20	4.5	1372.70	1	1376.20	4.5	1372.70
	P-2	3/3-4/99	4.4	1	1377.31	1377.28	4.5	6	1.9	1375.39	4.4	1372.89	1	1376.31	4.5	1372.81
	P-3	3/3-4/99	4.3	1	1377.19	1377.12	4.4	6	1.8	1375.36	4.3	1372.86	1	1376.19	4.3	1372.86
	P-4	3/3-4/99	4.4	1	1376.56	1376.47	4.6	6	1.9	1374.68	4.4	1372.18	1	1375.56	4.4	1372.18
	P-5	3/3-4/99	4.3	1	1376.42	1376.23	5	6	1.8	1374.59	4.3	1372.09	1	1375.42	5	1371.42
	P-6	3/3-4/99	4.2	1	1376.33	1376.16	4.5	6	1.7	1374.66	4.2	1372.16	1.5	1374.83	4.2	1372.16
	TW-1	8/23/00	20	2	1377.07	1376.58	21	8	5	1372.07	20	1357.07	3	1374.07	21	1356.07
	TW-2	3/20/00	19	2	1377.37	1378.19	24	8	9	1368.37	19	1358.37	8	1369.37	19	1358.37
	TW-3	3/20/00	20	2	1377.39	1378.47	24	8	10	1367.39	20	1357.39	9	1368.39	24	1353.39
	TW-4	3/20/00	20	2	1377.37	1378.3	24	8	10	1367.37	20	1357.37	9	1368.37	24	1353.37
	TW-5	3/20/00	20	2	1377.02	1377.99	24	8	10	1367.02	20	1357.02	9	1368.02	24	1353.02
	TW-6	3/21/00	20	2	1377.03	1377.95	24	8	10	1367.03	20	1357.03	9	1368.03	24	1353.03
	TW-7	8/23/00	20	2	1377.07	1376.71	23	8	5	1372.07	20	1357.07	4	1373.07	20.5	1356.57
	TW-8	8/24/00	20	2	1378.25	1378.05	20	8	5	1373.25	20	1358.25	3	1375.25	20	1358.25
	TW-9	8/24/00	20	2	1378.27	1378.03	20	8	5	1373.27	20	1358.27	3	1375.27	20	1358.27
	TW-10	8/24/00	20	2	1378.25	1378.02	21	8	5	1373.25	20	1358.25	3	1375.25	21	1357.25
	TW-11	8/24/00	20	2	1378.24	1378.02	21.5	8	5	1373.24	20	1358.24	3	1375.24	21.5	1356.74
	W7	9/20/90	15	2	NA	1377.35	17	NA	10	NA	15	NA	8	NA	17	NA
	W8A	8/30/94	15.8	4	NA	1376.37	15.8	10	7.8	NA	15.8	NA	5.4	NA	15.8	NA
	W9A	8/25/94	15	4	NA	1375.98	15	10	7	NA	14.6	NA	6	NA	15	NA
	W10A	3/24/00	20	2	1381.19	1380.8791	20	8	5	1376.19	20	1361.19	4	1377.19	20	1361.19
	W11A	3/23/00	19	2	1380.29	1380.14	20	8	9	1371.29	19	1361.29	8	1372.29	20	1360.29
	W12A	3/24/00	20	2	1378.31	1378.05	20	2.5	10	1368.31	20	1358.31	9	1369.31	20	1358.31
	W13A	7/25/00	20	2	1377.51	1377.07	20	8	10	1367.51	20	1357.51	9	1368.51	20	1357.51
	W14A	3/29/00	20	2	1376.23	1375.94	20	8	10	1366.23	20	1356.23	9	1367.23	20	1356.23
	W15A	3/22/00	20	2	1376.91	1376.59	20	8	10	1366.91	20	1356.91	9	1367.91	20	1356.91
	W16A	3/23/00	18	2	1384.44	1384.14	25	8	8	1376.44	18	1366.44	7	1377.44	18	1366.44
	W17A	3/28/00	22	2	1375.68	1375.35	25	8	7	1368.68	22	1353.68	6	1369.68	22	1353.68
	W18A	3/27/00	19	2	1378.28	1377.74	20	8	9	1369.28	19	1359.28	8	1370.28	20	1358.28
	W19A	3/28/00	20	2	1380.14	1379.76	39.5	8	10	1370.14	20	1360.14	9	1371.14	20	1360.14
	W20A	3/23/00	20	2	1382.47	1382.12	20	8	10	1372.47	20	1362.47	9	1373.47	20	1362.47
	W21A	10/20/99	22	2	1377.71	1377.25	22	8	7	1370.71	22	1355.71	6	1371.71	22	1355.71
	W22A	10/14/99	22	2	1378.23	1377.95	23.5	8.25	7	1371.23	22	1356.23	6	1372.23	23.5	1354.73
	W23A	7/25/00	20	2	1378.19	1377.85	20	8	10	1368.19	20	1358.19	9	1369.19	20	1358.19
	W24A	10/14/99	22	2	1378.34	1378.11	24	8.25	7	1371.34	22	1356.34	6	1372.34	24	1354.34
	W25A	3/21/00	19	2	1378.47	1378.27	24	8	9	1369.47	19	1359.47	8	1370.47	24	1354.47
	W26A	3/24/00	20	2	1381.14	1380.93	20	2.5	10	1371.14	20	1361.14	9	1372.14	20	1361.14
	W27A	3/21/00	18	2	1380.64	1380.38	24	8	8	1372.64	18	1362.64	7	1373.64	24	1356.64
	W28A	3/24/00	20	2	1382.41	1382.02	20	2.5	10	1372.41	20	1362.41	9	1373.41	20	1362.41
	W29A (3)	3/23/00	20	2	1382.03	1385.02	20	8	10	1372.03	20	1362.03	9	1373.03	20	1362.03
	W29A1	12/15/00	16	2	1381.95	1381.37	16	8	6	1375.95	16	1365.95	5	1376.95	16	1365.95
	W32A	8/17/00	18.5	2	1383.03	1382.64	20	8	8.5	1374.53	18.5	1364.53	7.5	1375.53	20	1363.03
	W33A	8/17/00	19	2	1381.69	1381.21	20	8	9	1372.69	19	1362.69	8	1373.69	20	1361.69
	W34A	8/17/00	20	2	1379.90	1379.43	23	8	10	1369.90	20	1359.90	9	1370.90	20	1359.90
	W35A	8/18/00	21.5	2	1378.37	1377.94	23	8	6.5	1371.87	21.5	1356.87	5.5	1372.87	22	1356.37

TABLE 4-1
SUMMARY OF WELL CONSTRUCTION DETAILS
Former Remco Hydraulics Facility
Willits, California
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Saturated Zone	Well ID	Date Installed	Well Casing Depth (ft. bgs)	Well Casing Diameter (inches)	Ground Surface Elevation	Top of Casing Elevation (ft. msl.)	Borehole Depth (ft. bgs)	Borehole Diameter (inches)	Top of Screen (ft bgs)	Elevation Top of Screen (ft msl)	Bottom of Screen (ft bgs)	Elevation Bottom of Screen (ft msl)	Top of Filter Pack (ft bgs)	Elevation Top of Filter Pack (ft msl)	Bottom of Filter Pack (ft bgs)	Elevation Bottom of Filter Pack (ft msl)
B-Zone	W36A	8/18/00	15.5	2	1377.31	1376.87	17	8	5.5	1371.81	15.5	1361.81	4.5	1372.81	16	1361.31
	W37A	8/25/00	20	2	1376.97	1376.55	20	8	5	1371.97	20	1356.97	3	1373.97	20	1356.97
	W38A	7/27/00	20	2	1378.24	1377.93	20	8	10	1368.24	20	1358.24	9	1369.24	20	1358.24
	W39A	1/18/01	15.5	2	1378.56	1378.33	15.5	8	5.5	1373.06	15.5	1363.06	4	1374.56	15.5	1363.06
	W40A	1/18/01	16	2	1377.85	1377.29	18.5	8	6	1371.85	16	1361.85	5	1372.85	16	1361.85
	W41A	1/19/01	16	2	1375.66	1375.19	17	8	6	1369.66	16	1359.66	5	1370.66	17	1358.66
	W42A	1/19/01	23	2	1373.75	1373.55	24.5	8	8	1365.75	23	1350.75	7	1366.75	24.5	1349.25
	W43A	1/19/01	15.5	2	1373.48	1372.85	15.5	8	5.5	1367.98	15.5	1357.98	4.5	1368.98	15.5	1357.98
	B1 (1)	2/5/82	50.9	6	NA	1376.11	50.9	20	22.5	NA	51	NA	16.5	NA	51	NA
	B2 (1)	2/5/82	51	6	NA	1385.75	50	20/24	20.3	NA	50	NA	18	NA	50	NA
	B5 (1)	9/9/82	39	6	NA	1378.38	39	24	19	NA	39	NA	16	NA	39	NA
	EW-1B	1/6,9/1997	39	4	1377.94	1379.46	39	18/12	26	NA	36	1341.94	24	1353.94	39	1338.94
	W1	9/1/90	33.5	2	NA	1377.44	37	NA	23	NA	33	NA	21	NA	33.5	NA
	W2	9/1/90	33.5	2	NA	1377.95	36.5	NA	23	NA	33	NA	21	NA	33.5	NA
	W4	9/9/90	35	2	NA	1377.67	35.5	NA	25	NA	35	NA	22.5	NA	35	NA
	W8B	8/30/94	40.5	4	NA	1376.67	40.5	10	25	NA	35	NA	23	NA	40.5	NA
	W9B	8/25/94	47	4	NA	1375.86	45	10	31.5	NA	41.5	NA	29.3	NA	47	NA
	W11B	8/4/00	37	2	1380.29	1380.12	37	15/8	27	1353.29	37	1343.29	26	1354.29	37	1343.29
	W17B	10/13/00	37	2	1375.68	1375.22	37	15/8	27	1348.68	37	1338.68	25	1350.68	37	1338.68
	W29B1	12/15/00	30	2	1381.94	1381.29	30	12/8	20	1361.94	30	1351.94	19	1362.94	30	1351.94
C-Zone	W30B	8/3/00	37	2	1377.07	1376.69	37	15/8	27	1350.07	37	1340.07	26	1351.07	37	1340.07
	W31B	8/3/00	37	2	1377.20	1376.96	37	15/8	27	1350.20	37	1340.20	26	1351.20	37	1340.20
	W3	9/1/90	70	2	NA	1377.13	70	NA	55	NA	65	NA	52	NA	65	NA
	W5	9/15/90	65	2	NA	1376.99	70	NA	55	NA	65	NA	53	NA	65	NA
	W6	9/17/90	64.5	2	NA	1377.53	65	NA	53.5	NA	64.5	NA	52	NA	64.5	NA
	W8C	8/29/94	75	4	NA	1376.35	75	10	54.5	NA	69.5	NA	51.9	NA	75	NA
	W29B2	12/15/00	55	2	1381.82	1381.41	55	12/8	40	1341.82	55	1326.82	39	1342.82	55	1326.82
	W31C	7/28/00	75	2	1377.40	1376.99	75	15/10/8	60	1317.40	75	1302.40	58	1319.40	75	1302.40

Notes:
bgs - below ground surface
ft - feet
msl = mean sea level
NA = measurement not available

- (1) Information on well construction for wells B1 through B5 developed from drillers logs and GeoSyntec Consultant's 1995 Report on Investigations of Volatile Organic Compounds in Groundwater, Remco Hydraulics, Inc., Willits, California.
(2) Wells MW-1 through MW-4 are Chevron monitoring wells.
(3) Well W29A was decommissioned on December 15, 2000 by overdrilling, removing well casing and filling with grout.

TABLE 4-2
SUMMARY OF PHYSICAL SOIL SAMPLING AND ANALYSIS RESULTS
Former Remco Hydraulics Facility
Willits, California

Soil Boring	Soil Sample Number	Sample Date	Sample Depth (ft bgs)	Hydrogeologic Zone	Bulk Density (PCF)	Vertical Permeability (cm/s)	Porosity (%)	Moisture Content (%)
SB-2A	SB2A-S1*	1/8/97	20	A/B-Aquitard	102.88	2.99E-08	37.78	23.4
EW-1A	EW1A-S1	1/8/97	19	A-Zone	NA	NA	NA	22.7
EW-1B	EW1B-S2	1/9/97	22.5	A/B-Aquitard	102.38	2.77E-08	38.09	22.88
	EW1B-S3	1/9/97	31.5	B-Zone	124	3.04E-06	25.01	14.46
	EW1B-S4	1/9/97	32	B-Zone	NA	NA	NA	12.51

Notes:

bgs = below ground surface
cm/s = centimeters per second
ft = feet
NA = not analyzed
% = percent
PCF = pounds per cubic foot

(1) These data were collected and reported as part of the Preliminary Endangerment Assessment Report, Henshaw Associates, July 13, 2000. Laboratory reports are included in Appendix 4-2.

* Under chain of custody as EW1A-S1, sample date 1/8/97

Vertical permeability by ASTM D5084-90

TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
Willits, California

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B1	1376.11	4/1/91	3.85	NA	1372.26
		9/1/91	5.42	-1.57	1370.69
		10/1/91	5.71	-0.29	1370.40
		1/1/92	4.21	1.50	1371.90
		2/3/92	4.08	0.13	1372.03
		3/5/92	3.62	0.46	1372.49
		4/1/92	4.00	-0.38	1372.11
		5/1/92	4.25	-0.25	1371.86
		6/1/92	4.42	-0.17	1371.69
		7/1/92	4.67	-0.25	1371.44
		8/3/92	5.08	-0.41	1371.03
		9/2/92	5.42	-0.34	1370.69
		10/5/92	5.50	-0.08	1370.61
		11/3/92	5.37	0.13	1370.74
		12/2/92	4.46	0.91	1371.65
		1/6/93	3.33	1.13	1372.78
		2/1/93	3.75	-0.42	1372.36
		3/3/93	3.71	0.04	1372.40
		4/5/93	3.83	-0.12	1372.28
		5/4/93	3.92	-0.09	1372.19
		6/4/93	3.71	0.21	1372.40
		7/2/93	4.33	-0.62	1371.78
		8/2/93	4.62	-0.29	1371.49
		9/1/93	4.75	-0.13	1371.36
		10/7/93	5.08	-0.33	1371.03
		11/2/93	5.25	-0.17	1370.86
		12/6/93	4.67	0.58	1371.44
		1/6/94	4.29	0.38	1371.82
		2/7/94	3.67	0.62	1372.44
		3/2/94	3.96	-0.29	1372.15
		4/4/94	4.25	-0.29	1371.86
		5/6/94	4.00	0.25	1372.11
		6/6/94	4.33	-0.33	1371.78
		7/6/94	4.96	-0.63	1371.15
		8/5/94	5.25	-0.29	1370.86
		9/1/94	5.25	0.00	1370.86
		10/1/94	5.46	-0.21	1370.65
		11/1/94	5.75	-0.29	1370.36
		12/1/94	5.58	0.17	1370.53
		1/1/95	3.04	2.54	1373.07
		2/1/95	4.46	-1.42	1371.65
		3/1/95	3.75	0.71	1372.36
		4/1/95	3.42	0.33	1372.69
		5/1/95	3.62	-0.20	1372.49
		6/1/95	4.33	-0.71	1371.78
		7/1/95	4.50	-0.17	1371.61
		8/1/95	4.62	-0.12	1371.49

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
Willits, California

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B1 continued		9/1/95	4.92	-0.30	1371.19
		9/27/95	4.30	0.62	1371.81
		10/1/95	5.33	-1.03	1370.78
		11/1/95	5.87	-0.54	1370.24
		12/1/95	4.67	1.20	1371.44
		1/1/96	4.62	0.05	1371.49
		2/1/96	3.00	1.62	1373.11
		3/1/96	3.00	0.00	1373.11
		4/17/96	3.48	-0.48	1372.63
		2/11/97	2.88	0.60	1373.23
		5/27/97	3.99	-1.11	1372.12
		8/26/97	4.90	-0.91	1371.21
		5/19/98	4.12	0.78	1371.99
		8/24/98	4.80	-0.68	1371.31
		12/16/98	3.59	1.21	1372.52
		7/26/99	5.24	-1.65	1370.87
		10/25/99	5.95	-0.71	1370.16
		2/1/00	3.20	2.75	1372.91
		4/3/00	4.34	-1.14	1371.77
		7/11/00	5.18	-0.84	1370.93
		10/16/00	5.61	-0.43	1370.50
		2/19/01	3.56	2.05	1372.55
B2	1385.75	4/1/91	6.21	NA	1379.54
		9/1/91	9.46	-3.25	1376.29
		10/1/91	10.08	-0.62	1375.67
		1/1/92	8.33	1.75	1377.42
		2/3/92	7.25	1.08	1378.50
		3/5/92	6.33	0.92	1379.42
		4/1/92	6.50	-0.17	1379.25
		5/1/92	6.79	-0.29	1378.96
		6/1/92	8.29	-1.50	1377.46
		7/1/92	8.29	0.00	1377.46
		8/3/92	8.75	-0.46	1377.00
		9/2/92	9.33	-0.58	1376.42
		10/5/92	9.96	-0.63	1375.79
		11/3/92	9.83	0.13	1375.92
		12/2/92	8.71	1.12	1377.04
		1/6/93	6.25	2.46	1379.50
		2/1/93	6.33	-0.08	1379.42
		3/3/93	6.04	0.29	1379.71
		4/5/93	6.08	-0.04	1379.67
		5/4/93	6.08	0.00	1379.67
		6/4/93	6.08	0.00	1379.67
		7/2/93	6.96	-0.88	1378.79
		8/2/93	7.75	-0.79	1378.00
		9/1/93	8.50	-0.75	1377.25

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B2 continued		10/7/93	9.00	-0.50	1376.75
		11/2/93	9.33	-0.33	1376.42
		12/6/93	8.75	0.58	1377.00
		1/6/94	7.71	1.04	1378.04
		2/7/94	6.46	1.25	1379.29
		3/2/94	6.42	0.04	1379.33
		4/4/94	6.71	-0.29	1379.04
		5/6/94	6.50	0.21	1379.25
		6/6/94	6.96	-0.46	1378.79
		7/6/94	7.83	-0.87	1377.92
		8/5/94	8.33	-0.50	1377.42
		9/1/94	8.75	-0.42	1377.00
		10/1/94	8.75	0.00	1377.00
		11/1/94	9.58	-0.83	1376.17
		12/1/94	9.17	0.41	1376.58
		1/1/95	6.00	3.17	1379.75
		2/1/95	6.17	-0.17	1379.58
		3/1/95	6.21	-0.04	1379.54
		4/1/95	5.87	0.34	1379.88
		5/1/95	6.00	-0.13	1379.75
		6/1/95	6.04	-0.04	1379.71
		7/1/95	6.17	-0.13	1379.58
		8/1/95	7.58	-1.41	1378.17
		9/1/95	8.08	-0.50	1377.67
		9/27/95	8.52	-0.44	1377.23
		10/1/95	8.50	0.02	1377.25
		11/1/95	9.08	-0.58	1376.67
		12/1/95	8.92	0.16	1376.83
		1/1/96	8.42	0.50	1377.33
		2/1/96	5.37	3.05	1380.38
		3/1/96	5.42	-0.05	1380.33
		4/17/96	5.47	-0.05	1380.28
		2/11/97	4.82	0.65	1380.93
		5/27/97	6.42	-1.60	1379.33
		8/26/97	8.13	-1.71	1377.62
		5/19/98	7.68	0.45	1378.07
		8/24/98	4.32	3.36	1381.43
		12/16/98	6.05	-1.73	1379.70
		7/26/99	7.40	-1.35	1378.35
		10/25/99	9.07	-1.67	1376.68
		2/1/00	5.61	3.46	1380.14
		4/3/00	5.61	0.00	1380.14
		7/11/00	7.15	-1.54	1378.60
		10/16/00	8.82	-1.67	1376.93
		2/19/01	5.69	3.13	1380.06

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B3	1385.49	4/1/91	1.33	NA	1384.16
		9/1/91	5.85	-4.52	1379.64
		10/1/91	6.75	-0.90	1378.74
		1/1/92	2.83	3.92	1382.66
		2/3/92	1.17	1.66	1384.32
		3/5/92	0.83	0.34	1384.66
		4/1/92	1.58	-0.75	1383.91
		5/1/92	2.46	-0.88	1383.03
		6/1/92	2.96	-0.50	1382.53
		7/1/92	4.08	-1.12	1381.41
		8/3/92	5.21	-1.13	1380.28
		9/2/92	6.08	-0.87	1379.41
		10/5/92	6.17	-0.09	1379.32
		11/3/92	6.04	0.13	1379.45
		12/2/92	3.33	2.71	1382.16
		1/6/93	0.67	2.66	1384.82
		2/1/93	1.25	-0.58	1384.24
		3/3/93	1.12	0.13	1384.37
		4/5/93	1.17	-0.05	1384.32
		5/4/93	1.83	-0.66	1383.66
		6/4/93	1.21	0.62	1384.28
		7/2/93	3.08	-1.87	1382.41
		8/2/93	4.00	-0.92	1381.49
		9/1/93	4.67	-0.67	1380.82
		10/7/93	4.92	-0.25	1380.57
		11/2/93	5.29	-0.37	1380.20
		12/6/93	4.58	0.71	1380.91
		1/6/94	2.33	2.25	1383.16
		2/7/94	0.96	1.37	1384.53
		3/2/94	2.08	-1.12	1383.41
		4/4/94	2.71	-0.63	1382.78
		5/6/94	2.04	0.67	1383.45
		6/6/94	3.00	-0.96	1382.49
		7/6/94	3.92	-0.92	1381.57
		8/5/94	4.54	-0.62	1380.95
		9/1/94	5.12	-0.58	1380.37
		10/1/94	5.25	-0.13	1380.24
		11/1/94	5.25	0.00	1380.24
		12/1/94	5.00	0.25	1380.49
		1/1/95	0.83	4.17	1384.66
		2/1/95	1.04	-0.21	1384.45
		3/1/95	1.17	-0.13	1384.32
		4/1/95	1.25	-0.08	1384.24
		5/1/95	1.33	-0.08	1384.16
		6/1/95	2.62	-1.29	1382.87
		7/1/95	2.96	-0.34	1382.53
		8/1/95	4.46	-1.50	1381.03

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B3 continued		9/1/95	5.25	-0.79	1380.24
		9/27/95	5.91	-0.66	1379.58
		10/1/95	5.92	-0.01	1379.57
		11/1/95	6.75	-0.83	1378.74
		12/1/95	4.92	1.83	1380.57
		1/1/96	4.75	0.17	1380.74
		2/1/96	0.79	3.96	1384.70
		3/1/96	0.75	0.04	1384.74
		4/17/96	0.99	-0.24	1384.50
		2/11/97	0.54	0.45	1384.95
		5/27/97	2.62	-2.08	1382.87
		8/26/97	5.00	-2.38	1380.49
		5/19/98	2.52	2.48	1382.97
		8/24/98	7.45	-4.93	1378.04
		12/16/98	1.20	6.25	1384.29
		7/26/99	4.44	-3.24	1381.05
		10/25/99	5.63	-1.19	1379.86
		2/1/00	0.57	5.06	1384.92
		4/3/00	2.51	-1.94	1382.98
		7/11/00	4.32	-1.81	1381.17
		10/16/00	5.30	-0.98	1380.19
		2/19/01	0.54	4.76	1384.95
B4	1376.16	4/1/91	4.10	NA	1372.06
		9/1/91	5.58	-1.48	1370.58
		10/1/91	5.87	-0.29	1370.29
		1/1/92	4.37	1.50	1371.79
		2/3/92	4.21	0.16	1371.95
		3/5/92	3.83	0.38	1372.33
		4/1/92	4.25	-0.42	1371.91
		5/1/92	4.54	-0.29	1371.62
		6/1/92	4.67	-0.13	1371.49
		7/1/92	4.83	-0.16	1371.33
		8/3/92	5.21	-0.38	1370.95
		9/2/92	5.58	-0.37	1370.58
		10/5/92	5.58	0.00	1370.58
		11/3/92	5.42	0.16	1370.74
		12/2/92	4.62	0.80	1371.54
		1/6/93	3.58	1.04	1372.58
		2/1/93	4.00	-0.42	1372.16
		3/3/93	4.00	0.00	1372.16
		4/5/93	4.08	-0.08	1372.08
		5/4/93	4.12	-0.04	1372.04
		6/4/93	3.92	0.20	1372.24
		7/2/93	4.54	-0.62	1371.62
		8/2/93	4.92	-0.38	1371.24
		9/1/93	4.96	-0.04	1371.20

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B4 continued		10/7/93	5.25	-0.29	1370.91
		11/2/93	5.42	-0.17	1370.74
		12/6/93	4.79	0.63	1371.37
		1/6/94	4.46	0.33	1371.70
		2/7/94	3.83	0.63	1372.33
		3/2/94	4.21	-0.38	1371.95
		4/4/94	4.42	-0.21	1371.74
		5/6/94	4.21	0.21	1371.95
		6/6/94	4.50	-0.29	1371.66
		7/6/94	5.08	-0.58	1371.08
		8/5/94	5.42	-0.34	1370.74
		9/1/94	6.00	-0.58	1370.16
		10/1/94	5.87	0.13	1370.29
		11/1/94	5.83	0.04	1370.33
		12/1/94	5.67	0.16	1370.49
		1/1/95	3.92	1.75	1372.24
		2/1/95	3.92	0.00	1372.24
		3/1/95	4.04	-0.12	1372.12
		4/1/95	3.71	0.33	1372.45
		5/1/95	3.92	-0.21	1372.24
		6/1/95	4.58	-0.66	1371.58
		7/1/95	4.67	-0.09	1371.49
		8/1/95	4.75	-0.08	1371.41
		9/1/95	5.00	-0.25	1371.16
		9/27/95	5.49	-0.49	1370.67
		10/1/95	5.50	-0.01	1370.66
		11/1/95	6.04	-0.54	1370.12
		12/1/95	4.75	1.29	1371.41
		1/1/96	4.67	0.08	1371.49
		2/1/96	3.37	1.30	1372.79
		3/1/96	3.29	0.08	1372.87
		4/17/96	3.73	-0.44	1372.43
		2/11/97	3.30	0.43	1372.86
		5/27/97	4.18	-0.88	1371.98
		8/26/97	5.02	-0.84	1371.14
		5/19/98	4.38	0.64	1371.78
		8/24/98	5.02	-0.64	1371.14
		12/16/98	3.90	1.12	1372.26
		7/26/99	5.43	-1.53	1370.73
		10/25/99	6.09	-0.66	1370.07
		2/1/00	3.51	2.58	1372.65
		4/3/00	4.63	-1.12	1371.53
		7/11/00	5.38	-0.75	1370.78
		10/16/00	5.77	-0.39	1370.39
		2/19/01	3.72	2.05	1372.44

btc = below top of casing
ft = foot
msl = mean seal level

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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B5	1378.38	4/1/91	2.72	NA	1375.66
		9/1/91	5.79	-3.07	1372.59
		10/1/91	6.21	-0.42	1372.17
		1/1/92	4.00	2.21	1374.38
		2/3/92	3.25	0.75	1375.13
		3/5/92	2.75	0.50	1375.63
		4/1/92	3.17	-0.42	1375.21
		5/1/92	3.67	-0.50	1374.71
		6/1/92	4.25	-0.58	1374.13
		7/1/92	4.58	-0.33	1373.80
		8/3/92	5.21	-0.63	1373.17
		9/2/92	5.75	-0.54	1372.63
		10/5/92	6.00	-0.25	1372.38
		11/3/92	5.87	0.13	1372.51
		12/2/92	4.42	1.45	1373.96
		1/6/93	2.50	1.92	1375.88
		2/1/93	2.92	-0.42	1375.46
		3/3/93	2.83	0.09	1375.55
		4/5/93	2.92	-0.09	1375.46
		5/4/93	3.17	-0.25	1375.21
		6/4/93	3.00	0.17	1375.38
		7/2/93	4.00	-1.00	1374.38
		8/2/93	4.62	-0.62	1373.76
		9/1/93	5.00	-0.38	1373.38
		10/7/93	5.50	-0.50	1372.88
		11/2/93	5.58	-0.08	1372.80
		12/6/93	5.12	0.46	1373.26
		1/6/94	4.08	1.04	1374.30
		2/7/94	3.29	0.79	1375.09
		3/2/94	3.83	-0.54	1374.55
		4/4/94	3.83	0.00	1374.55
		5/6/94	3.46	0.37	1374.92
		6/6/94	4.17	-0.71	1374.21
		7/6/94	4.96	-0.79	1373.42
		8/5/94	5.42	-0.46	1372.96
		9/1/94	5.96	-0.54	1372.42
		10/1/94	6.17	-0.21	1372.21
		11/1/94	6.12	0.05	1372.26
		12/1/94	5.83	0.29	1372.55
		1/1/95	2.29	3.54	1376.09
		2/1/95	2.50	-0.21	1375.88
		3/1/95	3.12	-0.62	1375.26
		4/1/95	2.75	0.37	1375.63
		5/1/95	2.92	-0.17	1375.46
		6/1/95	3.50	-0.58	1374.88

btc = below top of casing
ft = foot
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HISTORICAL GROUNDWATER ELEVATIONS
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
B5 continued		7/1/95	3.62	-0.12	1374.76
		8/1/95	4.46	-0.84	1373.92
		9/1/95	4.92	-0.46	1373.46
		9/27/95	5.28	-0.36	1373.10
		10/1/95	5.29	-0.01	1373.09
		11/1/95	5.79	-0.50	1372.59
		12/1/95	5.04	0.75	1373.34
		1/1/96	4.92	0.12	1373.46
		2/1/96	1.42	3.50	1376.96
		3/1/96	1.29	0.13	1377.09
		4/17/96	2.12	-0.83	1376.26
		2/11/97	0.80	1.32	1377.58
		5/27/97	2.55	-1.75	1375.83
		8/26/97	4.72	-2.17	1373.66
		5/19/98	2.93	1.79	1375.45
		8/24/98	4.65	-1.72	1373.73
		12/16/98	1.98	2.67	1376.40
		7/26/99	4.61	-2.63	1373.77
		10/25/99	5.77	-1.16	1372.61
		2/1/00	1.77	4.00	1376.61
		4/3/00	3.02	-1.25	1375.36
		7/11/00	4.70	-1.68	1373.68
		10/16/00	5.78	-1.08	1372.60
		2/19/01	2.02	3.76	1376.36
EW-1A	1379.34	2/11/97	1.50	NA	1377.84
		5/27/97	2.90	-1.40	1376.44
		8/26/97	5.55	-2.65	1373.79
		5/19/98	3.16	2.39	1376.18
		8/24/98	5.40	-2.24	1373.94
		12/16/98	2.40	3.00	1376.94
		7/26/99	5.25	-2.85	1374.09
		10/25/99	6.91	-1.66	1372.43
		2/1/00	1.78	5.13	1377.56
		4/3/00	3.17	-1.39	1376.17
		7/11/00	5.03	-1.86	1374.31
		10/16/00	6.39	-1.36	1372.95
		2/19/01	1.78	4.61	1377.56
EW-1B	1379.46	2/11/97	1.79	NA	1377.67
		5/27/97	3.51	-1.72	1375.95
		8/26/97	5.79	-2.28	1373.67
		5/19/98	3.86	1.93	1375.60
		8/24/98	5.64	-1.78	1373.82
		12/16/98	2.86	2.78	1376.60
		7/26/99	5.55	-2.69	1373.91
		10/25/99	6.75	-1.20	1372.71
		2/1/00	2.70	4.05	1376.76

btc = below top of casing
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
EW-1B continued		4/3/00	3.98	-1.28	1375.48
		7/11/00	5.69	-1.71	1373.77
		10/16/00	6.76	-1.07	1372.70
		2/19/01	3.00	3.76	1376.46
W1	1377.54	4/1/91	1.73	NA	1375.81
		9/1/91	5.00	-3.27	1372.54
		10/1/91	5.23	-0.23	1372.31
		1/1/92	3.32	1.91	1374.22
		2/3/92	2.82	0.50	1374.72
		3/5/92	1.86	0.96	1375.68
		4/1/92	1.90	-0.04	1375.64
		5/1/92	2.44	-0.54	1375.10
		6/1/92	2.90	-0.46	1374.64
		7/1/92	4.19	-1.29	1373.35
		8/3/92	4.23	-0.04	1373.31
		9/2/92	4.90	-0.67	1372.64
		10/5/92	5.07	-0.17	1372.47
		11/3/92	4.86	0.21	1372.68
		12/2/92	3.57	1.29	1373.97
		1/6/93	1.73	1.84	1375.81
		2/1/93	1.77	-0.04	1375.77
		3/3/93	1.52	0.25	1376.02
		4/5/93	1.65	-0.13	1375.89
		5/4/93	1.73	-0.08	1375.81
		6/4/93	2.23	-0.50	1375.31
		7/2/93	2.73	-0.50	1374.81
		8/2/93	3.57	-0.84	1373.97
		9/1/93	5.11	-1.54	1372.43
		10/7/93	4.73	0.38	1372.81
		11/2/93	4.65	0.08	1372.89
		12/6/93	4.15	0.50	1373.39
		1/6/94	3.57	0.58	1373.97
		2/7/94	2.98	0.59	1374.56
		3/2/94	3.32	-0.34	1374.22
		4/4/94	2.73	0.59	1374.81
		5/6/94	2.69	0.04	1374.85
		6/6/94	2.90	-0.21	1374.64
		7/6/94	3.52	-0.62	1374.02
		8/5/94	3.98	-0.46	1373.56
		9/1/94	4.61	-0.63	1372.93
		10/1/94	4.82	-0.21	1372.72
		11/1/94	5.23	-0.41	1372.31
		12/1/94	4.98	0.25	1372.56
		1/1/95	1.82	3.16	1375.72
		2/1/95	1.82	0.00	1375.72
		3/1/95	1.86	-0.04	1375.68

btc = below top of casing
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HISTORICAL GROUNDWATER ELEVATIONS
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W1 continued		4/1/95	1.82	0.04	1375.72
		5/1/95	1.90	-0.08	1375.64
		6/1/95	2.23	-0.33	1375.31
		7/1/95	2.73	-0.50	1374.81
		8/1/95	3.36	-0.63	1374.18
		9/1/95	3.73	-0.37	1373.81
		9/27/95	4.36	-0.63	1373.18
		10/1/95	4.27	0.09	1373.27
		11/1/95	5.15	-0.88	1372.39
		12/1/95	4.65	0.50	1372.89
		1/1/96	4.57	0.08	1372.97
		2/1/96	0.48	4.09	1377.06
		3/1/96	0.48	0.00	1377.06
		4/17/96	0.86	-0.38	1376.68
		2/11/97	0.00	0.86	1377.54
		5/27/97	1.98	-1.98	1375.56
		8/26/97	3.82	-1.84	1373.72
		5/19/98	1.96	1.86	1375.58
		8/24/98	3.77	-1.81	1373.77
		12/16/98	0.96	2.81	1376.58
		7/26/99	3.62	-2.66	1373.92
		10/25/99	4.86	-1.24	1372.68
		2/1/00	0.83	4.03	1376.71
		4/3/00	2.07	-1.24	1375.47
		7/11/00	3.77	-1.80	1373.67
		10/16/00	4.87	-1.10	1372.57
		2/19/01	1.11	3.86	1376.43
W2	1377.95	4/1/91	3.33	NA	1374.62
		9/1/91	5.12	-1.79	1372.83
		10/1/91	5.67	-0.55	1372.28
		1/1/92	3.08	2.59	1374.87
		2/3/92	2.42	0.66	1375.53
		3/5/92	2.00	0.42	1375.95
		4/1/92	2.29	-0.29	1375.66
		5/1/92	2.75	-0.46	1375.20
		6/1/92	3.17	-0.42	1374.78
		7/1/92	3.83	-0.66	1374.12
		8/3/92	4.50	-0.67	1373.45
		9/2/92	5.17	-0.67	1372.78
		10/5/92	5.50	-0.33	1372.45
		11/3/92	5.33	0.17	1372.62
		12/2/92	3.42	1.91	1374.53
		1/6/93	1.62	1.80	1376.33
		2/1/93	2.00	-0.38	1375.95
		3/3/93	1.96	0.04	1375.99
		4/5/93	1.92	0.04	1376.03
		5/4/93	2.12	-0.20	1375.83

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W2 continued		6/4/93	2.00	0.12	1375.95
		7/2/93	3.17	-1.17	1374.78
		8/2/93	3.92	-0.75	1374.03
		9/1/93	4.42	-0.50	1373.53
		10/7/93	4.92	-0.50	1373.03
		11/2/93	5.08	-0.16	1372.87
		12/6/93	4.37	0.71	1373.58
		1/6/94	3.00	1.37	1374.95
		2/7/94	2.25	0.75	1375.70
		3/2/94	2.58	-0.33	1375.37
		4/4/94	2.75	-0.17	1375.20
		5/6/94	2.50	0.25	1375.45
		6/6/94	2.67	-0.17	1375.28
		7/6/94	3.96	-1.29	1373.99
		8/5/94	4.50	-0.54	1373.45
		9/1/94	5.00	-0.50	1372.95
		10/1/94	5.29	-0.29	1372.66
		11/1/94	5.50	-0.21	1372.45
		12/1/94	5.33	0.17	1372.62
		1/1/95	1.17	4.16	1376.78
		2/1/95	1.58	-0.41	1376.37
		3/1/95	2.08	-0.50	1375.87
		4/1/95	1.75	0.33	1376.20
		5/1/95	1.83	-0.08	1376.12
		6/1/95	2.50	-0.67	1375.45
		7/1/95	2.67	-0.17	1375.28
		8/1/95	3.46	-0.79	1374.49
		9/1/95	4.21	-0.75	1373.74
		9/27/95	4.59	-0.38	1373.36
		10/1/95	4.58	0.01	1373.37
		11/1/95	5.00	-0.42	1372.95
		12/1/95	4.46	0.54	1373.49
		1/1/96	4.42	0.04	1373.53
		2/1/96	0.33	4.09	1377.62
		3/1/96	0.33	0.00	1377.62
		4/17/96	0.87	-0.54	1377.08
		2/11/97	0.00	0.87	1377.95
		5/27/97	1.50	-1.50	1376.45
		8/26/97	3.68	-2.18	1374.27
		5/19/98	1.42	2.26	1376.53
		8/24/98	3.50	-2.08	1374.45
		12/16/98	0.56	2.94	1377.39
		7/26/99	3.37	-2.81	1374.58
		10/25/99	4.61	-1.24	1373.34
		2/1/00	0.07	4.54	1377.88
		4/3/00	1.38	-2.31	1375.57
		7/11/00	3.24	-0.86	1374.71

btc = below top of casing
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W2 continued		10/16/00	4.52	-1.28	1373.43
		2/19/01	0.49	4.03	1377.46
W3	1377.13	4/1/91	3.90	NA	1373.23
		9/1/91	4.19	-0.29	1372.94
		10/1/91	10.83	-6.64	1366.30
		1/1/92	2.33	8.50	1374.80
		2/3/92	5.83	-3.50	1371.30
		3/5/92	4.41	1.42	1372.72
		4/1/92	4.83	-0.42	1372.30
		5/1/92	5.29	-0.46	1371.84
		6/1/92	2.33	2.96	1374.80
		7/1/92	6.75	-4.42	1370.38
		8/3/92	5.50	1.25	1371.63
		9/2/92	5.45	0.05	1371.68
		10/5/92	5.83	-0.38	1371.30
		11/3/92	7.33	-1.50	1369.80
		12/2/92	5.62	1.71	1371.51
		1/6/93	4.54	1.08	1372.59
		2/1/93	4.04	0.50	1373.09
		3/3/93	4.25	-0.21	1372.88
		4/5/93	4.33	-0.08	1372.80
		5/4/93	4.66	-0.33	1372.47
		6/4/93	4.83	-0.17	1372.30
		7/2/93	4.70	0.13	1372.43
		8/2/93	4.91	-0.21	1372.22
		9/1/93	5.25	-0.34	1371.88
		10/7/93	5.45	-0.20	1371.68
		11/2/93	5.66	-0.21	1371.47
		12/6/93	5.66	0.00	1371.47
		1/6/94	5.50	0.16	1371.63
		2/7/94	4.91	0.59	1372.22
		3/2/94	5.08	-0.17	1372.05
		4/4/94	5.00	0.08	1372.13
		5/6/94	4.95	0.05	1372.18
		6/6/94	5.33	-0.38	1371.80
		7/6/94	5.33	0.00	1371.80
		8/5/94	5.50	-0.17	1371.63
		9/1/94	6.04	-0.54	1371.09
		10/1/94	6.20	-0.16	1370.93
		11/1/94	6.41	-0.21	1370.72
		12/1/94	6.08	0.33	1371.05
		1/1/95	5.25	0.83	1371.88
		2/1/95	4.04	1.21	1373.09
		3/1/95	4.66	-0.62	1372.47

btc = below top of casing
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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W3 continued		4/1/95	4.33	0.33	1372.80
		5/1/95	4.41	-0.08	1372.72
		6/1/95	4.54	-0.13	1372.59
		7/1/95	4.75	-0.21	1372.38
		8/1/95	4.95	-0.20	1372.18
		9/1/95	5.20	-0.25	1371.93
		9/27/95	5.39	-0.19	1371.74
		10/1/95	5.41	-0.02	1371.72
		11/1/95	3.75	1.66	1373.38
		12/1/95	3.58	0.17	1373.55
		1/1/96	3.58	0.00	1373.55
		2/1/96	6.41	-2.83	1370.72
		3/1/96	6.29	0.12	1370.84
		4/17/96	3.51	2.78	1373.62
		2/11/97	2.33	1.18	1374.80
		5/27/97	3.77	-1.44	1373.36
		8/26/97	5.86	-2.09	1371.27
		5/19/98	10.29	-4.43	1366.84
		8/24/98	15.28	-4.99	1361.85
		12/16/98	6.28	9.00	1370.85
		7/26/99	9.79	-3.51	1367.34
		10/25/99	8.68	1.11	1368.45
		2/1/00	0.94	7.74	1376.19
		4/3/00	2.35	-1.41	1374.78
		7/11/00	2.26	0.09	1374.87
		10/16/00	2.83	-0.57	1374.30
		2/19/01	0.76	2.07	1376.37
W4	1377.67	4/1/91	2.00	NA	1375.67
		9/1/91	5.06	-3.06	1372.61
		10/1/91	5.42	-0.36	1372.25
		1/1/92	3.23	2.19	1374.44
		2/3/92	2.50	0.73	1375.17
		3/5/92	1.92	0.58	1375.75
		4/1/92	2.33	-0.41	1375.34
		5/1/92	2.83	-0.50	1374.84
		6/1/92	3.08	-0.25	1374.59
		7/1/92	3.79	-0.71	1373.88
		8/3/92	4.46	-0.67	1373.21
		9/2/92	5.00	-0.54	1372.67
		10/5/92	5.25	-0.25	1372.42
		11/3/92	5.21	0.04	1372.46
		12/2/92	3.58	1.63	1374.09
		1/6/93	1.75	1.83	1375.92
		2/1/93	2.08	-0.33	1375.59
		3/3/93	1.83	0.25	1375.84
		4/5/93	2.00	-0.17	1375.67

btc = below top of casing
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W4 continued		5/4/93	2.29	-0.29	1375.38
		6/4/93	2.08	0.21	1375.59
		7/2/93	3.17	-1.09	1374.50
		8/2/93	3.87	-0.70	1373.80
		9/1/93	4.17	-0.30	1373.50
		10/7/93	4.67	-0.50	1373.00
		11/2/93	4.79	-0.12	1372.88
		12/6/93	4.37	0.42	1373.30
		1/6/94	3.17	1.20	1374.50
		2/7/94	2.46	0.71	1375.21
		3/2/94	2.75	-0.29	1374.92
		4/4/94	2.87	-0.12	1374.80
		5/6/94	2.62	0.25	1375.05
		6/6/94	3.33	-0.71	1374.34
		7/6/94	4.08	-0.75	1373.59
		8/5/94	4.58	-0.50	1373.09
		9/1/94	5.08	-0.50	1372.59
		10/1/94	5.25	-0.17	1372.42
		11/1/94	5.29	-0.04	1372.38
		12/1/94	4.92	0.37	1372.75
		1/1/95	1.46	3.46	1376.21
		2/1/95	1.62	-0.16	1376.05
		3/1/95	2.33	-0.71	1375.34
		4/1/95	2.00	0.33	1375.67
		5/1/95	2.12	-0.12	1375.55
		6/1/95	2.67	-0.55	1375.00
		7/1/95	3.25	-0.58	1374.42
		8/1/95	3.71	-0.46	1373.96
		9/1/95	4.04	-0.33	1373.63
		9/27/95	4.52	-0.48	1373.15
		10/1/95	4.50	0.02	1373.17
		11/1/95	5.08	-0.58	1372.59
		12/1/95	4.25	0.83	1373.42
		1/1/96	4.17	0.08	1373.50
		2/1/96	0.67	3.50	1377.00
		3/1/96	0.58	0.09	1377.09
		4/17/96	1.30	-0.72	1376.37
		2/11/97	0.06	1.24	1377.61
		5/27/97	1.82	-1.76	1375.85
		8/26/97	3.92	-2.10	1373.75
		5/19/98	2.10	1.82	1375.57
		8/24/98	3.88	-1.78	1373.79
		12/16/98	1.20	2.68	1376.47
		7/26/99	3.83	-2.63	1373.84
		10/25/99	4.75	-0.92	1372.92
		2/1/00	1.02	3.73	1376.65
		4/3/00	2.25	-1.23	1375.42

btc = below top of casing
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W4 continued		7/11/00	3.78	-1.53	1373.89
		10/16/00	5.01	-1.23	1372.66
		2/19/01	1.29	3.72	1376.38
W5	1376.99	4/1/91	1.90	NA	1375.09
		9/1/91	4.69	-2.79	1372.30
		10/1/91	5.00	-0.31	1371.99
		1/1/92	0.00	5.00	1376.99
		2/3/92	2.12	-2.12	1374.87
		3/5/92	1.58	0.54	1375.41
		4/1/92	1.92	-0.34	1375.07
		5/1/92	2.33	-0.41	1374.66
		6/1/92	0.00	2.33	1376.99
		7/1/92	3.33	-3.33	1373.66
		8/3/92	3.92	-0.59	1373.07
		9/2/92	4.62	-0.70	1372.37
		10/5/92	5.00	-0.38	1371.99
		11/3/92	4.83	0.17	1372.16
		12/2/92	3.00	1.83	1373.99
		1/6/93	1.46	1.54	1375.53
		2/1/93	1.75	-0.29	1375.24
		3/3/93	1.75	0.00	1375.24
		4/5/93	1.62	0.13	1375.37
		5/4/93	1.87	-0.25	1375.12
		6/4/93	1.71	0.16	1375.28
		7/2/93	2.67	-0.96	1374.32
		8/2/93	3.92	-1.25	1373.07
		9/1/93	4.00	-0.08	1372.99
		10/7/93	4.46	-0.46	1372.53
		11/2/93	4.58	-0.12	1372.41
		12/6/93	3.96	0.62	1373.03
		1/6/94	2.67	1.29	1374.32
		2/7/94	2.04	0.63	1374.95
		3/2/94	2.37	-0.33	1374.62
		4/4/94	2.50	-0.13	1374.49
		5/6/94	2.25	0.25	1374.74
		6/6/94	2.79	-0.54	1374.20
		7/6/94	3.71	-0.92	1373.28
		8/5/94	4.21	-0.50	1372.78
		9/1/94	4.92	-0.71	1372.07
		10/1/94	5.21	-0.29	1371.78
		11/1/94	5.17	0.04	1371.82
		12/1/94	4.92	0.25	1372.07
		1/1/95	1.08	3.84	1375.91
		2/1/95	1.33	-0.25	1375.66
		3/1/95	1.79	-0.46	1375.20
		4/1/95	1.54	0.25	1375.45

btc = below top of casing
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W5 continued		5/1/95	1.71	-0.17	1375.28
		6/1/95	2.17	-0.46	1374.82
		7/1/95	2.42	-0.25	1374.57
		8/1/95	3.17	-0.75	1373.82
		9/1/95	3.75	-0.58	1373.24
		9/27/95	4.14	-0.39	1372.85
		10/1/95	4.12	0.02	1372.87
		11/1/95	4.83	-0.71	1372.16
		12/1/95	4.00	0.83	1372.99
		1/1/96	3.87	0.13	1373.12
		2/1/96	0.33	3.54	1376.66
		3/1/96	0.33	0.00	1376.66
		4/17/96	9.86	-9.53	1367.13
		2/11/97	0.00	9.86	1376.99
		5/27/97	1.45	-1.45	1375.54
		8/26/97	2.82	-1.37	1374.17
		5/19/98	1.88	0.94	1375.11
		8/24/98	3.43	-1.55	1373.56
		12/16/98	1.06	2.37	1375.93
		7/26/99	4.16	-3.10	1372.83
		10/25/99	4.18	-0.02	1372.81
		2/1/00	0.52	3.66	1376.47
		4/3/00	2.46	-1.94	1374.53
		7/11/00	3.00	-0.54	1373.99
		10/16/00	4.38	-1.38	1372.61
		2/19/01	0.81	3.57	1376.18
W6	1377.53	4/1/91	1.98	NA	1375.55
		9/1/91	4.62	-2.64	1372.91
		10/1/91	5.08	-0.46	1372.45
		1/1/92	0.00	5.08	1377.53
		2/3/92	2.46	-2.46	1375.07
		3/5/92	1.83	0.63	1375.70
		4/1/92	2.00	-0.17	1375.53
		5/1/92	2.46	-0.46	1375.07
		6/1/92	0.00	2.46	1377.53
		7/1/92	3.42	-3.42	1374.11
		8/3/92	3.96	-0.54	1373.57
		9/2/92	4.50	-0.54	1373.03
		10/5/92	5.00	-0.50	1372.53
		11/3/92	5.04	-0.04	1372.49
		12/2/92	3.37	1.67	1374.16
		1/6/93	1.92	1.45	1375.61
		2/1/93	1.79	0.13	1375.74
		3/3/93	1.83	-0.04	1375.70
		4/5/93	1.75	0.08	1375.78
		5/4/93	1.92	-0.17	1375.61

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W6 continued		6/4/93	1.92	0.00	1375.61
		7/2/93	2.62	-0.70	1374.91
		8/2/93	3.92	-1.30	1373.61
		9/1/93	3.83	0.09	1373.70
		10/7/93	4.33	-0.50	1373.20
		11/2/93	4.37	-0.04	1373.16
		12/6/93	4.04	0.33	1373.49
		1/6/94	2.92	1.12	1374.61
		2/7/94	2.17	0.75	1375.36
		3/2/94	2.50	-0.33	1375.03
		4/4/94	2.62	-0.12	1374.91
		5/6/94	2.33	0.29	1375.20
		6/6/94	2.75	-0.42	1374.78
		7/6/94	3.42	-0.67	1374.11
		8/5/94	4.04	-0.62	1373.49
		9/1/94	4.71	-0.67	1372.82
		10/1/94	4.96	-0.25	1372.57
		11/1/94	5.12	-0.16	1372.41
		12/1/94	4.87	0.25	1372.66
		1/1/95	1.50	3.37	1376.03
		2/1/95	1.67	-0.17	1375.86
		3/1/95	1.83	-0.16	1375.70
		4/1/95	1.50	0.33	1376.03
		5/1/95	1.62	-0.12	1375.91
		6/1/95	2.21	-0.59	1375.32
		7/1/95	2.50	-0.29	1375.03
		8/1/95	3.17	-0.67	1374.36
		9/1/95	3.67	-0.50	1373.86
		9/27/95	4.09	-0.42	1373.44
		10/1/95	4.08	0.01	1373.45
		11/1/95	4.62	-0.54	1372.91
		12/1/95	4.08	0.54	1373.45
		1/1/96	4.04	0.04	1373.49
		2/1/96	0.67	3.37	1376.86
		3/1/96	0.58	0.09	1376.95
		4/17/96	1.02	-0.44	1376.51
		2/11/97	0.28	0.74	1377.25
		5/27/97	1.73	-1.45	1375.80
		8/26/97	3.42	-1.69	1374.11
		5/19/98	1.38	2.04	1376.15
		8/24/98	1.51	-0.13	1376.02
		12/16/98	1.07	0.44	1376.46
		7/26/99	3.27	-2.20	1374.26
		10/25/99	4.58	-1.31	1372.95
		2/1/00	0.52	3.52	1376.47
		4/3/00	1.62	-0.56	1375.91
		7/11/00	3.02	-1.40	1374.51

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W6 continued		10/16/00	4.46	-1.44	1373.07
		2/19/01	1.01	3.45	1376.52
W7	1377.35	4/1/91	2.00	NA	1375.35
		9/1/91	4.71	-2.71	1372.64
		10/1/91	5.25	-0.54	1372.10
		1/1/92	2.42	2.83	1374.93
		2/3/92	2.29	0.13	1375.06
		3/5/92	1.42	0.87	1375.93
		4/1/92	1.75	-0.33	1375.60
		5/1/92	2.29	-0.54	1375.06
		6/1/92	2.92	-0.63	1374.43
		7/1/92	3.50	-0.58	1373.85
		8/3/92	4.08	-0.58	1373.27
		9/2/92	5.08	-1.00	1372.27
		10/5/92	5.25	-0.17	1372.10
		11/3/92	4.92	0.33	1372.43
		12/2/92	3.00	1.92	1374.35
		1/6/93	1.42	1.58	1375.93
		2/1/93	1.75	-0.33	1375.60
		3/3/93	1.71	0.04	1375.64
		4/5/93	1.83	-0.12	1375.52
		5/4/93	2.42	-0.59	1374.93
		6/4/93	1.87	0.55	1375.48
		7/2/93	2.96	-1.09	1374.39
		8/2/93	3.50	-0.54	1373.85
		9/1/93	4.25	-0.75	1373.10
		10/7/93	4.75	-0.50	1372.60
		11/2/93	5.00	-0.25	1372.35
		12/6/93	3.87	1.13	1373.48
		1/6/94	2.50	1.37	1374.85
		2/7/94	1.87	0.63	1375.48
		3/2/94	2.21	-0.34	1375.14
		4/4/94	2.25	-0.04	1375.10
		5/6/94	1.96	0.29	1375.39
		6/6/94	2.67	-0.71	1374.68
		7/6/94	3.87	-1.20	1373.48
		8/5/94	4.33	-0.46	1373.02
		9/1/94	4.92	-0.59	1372.43
		10/1/94	5.25	-0.33	1372.10
		11/1/94	5.58	-0.33	1371.77
		12/1/94	5.42	0.16	1371.93
		1/1/95	0.87	4.55	1376.48
		2/1/95	1.37	-0.50	1375.98
		3/1/95	1.46	-0.09	1375.89
		4/1/95	1.75	-0.29	1375.60
		5/1/95	1.75	0.00	1375.60

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W7 continued		6/1/95	2.29	-0.54	1375.06
		7/1/95	2.62	-0.33	1374.73
		8/1/95	3.42	-0.80	1373.93
		9/1/95	4.17	-0.75	1373.18
		9/27/95	4.58	-0.41	1372.77
		10/1/95	4.58	0.00	1372.77
		11/1/95	5.33	-0.75	1372.02
		12/1/95	3.00	2.33	1374.35
		1/1/96	2.83	0.17	1374.52
		2/1/96	0.58	2.25	1376.77
		3/1/96	0.58	0.00	1376.77
		4/17/96	0.64	-0.06	1376.71
		2/11/97	0.00	0.64	1377.35
		5/27/97	1.09	-1.09	1376.26
		8/26/97	3.85	-2.76	1373.50
		5/19/98	1.85	2.00	1375.50
		8/24/98	3.92	-2.07	1373.43
		12/16/98	1.08	2.84	1376.27
		7/26/99	3.72	-2.64	1373.63
		10/25/99	5.40	-1.68	1371.95
		2/1/00	0.33	5.07	1377.02
		4/3/00	1.80	-1.47	1375.55
		7/11/00	3.67	-1.87	1373.68
		10/16/00	4.74	-1.07	1372.61
		2/19/01	0.29	4.45	1377.06
W8A	1376.37	9/27/95	4.03	NA	1372.34
		4/17/96	0.42	3.61	1375.95
		2/11/97	0.00	0.42	1376.37
		5/27/97	0.98	-0.98	1375.39
		8/26/97	3.34	-2.36	1373.03
		5/19/98	1.68	1.66	1374.69
		8/24/98	3.48	-1.80	1372.89
		12/16/98	0.90	2.58	1375.47
		7/26/99	4.75	-3.85	1371.62
		10/25/99	4.87	-0.12	1371.50
		2/1/00	-0.22	5.06	1376.56
		4/3/00	1.63	-1.82	1374.74
		7/11/00	2.86	-1.23	1373.51
		10/16/00	7.31	-4.45	1369.06
		2/19/01	0.00	7.31	1376.37
W8B	1376.67	9/27/95	7.26	NA	1369.41
		4/17/96	5.34	1.92	1371.33
		2/11/97	3.26	2.08	1373.41
		5/27/97	6.16	-2.90	1370.51
		8/26/97	6.85	-0.69	1369.82

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W8B continued		5/19/98	7.92	-1.07	1368.75
		8/24/98	6.61	1.31	1370.06
		12/16/98	4.43	2.18	1372.24
		7/26/99	6.88	-2.45	1369.79
		10/25/99	7.69	-0.81	1368.98
		2/1/00	4.50	3.19	1372.17
		4/3/00	6.02	-1.43	1370.74
		7/11/00	6.89	-0.96	1369.78
		10/16/00	7.61	-0.72	1369.06
		2/19/01	4.92	2.69	1371.75
W8C	1376.35	9/27/95	6.48	NA	1369.87
		4/17/96	4.80	1.68	1371.55
		2/11/97	2.99	1.81	1373.36
		5/27/97	5.92	-2.93	1370.43
		8/26/97	6.20	-0.28	1370.15
		5/19/98	5.08	1.12	1371.27
		8/24/98	5.91	-0.83	1370.44
		12/16/98	4.05	1.86	1372.30
		7/26/99	5.75	-1.70	1370.60
		10/25/99	7.05	-1.30	1369.30
		2/1/00	4.42	2.63	1371.93
		4/3/00	5.33	-0.91	1371.02
		7/11/00	6.17	-0.84	1370.18
		10/16/00	6.88	-0.71	1369.47
		2/19/01	4.76	2.12	1371.59
W9A	1375.98	9/27/95	4.51	NA	1371.47
		4/17/96	2.01	2.50	1373.97
		2/11/97	1.40	0.61	1374.58
		5/27/97	2.53	-1.13	1373.45
		8/26/97	3.97	-1.44	1372.01
		5/19/98	3.05	0.92	1372.93
		8/24/98	4.01	-0.96	1371.97
		12/16/98	2.57	1.44	1373.41
		7/26/99	3.22	-0.65	1372.76
		10/25/99	5.20	-1.98	1370.78
		2/1/00	2.00	3.20	1373.98
		4/3/00	3.24	-1.24	1372.74
		7/11/00	4.29	-1.05	1371.69
		10/16/00	4.88	-0.59	1371.10
		2/19/01	1.98	2.90	1374.00
W9B	1375.86	9/27/95	5.00	NA	1370.86
		4/17/96	3.18	1.82	1372.68
		2/11/97	2.37	0.81	1373.49
		5/27/97	3.82	-1.45	1372.04

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W9B continued		8/26/97	4.66	-0.84	1371.20
		5/19/98	3.80	0.86	1372.06
		8/24/98	4.61	-0.81	1371.25
		12/16/98	3.12	1.49	1372.74
		7/26/99	4.82	-1.70	1371.04
		10/25/99	5.63	-0.81	1370.23
		2/1/00	2.89	2.74	1372.97
		4/3/00	4.00	-1.11	1371.86
		7/11/00	4.81	-0.81	1371.05
		10/16/00	5.35	-0.54	1370.51
		2/19/01	3.06	2.29	1372.80
W-10A	NA	4/3/00	1.54	NA	NA
	1380.88	7/11/00	2.85	NA	1378.03
		10/16/00	4.78	-1.93	1376.10
		2/19/01	2.12	2.66	1378.76
W-11A	NA	4/3/00	3.49	NA	NA
	1380.14	7/11/00	5.80	NA	1374.34
		10/16/00	7.03	-1.23	1373.11
		2/19/01	1.97	5.06	1378.17
W-11B	1380.33	10/16/00	7.31	NA	1373.02
		2/19/01	1.22	6.09	1379.11
W-12A	NA	4/3/00	1.76	NA	NA
	1378.05	7/11/00	3.46	NA	1374.59
		10/16/00	4.65	-1.19	1373.40
		2/19/01	0.71	3.94	1377.34
W-13A	1377.51	10/16/00	3.42	NA	1374.09
		2/19/01	2.83	0.59	1374.68
W-14A	1375.94	4/3/00	2.32	NA	1373.62
		7/11/00	3.52	-1.20	1372.42
		10/16/00	4.98	-1.46	1370.96
		2/19/01	1.18	3.80	1374.76
W-15A	1376.59	4/3/00	1.43	NA	1375.16
		7/11/00	2.54	-1.11	1374.05
		10/16/00	3.42	-0.88	1373.17
		2/19/01	1.03	2.39	1375.56
W-16A	1384.14	4/3/00	3.37	NA	1380.77
		7/11/00	6.07	-2.70	1378.07
		10/16/00	8.25	-2.18	1375.89
		2/19/01	1.30	6.95	1382.84

btc = below top of casing
ft = foot
msl = mean seal level

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W-17A	1375.35	4/3/00	3.19	NA	1372.16
		7/11/00	3.44	-0.25	1371.91
		10/16/00	4.34	-0.90	1371.01
		2/19/01	1.92	2.42	1373.43
W-18A	1377.74	4/3/00	3.94	NA	1373.80
		7/11/00	5.28	-1.34	1372.46
		2/19/01	1.09	4.19	1376.65
W-19A	1379.76	4/3/00	3.73	NA	1376.03
		7/11/00	5.73	-2.00	1374.03
		10/16/00	7.11	-1.38	1372.65
		2/19/01	1.56	5.55	1378.20
W-20A	1382.12	4/3/00	4.72	NA	1377.40
		7/11/00	7.21	-2.49	1374.91
		10/16/00	8.48	-1.27	1373.64
		2/19/01	2.20	6.28	1379.92
W-21A	1377.25	10/25/99	5.36	NA	1371.89
	1377.67	2/1/00	0.75	5.03	1376.92
	1377.76	4/3/00	1.87	-1.03	1375.89
		7/11/00	3.60	-1.73	1374.16
		10/16/00	4.43	-0.83	1373.33
		2/19/01	0.77	3.15	1376.48
W-22A	1377.95	10/25/99	7.47	NA	1370.48
	1378.23	2/1/00	0.80	6.95	1377.43
	1378.23	4/3/00	1.78	-0.98	1376.45
		7/11/00	3.55	-1.77	1374.68
		10/16/00	4.93	-1.38	1373.3
		2/19/01	0.73	3.92	1377.22
W-23A	1378.16	10/16/00	4.06	NA	1374.10
		2/19/01	0.52	3.54	1377.64
W-24A	1378.11	10/25/99	6.05	NA	1372.06
	1378.34	2/1/00	1.78	4.44	1376.50
	1378.34	4/3/00	2.60	-0.76	1375.74
		7/11/00	4.16	-1.56	1374.18
		10/16/00	5.22	-1.06	1373.12
		2/19/01	1.66	3.33	1376.45
W-25A	1378.27	4/3/00	1.78	NA	1376.49
		7/11/00	3.81	NA	1374.46
		10/16/00	5.18	-1.37	1373.09
		2/19/01	0.12	5.06	1378.15

btc = below top of casing
ft = foot
msl = mean seal level

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W-26A	1380.93	4/3/00	3.50	NA	1377.43
		7/11/00	5.69	NA	1375.24
		10/16/00	7.43	-1.74	1373.50
		2/19/01	1.66	5.77	1379.27
W-27A	1380.38	4/3/00	3.11	NA	1377.27
		7/11/00	5.41	NA	1375.42
		10/16/00	7.11	-1.70	1373.72
		2/19/01	1.04	5.62	1379.34
W-28A	1382.02	4/3/00	12.91	NA	1369.11
		7/11/00	4.61	NA	1377.41
		10/16/00	12.86	-8.25	1369.16
		2/19/01	3.16	9.70	1378.86
W-29A* DECOMMISSIONED 12/15/00	1385.02	4/3/00	5.97	NA	1379.05
		7/11/00	8.56	-2.59	1376.46
		10/16/00	10.71	-2.15	1374.31
W-29A1	1381.37	2/19/01	0.66	NA	1380.71
W-30B	1377.08	10/16/00	4.55	NA	1372.53
		2/19/01	1.63	2.92	1375.45
W-31B	1377.47	10/16/00	4.35	NA	1373.12
		2/19/01	0.53	3.82	1376.94
W-31C	1377.4	10/16/00	8.73	NA	1368.67
		2/19/01	4.07	4.66	1373.33
W-32A	1383.1	10/16/00	9.85	NA	1373.25
		2/19/01	3.87	5.98	1379.23
W-33A	1381.75	10/16/00	9.08	NA	1372.67
		2/19/01	2.01	7.07	1379.74
W-34A	1379.98	10/16/00	8.46	NA	1371.52
		2/19/01	1.46	7.00	1378.52
W-35A	1378.34	10/16/00	7.33	NA	1371.01
		2/19/01	1.87	5.46	1376.47
W-36A	1377.31	10/16/00	6.65	NA	1370.66
		2/19/01	1.17	5.48	1376.14
W-37A	1376.97	10/16/00	4.54	NA	1372.43
		2/19/01	1.16	3.38	1375.81

btc = below top of casing
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msl = mean seal level

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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
W-38A	1378.23	10/16/00	4.33	NA	1373.90
		2/19/01	NA	NA	NA
W-39A	1378.33	2/19/01	1.98		1376.35
W-40A	1377.29	2/19/01	2.90		1374.39
W-41A	1375.19	2/19/01	4.95		1370.24
W-42A	1373.55	2/19/01	5.31		1368.24
W-43A	1372.85	2/19/01	7.61		1365.24
WU	1380.22	2/1/00	0.69	NA	1379.53
TW1	1377.11	10/16/00	4.61	NA	1372.50
		2/19/01	0.90	3.71	1376.21
TW2	1378.19	4/3/00	3.31	NA	1374.88
		7/11/00	4.78	-1.47	1373.41
		10/16/00	5.61	-0.83	1372.58
		2/19/01	2.26	3.35	1375.93
TW3	1378.47	4/3/00	3.71	NA	1374.76
		7/11/00	5.12	-1.41	1373.35
		10/16/00	5.86	-0.74	1372.61
		2/19/01	2.51	3.35	1375.96
TW4	1378.30	4/3/00	3.77	NA	1374.53
		7/11/00	5.14	-1.37	1373.16
		10/16/00	5.87	-0.73	1372.43
		2/19/01	2.75	3.12	1375.55
TW5	1377.99	4/3/00	4.04	NA	1373.95
		7/11/00	5.34	-1.30	1372.65
		10/16/00	5.69	-0.35	1372.30
		2/19/01	2.77	2.92	1375.22
TW6	1377.95	4/3/00	4.17	NA	1373.78
		7/11/00	5.46	-1.29	1372.49
		10/16/00	6.26	-0.80	1371.69
		2/19/01	2.93	3.33	1375.02
TW7	1377.14	10/16/00	4.62	NA	1372.52
		2/19/01	1.79	2.83	1375.35
TW8	1378.27	10/16/00	4.85	NA	1373.42
		2/19/01	0.61	4.24	1377.66
TW9	1378.28	10/16/00	4.93	NA	1373.35
		2/19/01	1.10	3.83	1377.18

btc = below top of casing
ft = foot
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TABLE 4-3
HISTORICAL GROUNDWATER ELEVATIONS
Former Remco Hydraulics Facility
Willits, California
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Location	Casing Elevation (ft above msl)	Date	Depth to Water (ft btc)	Change in Elevation (ft)	Groundwater Elevation (ft above msl)
TW10	1378.33	10/16/00	5.12	NA	1373.21
		2/19/01	1.51	3.61	1376.82
TW11	1378.02	10/16/00	5.26	NA	1372.76
		2/19/01	1.90	3.36	1376.12
CMW-1 (1)	1375.76	10/16/00	7.77	NA	1367.99
		2/19/01	3.89	3.88	1371.87
CMW-2 (1)	1375.16	10/16/00	6.57	NA	1368.59
		2/19/01	4.01	2.56	1371.15
CMW-3 (1)	1375.29	10/16/00	6.95	NA	1368.34
		2/19/01	5.41	1.54	1369.88
CMW-4 (1)	1376.03	10/16/00	7.18	NA	1368.85
		2/19/01	5.33	1.85	1370.70

Note:

(1) Wells identified as CMW-1 through CMW-4 are Chevron monitoring wells MW-1 through MW-4.

TABLE 4-4
VERTICAL GROUNDWATER POTENTIOMETRIC HEAD DIFFERENCES
Former Remco Hydraulics Facility
Willits, California

Water Bearing Zone	Well Pairs	Vertical Distance Between Center of Screened Intervals (ft)	Third Quarter 2000 (7/11/00)				Fourth Quarter 2000 (10/16/00)				First Quarter 2001 (2/19/01)				Second Quarter 2001 (4/30/01)			
			Groundwater Elevation (ft. above msl)	Hydraulic Head Difference (ft)	Vertical Gradient (ft/ft) ⁽¹⁾	Vertical Gradient Direction	Groundwater Elevation (ft. above msl)	Hydraulic Head Difference (ft)	Vertical Gradient (ft/ft) ⁽¹⁾	Vertical Gradient Direction	Groundwater Elevation (ft. above msl)	Hydraulic Head Difference (ft)	Vertical Gradient (ft/ft) ⁽¹⁾	Vertical Gradient Direction	Groundwater Elevation (ft. above msl)	Hydraulic Head Difference (ft)	Vertical Gradient (ft/ft) ⁽¹⁾	Vertical Gradient Direction
A-Zone & B-Zone	W8A	18.2	1373.51				1369.06				1376.37 ⁽²⁾				1374.68			
	W8B		1369.78	3.73	0.20	downward	1369.06	0.00	0.00	even	1371.75	4.62	0.25	downward	1370.27	4.41	0.24	downward
	B3	28.25	1381.17				1380.19				1384.95				1382.89			
	B2		1378.60	2.57	0.09	downward	1376.93	3.26	0.12	downward	1380.06	4.89	0.17	downward	1379.65	3.24	0.11	downward
	EW-1A	16	1374.31				1372.95				1377.56				1376.08			
	EW-1B		1373.77	0.54	0.03	downward	1372.70	0.25	0.02	downward	1376.46	1.10	0.07	downward	1375.11	0.97	0.06	downward
	W9A	25.7	1371.69				1371.10				1374.00				1372.70			
	W9B		1371.05	0.64	0.02	downward	1370.51	0.59	0.02	downward	1372.80	1.20	0.05	downward	1371.88	0.82	0.03	downward
	W11A	19	--	--	--	--	1373.11				1378.17				1376.40			
	W11B		--	--	--	--	1373.02	0.09	0.00	downward	1379.11	-0.94	-0.05	upward	1375.66	0.74	0.04	downward
	W17A	18.5	--	--	--	--	1371.01				1373.43				1372.19			
	W17B		--	--	--	--	1370.88	0.13	0.01	downward	1371.55	1.88	0.10	downward	1370.41	1.78	0.10	downward
	W29A1	14	--	--	--	--	--	--	--	--	1380.71				1378.47			
	W29B1		--	--	--	--	--	--	--	--	1376.27	4.44	0.32	downward	1375.4	3.07	0.22	downward
B-Zone & C-Zone	W8B	32	1369.78				1369.06				1371.75				1370.27			
	W8C		1370.18	-0.40	-0.01	upward	1369.47	-0.41	-0.01	upward	1371.59	0.16	0.01	downward	1370.72	-0.45	-0.01	upward
	W4	20	1373.89				1372.66				1376.38				1375.05			
	W5		1373.99	-0.10	-0.005	upward	1372.61	0.05	0.00	even	1376.18	0.20	0.01	downward	1375.38	-0.33	-0.02	upward
	W31B		--	--	--	--	1373.12				1376.94				1375.58			
	W31C	38	--	--	--	--	1368.67	4.45	0.12	downward	1373.33	3.61	0.10	downward	1372.41	3.17	0.08	downward
	W29B1		--	--	--	--	--	--	--	--	1376.27				1375.40			
	W29B2	22.5	--	--	--	--	--	--	--	--	1376.23	0.04	0.002	downward	1375.36	0.04	0.002	downward

Notes:

ft = feet

ft/ft = feet per foot

msl = mean sea level

⁽¹⁾ Vertical gradient measurement based on mid-point of well screens.

⁽²⁾ The water level was above the top of casing. The top of casing elevation was assumed for the groundwater elevation.

TABLE 4-5
SHORT TERM AQUIFER TEST RESULTS
AQUIFER SLUG TESTING
Former Remco Hydraulics Facility
Willits, California

				Bouwer-Rice Confined (BRC) Aquifer Solution				Cooper-Bredehoeft-Papadopoulos (CBP) Confined Aquifer Solution (2)						Methodology Comparison			
Estimated		Gravel Pack Porosity	Anisotrop y Ratio (Kz/Kr)	Slug In: K (cm/sec)	Slug Out: K (cm/sec)	Average K (cm/sec)	Recalculated for Possible Gravel Pack Drainage (3)	Slug In: T (cm²/sec)	Slug Out: T (cm²/sec)	Slug In: K (cm/sec)	Slug Out: K (cm/sec)	Average T (cm²/sec)	Average K (cm/sec)	Slug In: K _{BRC} /K _{CB} p	Slug Out: K _{BRC} /K _{CB} p	BRC Kin/Kout	CBP Kin/Kout
Well	Slug Test Date																
A-Zone Monitoring Wells																	
EW1A	02/21/01	0.25	1.00	1.25E-03	8.96E-04	1.1E-03	--	0.35	0.18	1.14E-03	5.93E-04	0.26	8.7E-04	1.10	1.51	1.40	1.93
TW6	10/18/00	0.25	1.00	4.98E-03	4.59E-03	4.8E-03	--	0.46	0.68	1.52E-03	2.23E-03	0.57	1.9E-03	3.29	2.06	1.09	0.68
W11A	10/18/00	0.25	1.00	5.43E-03	6.48E-03	4.1E-03	4.1E-03	0.43	0.49	1.40E-03	1.60E-03	0.46	1.5E-03	3.88	4.06	0.84	0.88
W13A	10/17/00	0.25	1.00	1.35E-03	1.59E-03	1.5E-03	--	0.10	0.10	3.13E-04	3.28E-04	0.10	3.2E-04	4.30	4.86	0.85	0.96
W15A	10/18/00	0.25	1.00	3.43E-03	8.49E-03	6.0E-03	--	0.20	0.32	6.41E-04	1.05E-03	0.26	8.4E-04	5.35	8.12	0.40	0.61
W20A	10/17/00	0.25	1.00	3.92E-03	3.59E-03	3.8E-03	nc	0.60	0.26	1.98E-03	8.37E-04	0.43	1.4E-03	1.98	4.28	1.09	2.37
W22A	10/17/00	0.25	1.00	4.89E-04	7.09E-04	9.7E-04	9.7E-04	0.02	0.02	6.02E-05	3.93E-05	0.02	5.0E-05	8.13	18.05	0.69	1.53
W23A	10/18/00	0.25	1.00	1.20E-03	1.27E-03	1.2E-03	--	0.05	0.09	1.76E-04	2.89E-04	0.07	2.3E-04	6.83	4.40	0.95	0.61
W24A	10/17/00	0.25	1.00	3.30E-03	1.79E-03	2.5E-03	nc	0.23	0.21	7.59E-04	4.55E-04	0.22	6.1E-04	4.34	3.94	1.84	1.67
W27A	10/17/00	0.25	1.00	1.24E-02	3.01E-02	9.0E-03	9.0E-03	3.35	3.79	1.10E-02	1.24E-02	3.57	1.2E-02	1.13	2.42	0.41	0.88
W29A	10/17/00	0.25	1.00	4.16E-03	1.59E-03	2.9E-03	nc	0.91	0.22	2.97E-03	7.38E-04	0.57	1.9E-03	1.40	2.15	2.62	4.03
W29A1	02/21/01	0.25	1.00	NA	3.08E-03	3.1E-03	--	NA	0.47	NA	1.56E-03	0.47	1.6E-03	NA	1.98	NA	NA
W37A	10/17/00	0.25	1.00	7.24E-03	3.36E-02	9.0E-03	9.0E-03	0.13	1.47	4.25E-04	3.22E-03	0.80	1.8E-03	17.02	10.44	0.22	0.13
W38A	10/18/00	0.25	1.00	1.10E-03	1.05E-03	1.1E-03	--	0.08	0.16	2.58E-04	5.19E-04	0.12	3.9E-04	4.27	2.03	1.05	0.50
Average						3.6E-03						0.59	1.9E-03				
Geometric Mean						2.78E-03							8.8E-04				
Harmonic Mean						2.13E-03							3.7E-04				
Median						2.98E-03							1.1E-03				
B-Zone Monitoring Wells																	
EW1B	02/21/01	0.25	1.00	2.94E-03	3.09E-03	3.0E-03	--	0.99	1.00	3.24E-03	3.28E-03	0.99	3.3E-03	0.91	0.94	0.95	0.99
W11B	10/18/00	0.25	1.00	3.62E-03	8.60E-03	6.1E-03	--	0.10	0.29	3.21E-04	9.41E-04	0.19	6.3E-04	11.30	9.15	0.42	0.34
W29B1	02/21/01	0.25	1.00	3.86E-03	8.50E-03	6.2E-03	--	0.05	0.04	1.54E-04	1.25E-04	0.04	1.4E-04	25.00	67.75	0.45	1.23
W30B	10/18/00	0.25	1.00	2.28E-03	1.04E-03	1.7E-03	--	0.09	0.01	2.85E-04	3.44E-05	0.05	1.6E-04	7.99	30.36	2.18	8.28
W31B	10/12/00	0.25	1.00	7.17E-03	9.69E-03	8.4E-03	--	0.73	0.53	2.38E-03	1.75E-03	0.63	2.1E-03	3.01	5.55	0.74	1.36
Average						5.1E-03						0.23	7.5E-04				
Geometric Mean						4.4E-03							6.2E-04				
Harmonic Mean						3.63E-03							3.17E-04				
Median						6.11E-03							6.31E-04				
C-Zone Monitoring Wells																	
W31C	10/19/00	0.25	1.00	1.81E-04	1.64E-04	1.7E-04	--	0.012	0.002	4.00E-05	5.26E-06	0.007	2.3E-05	4.51	31.21	1.10	7.61
W29B1	02/21/01	0.25	1.00	4.96E-03	5.98E-03	5.5E-03	--	0.12	0.11	3.96E-04	3.72E-04	0.12	3.8E-04	12.52	16.08	0.83	1.07
Average						2.8E-03						0.062	2.0E-04				
Geometric Mean						9.71E-04							9.33E-05				
Harmonic Mean						3.34E-04							4.28E-05				

Notes:

cm/s = centimeters per second

cm²/s = centimeters squared per second

K = Hydraulic Conductivity

T = Transmissivity

(1) Analyzed using AQTESOLV software (version 2.13) in accordance with the methodology of Bouwer and Rice (1976 and 1989) and Cooper, et al. (1967).

(2) Analyses using CBP methodology yielded values for transmissivity and storativity. Hydraulic conductivity was calculated by dividing transmissivity (cm²/sec) by screen length (cm).

(3) Based upon a comparison of water levels to sand pack interval, wells for which the water level would fall below the top of the sand pack during the rising head (slug out) test were re-evaluated for the "double straight-line" effect caused by possible drainage in the sand pack. Recalculated values are shown; values shown as "nc" indicate that there was no change in the selected line as no alternate slope was discernible.

TABLE 4-6
LONG TERM AQUIFER TEST RESULTS
Former Remco Hydraulics Facility
Willits, California

Theis					Quick Neuman		Moench		Cooper-Jacob			
	Pumped	Observation	Distance from	Saturated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Remarks
Date	Well	Well	Pumped Well	Thickness	Transmissivity	Conductivity	Transmissivity	Conductivity	Transmissivity	Conductivity	Conductivity	
			(Feet)	(Feet)	(cm ² /s)	(cm/s)	(cm ² /s)	(cm/s)	(cm ² /s)	(cm/s)	(cm/s)	
<u>A-ZONE TEST RESULTS</u>												
3/01	W-13A	W-13A	0.33	14.5	0.29	6.56E-04	0.15	3.39E-04	0.18	4.10E-04	--	Noise data
	W-13A	W-9A	96	14.5	NR	--	--	--	--	--	--	
	W-13A	W-15A	144	14.5	NR	--	--	--	--	--	--	
	W-13A	W-41A	216	14.5	NR	--	--	--	--	--	--	
	W-13A	TW-7	110	14.5	1.5	3.39E-03	1.4	3.17E-03	1.4	3.17E-03	--	
3/01	W-29A	W-29A	0.33	13.5	0.28	6.80E-04	0.2	4.86E-04	0.18	4.40E-04	--	
	W-29A	W-16A	180	13.5	NR	--	--	--	--	--	--	
	W-29A	W-20A	120	13.5	NR	--	--	--	--	--	--	
	W-29A	W-28A	120	13.5	NR	--	--	--	--	--	--	
<u>B-ZONE TEST RESULTS</u>												
3/82	B1 (1)	B1	na	na	na	na	na	na			1.30E-03	
	B2 (1)	B2	na	na	na	na	na	na			3.92E-03	
10/94	W1 (2)	W2	na	9.5-15.4	0.08-0.35	2.83E-04, 7.55E-04	na	na			na	
1/97	EW-1B (3)	EW-1B	na	15	0.17	3.71E-04	na	na			na	
	EW-1B (3)	W4	na	15	0.17	3.73E-04	na	na			na	
	EW-1B (3)	W8B	na	15	0.064	1.41E-03	na	na			na	

Notes:

cm/s = centimeters per second

cm²/s = centimeters squared per second

NA = not applicable

NR = no response

Conductivity values reported in gpd/ft² converted to cm/s by multiplying by 4.72E-05.

(1) Alvin Franks, Technical Report, Geohydrology, Groundwater Quality Monitoring and Structural Integrity, April 1982. Estimated conductivity based upon water level recovery following well purge.

(2) GeoSyntec, Report on Investigations of Chromium in Ground Water, February 8, 1995.

(3) Henshaw Associates, Interim Remedial Measures, Technical Memorandum, March 26, 1997. Estimated hydraulic conductivity was based upon an assumed saturated thickness of 15 feet (457.2 centimeters).

TABLE 4-7
GROUNDWATER VELOCITY ESTIMATES
Former Remco Hydraulics Facility
Willits, California

Aquifer Zone	Hydraulic Conductivity (K)		Hydraulic Gradient	Porosity	Groundwater Velocity (1)		
	Range	(cm/s)			(cm/s)	(ft/day)	(ft/yr)
A-Zone	Low (2)	3.70E-04	0.010	0.25	1.48E-05	0.04	15
	High (2)	3.60E-03			1.44E-04	0.41	149
B-Zone	Low (2)	3.17E-04	0.022	0.25	2.79E-05	0.08	29
	High (2)	6.11E-03			5.38E-04	1.52	556
C-Zone	Low (2)	4.28E-05	0.039	0.25	6.68E-06	0.02	7
	High (2)	2.80E-03			4.37E-04	1.24	452

Notes:

cm/s = centimeters per second

ft/day = feet per day

ft/ft = feet per foot

ft/yr = feet per year

% = percent

(1) Groundwater velocity estimates assume hydraulic conductivity and gradient remain the same, which is expected to result in an overestimation of the actual velocity given the observed heterogeneity at the Site.

(2) Low range and high range K values for A-, B-, and C-Zones are from the low and high values of central tendency calculations from the short term aquifer test results (average, geometric mean, harmonic mean, and median values) in Table 4

TABLE 5-1-1a
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN SURFACE SOIL
Former Remco Hydraulics Facility
Willits, California

	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Depth of Maximum Detection ^d (feet bgs)	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
Metals	Total Antimony	mg/kg	2	4	11	0.55	0.716	0.725	0.72	SB-182	19-Mar-01	0.2	0.463	6	6	0	0	0.00
	Total Arsenic	mg/kg	11	0	11	1.00	0.995	3.51	2.23	SB-181	19-Mar-01	0.2	-	-	8.29	0	0	0.00
	Total Beryllium	mg/kg	11	0	11	1.00	0.261	0.478	0.36	SB-181	19-Mar-01	0.2	-	-	15	0	0	0.00
	Total Cadmium	mg/kg	10	1	11	1.00	0.233	3.4	1.03	SS-32	27-Jul-00	0	0.0943	0.0943	0.9	2	0	0.18
	Total Copper	mg/kg	11	0	11	1.00	18.9	294	61.93	SS-32	27-Jul-00	0	-	-	290	1	0	0.09
	Total Lead	mg/kg	11	0	11	1.00	19.9	542	149.48	SS-32	27-Jul-00	0	-	-	40	9	0	0.82
	Total Mercury	mg/kg	11	0	11	1.00	0.0207	0.843	0.21	SS-34	27-Jul-00	0	-	-	23	0	0	0.00
	Total Nickel	mg/kg	11	0	11	1.00	12.9	134	50.51	SS-32	27-Jul-00	0	-	-	161	0	0	0.00
	Total Selenium	mg/kg	0	6	11	0.55	-	-	-	-	-	-	0.5	0.5	39	0	0	0.00
	Total Silver	mg/kg	2	2	11	0.36	0.515	0.562	0.54	SB-182	19-Mar-01	0.2	0.0926	0.0943	39	0	0	0.00
	Total Thallium	mg/kg	1	4	11	0.45	0.344	0.344	0.34	SB-181	19-Mar-01	0.2	0.161	0.189	0.52	0	0	0.00
	Total Zinc	mg/kg	11	0	11	1.00	102	1960	505.91	SS-32	27-Jul-00	0	-	-	2,300	0	0	0.00
	Hexavalent Chromium	mg/kg	1	1	42	0.05	0.828	0.828	0.83	SS-31	27-Jul-00	0	0.026	0.026	0.02	1	1	1.00
	Total Chromium	mg/kg	42	0	42	1.00	13.9	349	62.5	SS-32	27-Jul-00	0	-	-	117	5	0	0.12
TPH	TPH-diesel	mg/kg	6	1	7	1.00	25.1	220	94.1	SS-36	27-Jul-00	0	100	100	- ^g	NA	NA	NA

Notes:

a - Estimated detctions (Jo flags) are detections below the reporting limit.

b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo flags) over the total number of samples analyzed.

c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).

d - Information regarding the maximum detection does not consider estimated detections (Jo flag samples).

e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.

f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo flags) over the number of detections and estimated detections (Jo flags).

g - No screening criteria available.

Acronyms:

bgs - below ground surface

mg/kg - milligrams per kilogram

TPH - total petroleum hydrocarbons

NA - not applicable

TABLE 5-1-1b
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN SUBSURFACE SOIL
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Depth of Maximum Detection ^d (feet bgs)	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
Gen Min	Orthophosphate as P	mg/kg	5	0	8	0.63	1.63	11.7	4.61	SB-149	08-Jan-01	1	A-Zone	-	-	- ^g	NA	NA	NA
	Phosphorus	mg/kg	8	0	8	1.00	24.6	341	230	SB-149	08-Jan-01	1	A-Zone	-	-	- ^g	NA	NA	NA
	Total Magnesium	mg/kg	18	0	18	1.00	102	13,400	8428	SB-049	19-Oct-99	19	A-Zone	-	-	- ^g	NA	NA	NA
Metals	Total Antimony	mg/kg	5	20	106	0.24	0.51	57.6	14.81	SB-150	08-Jan-01	1	A-Zone	0.385	5.88	6	2	0	0.08
	Total Arsenic	mg/kg	105	1	106	1.00	1.34	29	4.99	SB-019	18-Oct-99	13	A-Zone	0.481	0.481	8.29	5	0	0.05
	Total Beryllium	mg/kg	105	1	106	1.00	0.289	0.939	0.501	SB-027	14-Oct-99	2	A-Zone	0.0926	0.0926	15	0	0	0.00
	Total Cadmium	mg/kg	73	14	106	0.82	0.0353	33.8	0.762	SB-134	08-Dec-00	2	A-Zone	0.0373	0.1	0.9	5	0	0.06
	Total Copper	mg/kg	106	0	106	1.00	10.9	767	33.2	SB-134	08-Dec-00	2	A-Zone	-	-	290	1	0	0.01
	Total Lead	mg/kg	106	0	106	1.00	1.19	857	23.4	SB-181	19-Mar-01	0.5	A-Zone	-	-	40	6	0	0.06
	Total Mercury	mg/kg	75	4	106	0.75	0.0134	0.64	0.0626	SB-019	18-Oct-99	2	A-Zone	0.0063	0.0362	23	0	0	0.00
	Total Nickel	mg/kg	105	0	106	0.99	26.5	170	72.9	SB-012	18-Oct-99	10	A-Zone	-	-	161	1	0	0.01
	Total Selenium	mg/kg	14	26	106	0.38	0.527	0.898	0.649	SB-024	19-Oct-99	12.5	A-Zone	0.325	0.5	39	0	0	0.00
	Total Silver	mg/kg	15	18	106	0.31	0.271	3.7	1.507	SB-044	19-Oct-99	10.5	A-Zone	0.0769	0.686	39	0	0	0.00
	Total Thallium	mg/kg	1	46	106	0.44	1.06	1.06	1.060	SB-181	19-Mar-01	0.5	A-Zone	0.154	0.5	0.52	1	0	0.02
	Total Zinc	mg/kg	106	0	106	1.00	2.42	810	65.0	SB-181	19-Mar-01	0.5	A-Zone	-	-	2300	0	0	0.00
	Hexavalent Chromium	mg/kg	47	6	314	0.17	0.0167	158	19.2	SB-056	20-Oct-99	11	A-Zone	0.013	0.163	0.02	15	0	0.28
	Total Chromium	mg/kg	304	0	304	1.00	23.3	8,710	168	SB-041	14-Dec-98	33	B-Zone	-	-	117	62	0	0.20
PAH	Benzo(a)anthracene	µg/kg	1	0	44	0.02	125	125	125	SB-020	20-Oct-99	10	A-Zone	-	-	62	1	0	1.00
	Indeno(1,2,3-cd)pyrene	µg/kg	1	0	44	0.02	114	114	114	SB-044	19-Oct-99	10.5	A-Zone	-	-	62	1	0	1.00
	Naphthalene ^h	µg/kg	4	17	225	0.09	6.83	24.1	14	SB-125	07-Dec-00	6	A-Zone	5	12,500	5600	0	2	0.10
PCB	Aroclor 1242	µg/kg	8	0	40	0.20	36.9	142	80.1	SB-001	13-Oct-99	2	A-Zone	-	-	22	8	0	1.00
	Aroclor 1248	µg/kg	1	0	40	0.03	108	108	108	SB-001	13-Oct-99	2	A-Zone	-	-	22	1	0	1.00
TPH	Extractable Range Organics (C10-C24)	mg/kg	8	10	47	0.38	6.59	1,300	299	SB-036	17-Dec-98	2	A-Zone	5	5	- ^g	NA	NA	NA
	TPH-motor oil	mg/kg	19	0	29	0.66	10.2	11,500	1078	SB-195	20-Apr-01	1	A-Zone	-	-	- ^g	NA	NA	NA
	TPH-diesel	mg/kg	76	41	185	0.63	5.17	8,560	770	SB-195	20-Apr-01	1	A-Zone	5	10	- ^g	NA	NA	NA
	TPH-gasoline	mg/kg	2	1	14	0.21	11.8	314	163	W37A	25-Aug-00	3	A-Zone	1	1	- ^g	NA	NA	NA
VOC	1,1,1-Trichloroethane (1,1,1-TCA)	µg/kg	26	11	229	0.16	6.59	108,000	4777	SB-141	10-Jan-01	2	A-Zone	5	12.5	63000	1	0	0.03
	1,1,2-Trichloroethane	µg/kg	1	2	229	0.01	17	17	17.00	SB-036	17-Dec-98	2	A-Zone	5	10	84	0	0	0.00
	1,1-Dichloroethane (1,1-DCA)	µg/kg	29	29	229	0.25	5.06	580	46	SB-124	07-Dec-00	3	A-Zone	5	10,000	330	1	3	0.07
	1,1-Dichloroethene (1,1-DCE)	µg/kg	13	15	229	0.12	5.03	168	37.4	SB-083	05-Jun-00	16	A-Zone	5	500	5.4	12	5	0.61
	1,2,3-Trichlorobenzene	µg/kg	1	5	185	0.03	5.18	5.18	5.2	SB-135	16-Jan-01	5	A-Zone	5	500	- ^g	NA	NA	NA
	1,2,4-Trimethylbenzene	µg/kg	0	5	185	0.03	-	-	-	-	-	-	-	5	10,000	5200	0	1	0.20
	1,2-Dibromo-3-chloropropane	µg/kg	0	1	185	0.01	-	-	-	-	-	-	-	500	500	6	0	1	1.00
	1,2-Dichlorobenzene	µg/kg	0	1	185	0.01	-	-	-	-	-	-	-	500	500	37000	0	0	0.00
	1,2-Dichloroethane	µg/kg	0	2	229	0.01	-	-	-	-	-	-	-	10	500	35	0	1	0.50
	1,3,5-Trimethylbenzene	µg/kg	0	3	185	0.02	-	-	-	-	-	-	-	2500	10,000	2100	0	3	1.00
	2-Butanone (MEK)	µg/kg	13	16	210	0.14	10.3	940	89.1	SB-036	17-Dec-98	2	A-Zone	10	1000	730000	0	0	0.00
	2-Hexanone	µg/kg	0	2	229	0.01	-	-	-	-	-	-	-	10	10	- ^g	NA	NA	NA
	4-Methyl-2-pentanone	µg/kg	0	1	210	0.00	-	-	-	-	-	-	-	10	10	79000	0	0	0.00
	Acetone	µg/kg	61	95	229	0.68	18	2,300	87.5	SB-036	17-Dec-98	2	A-Zone	50	5000	160000	0	0	0.00
	Bromomethane	µg/kg	0	2	229	0.01	-	-	-	-	-	-	-	5	5	390	0	0	0.00
	Carbon disulfide	µg/kg	3	1	229	0.02	13	130	62.0	SB-021	17-Dec-98	2	A-Zone	10	10	36000	0	0	0.00
	Chlorobenzene	µg/kg	0	3	229	0.01	-	-	-	-	-	-	-	5	10	15,000	0	0	0.00
	Chloroethane	µg/kg	2	2	229	0.02	5.5	51	28.3	SB-036	17-Dec-98	2	A-Zone	5	10	300	0	0	0.00
	Chloroform	µg/kg	0	3	229	0.01	-	-	-	-	-	-	-	500	500	24	0	3	1.00
	Chloromethane	µg/kg	0	1	229	0.00	-	-	-	-	-	-	-	2500	2500	120	0	1	1.00

TABLE 5-1-1b
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN SUBSURFACE SOIL
Former Remco Hydraulics Facility
Willits, California
Page 2 of 2

	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Depth of Maximum Detection ^d (feet bgs)	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
VOC	cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/kg	17	28	229	0.20	5.03	1,960	226.4	SB-127	07-Dec-00	3	A-Zone	5	500	4300	0	0	0.00
	Dibromochloromethane	µg/kg	1	0	229	0.00	12	12	12.0	SB-036	17-Dec-98	2	A-Zone	-	-	110	0	0	0.00
	Ethylbenzene	µg/kg	2	0	230	0.01	6.11	140	73.1	SB-036	17-Dec-98	2	A-Zone	-	-	23000	0	0	0.00
	Isopropylbenzene	µg/kg	0	1	185	0.01	-	-	-	-	-	-	-	500	500	- ^g	NA	NA	NA
	m,p-Xylene	µg/kg	1	1	185	0.01	30.6	30.6	30.6	SB-138	16-Jan-01	5	A-Zone	5	5	21000	0	0	0.00
	Methyl tert-butyl ether (MTBE)	µg/kg	0	2	230	0.01	-	-	-	-	-	-	-	5	5	1,700	0	0	0.00
	Methylene chloride	µg/kg	51	60	229	0.48	5.02	33	8.2	SB-036	17-Dec-98	2	A-Zone	5	5,000	890	0	1	0.01
	n-Butylbenzene	µg/kg	0	1	185	0.01	-	-	-	-	-	-	-	5000	5,000	14,000	0	0	0.00
	o-Xylene	µg/kg	1	2	185	0.02	14.1	14.1	14.1	SB-138	16-Jan-01	5	A-Zone	5	500	21000	0	0	0.00
	p-Isopropyltoluene	µg/kg	0	2	185	0.01	-	-	-	-	-	-	-	10	5,000	- ^g	NA	NA	NA
	sec-Butylbenzene	µg/kg	0	3	185	0.02	-	-	-	-	-	-	-	500	5,000	11,000	0	0	0.00
	Tetrachloroethene (PCE)	µg/kg	28	11	229	0.17	5.34	3,710	235	SB-089	25-Jul-00	6	A-Zone	5	500	570	2	0	0.05
	Toluene	µg/kg	7	1	230	0.03	5.1	34	10.9	SB-036	17-Dec-98	2	A-Zone	500	500	52000	0	0	0.00
	trans-1,2-Dichloroethene	µg/kg	0	1	229	0.00	-	-	-	-	-	-	-	10	10	6,300	0	0	0.00
	Trichloroethene (TCE)	µg/kg	20	12	229	0.14	5.15	320	32.7	SB-083	05-Jun-00	16	A-Zone	5	2500	280	1	2	0.09
	Trichlorotrifluoroethane (Freon 113)	µg/kg	3	15	229	0.08	55.7	355	161.1	SB-033	19-Oct-99	10.5	A-Zone	5	5	560000	0	0	0.00
	Xylenes (total)	µg/kg	1	0	45	0.02	190	190	190	SB-036	17-Dec-98	2	A-Zone	-	-	21000	0	0	0.00

Notes:

- a - Estimated detctions (Jo flags) are detections below the reporting limit.
- b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo Flags) over the total number of samples analyzed.
- c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).
- d - Information regarding the maximum detection does not consider estimated detections (Jo Flag samples). Two of the maximum detections were for duplicate samples (Aroclor 1242 and Aroclor 1248); the remaining maximum detections were for primary samples.
- e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
- f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo Flags) over the number of detections and estimated detections (Jo flags).
- g - No screening criteria available.
- h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:

- bgs - below ground surface
- mg/kg - milligrams per kilogram
- µg/kg - micrograms per kilogram
- PAH - polyaromatic hydrocarbon
- PCB - polychlorinated biphenyl
- TPH - total petroleum hydrocarbons
- VOC - volatile organic compound
- NA - not applicable

TABLE 5-1-2a
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
Gen Min	Total Magnesium	mg/L	5	0	5	1.00	151	847	445	SB-049	19-Oct-99	C-Zone	-	-	- ^g	NA	NA	NA
Metals	Dissolved Antimony	mg/L	1	2	63	0.05	0.0904	0.0904	0.0904	SB-124	07-Dec-00	B-Zone	0.06	0.06	0.06	1	0	0.33
	Dissolved Arsenic	mg/L	13	19	63	0.51	0.00506	0.0671	0.0242	SB-102	11-Oct-00	A-Zone	0.005	0.005	0.0645	1	0	0.03
	Dissolved Beryllium	mg/L	0	10	63	0.16	-	-	-	-	-	-	0.001	0.001	0.004	0	0	0
	Dissolved Cadmium	mg/L	1	0	63	0.02	0.000506	0.000506	0.000506	SB-007	19-Oct-99	A-Zone	-	-	0.0005	1	0	1
	Dissolved Copper	mg/L	13	5	63	0.29	0.0102	0.0623	0.0239	SB-080	23-Mar-00	A-Zone	0.01	0.01	0.17	0	0	0
	Dissolved Lead	mg/L	2	11	63	0.21	0.00653	0.0068	0.00667	SB-045	21-Oct-99	A-Zone	0.005	0.005	0.00653	1	0	0.08
	Dissolved Mercury	mg/L	0	5	63	0.08	-	-	-	-	-	-	0.0002	0.0002	0.0012	0	0	0
	Dissolved Nickel	mg/L	4	7	63	0.17	0.0396	0.108	0.0611	SB-146	10-Jan-01	A-Zone	0.03	0.03	0.1	1	0	0.09
	Dissolved Selenium	mg/L	0	1	63	0.02	-	-	-	-	-	-	0.005	0.005	0.01	0	0	0
	Dissolved Silver	mg/L	0	2	63	0.03	-	-	-	-	-	-	0.007	0.007	0.035	0	0	0
	Dissolved Thallium	mg/L	0	4	63	0.06	-	-	-	-	-	-	0.005	0.005	0.005	0	0	0
	Dissolved Zinc	mg/L	35	11	63	0.73	0.0223	0.112	0.0436	W40A	18-Jan-01	A-Zone	0.02	0.025	2.1	0	0	0
	Dissolved Chromium	mg/L	43	5	187	0.26	0.00585	296	39.8	W24A	14-Oct-99	A-Zone	0.005	0.005	0.0605	24	0	0.50
	Hexavalent Chromium	mg/L	38	7	188	0.24	0.00512	336	53.5	SB-042	21-Oct-99	A-Zone	0.005	0.005	0.005	38	0	0.84
	Total Chromium	mg/L	18	0	18	1.00	0.028	283	23.1	SB-041	14-Dec-98	B-Zone	-	-	- ^g	NA	NA	NA
PAH	Anthracene	µg/L	1	0	21	0.05	1.24	1.24	1.24	SB-020	22-Oct-99	A-Zone	-	-	1,800	0	0	0
	Benzo(a)pyrene	µg/L	1	0	21	0.05	0.575	0.575	0.575	SB-020	22-Oct-99	A-Zone	-	-	0.0015	1	0	1
	Benzo(b)fluoranthene	µg/L	2	0	21	0.10	0.157	0.565	0.361	SB-020	22-Oct-99	A-Zone	-	-	0.02	2	0	1
	Benzo(g,h,i)perylene	µg/L	1	0	21	0.05	4.63	4.63	4.63	SB-020	22-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
	Benzo(k)fluoranthene	µg/L	1	0	21	0.05	0.766	0.766	0.766	SB-020	22-Oct-99	A-Zone	-	-	0.92	0	0	0
	Chrysene	µg/L	2	0	21	0.10	0.125	2.23	1.18	SB-020	22-Oct-99	A-Zone	-	-	0.1	2	0	1
	Dibenz(a,h)anthracene	µg/L	1	0	15	0.07	5.93	5.93	5.93	SB-020	22-Oct-99	A-Zone	-	-	0.0092	1	0	1
	Fluoranthene	µg/L	2	0	21	0.10	0.24	0.99	0.62	SB-020	22-Oct-99	A-Zone	-	-	280	0	0	0
	Fluorene	µg/L	2	0	21	0.10	1.27	2.42	1.85	SB-020	22-Oct-99	A-Zone	-	-	240	0	0	0
	Indeno(1,2,3-cd)pyrene	µg/L	3	0	21	0.14	0.0599	2.22	0.899	SB-020	22-Oct-99	A-Zone	-	-	0.092	2	0	0.67
	Naphthalene ^h	µg/L	6	12	202	0.09	0.976	24	5.49	SB-126	07-Dec-00	A-Zone	0.5	1000	6.2	1	2	0.17
	Phenanthrene	µg/L	2	0	21	0.10	0.0602	0.0939	0.0771	SB-066	28-Dec-99	A-Zone	-	-	- ^g	NA	NA	NA
	Pyrene	µg/L	2	0	21	0.10	0.137	8.26	4.20	SB-020	22-Oct-99	A-Zone	-	-	180	0	0	0
PCB	Aroclor 1016	µg/L	1	0	11	0.09	6.43	6.43	6.43	SB-163	22-Feb-01	A-Zone	-	-	0.045	1	0	1
TPH	Diesel Range Hydrocarbons	mg/L	9	0	9	1.00	0.0626	706	78.6	SB-089	25-Jul-00	A-Zone	-	-	0.1	5	0	0.56
	Extractable Range Organics (C10-C24)	mg/l	4	0	17	0.24	0.124	23.8	7.24	SB-170	22-Feb-01	A-Zone	-	-	0.1	4	0	1
	TPH-motor oil	mg/l	8	0	9	0.89	0.366	42.4	14.5	SB-187	30-Mar-01	A-Zone	-	-	- ^g	NA	NA	NA
	TPH-diesel	mg/L	66	3	83	0.83	0.0529	2860	134	SB-004	19-Oct-99	A-Zone	0.05	0.05	0.1	56	0	0.81
	TPH-gasoline	mg/L	6	0	12	0.50	0.0541	1.1	0.239	SB-062	06-Dec-99	A-Zone	-	-	0.005	6	0	1
VOC	1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	100	8	239	0.45	0.504	3210	167	SB-123	06-Dec-00	A-Zone	0.5	250	200	14	1	0.14
	1,1,2-Trichloroethane	µg/L	3	2	239	0.02	1.41	3.08	2.35	SB-019	22-Oct-99	A-Zone	0.5	2	0.2	3	2	1.00
	1,1-Dichloroethane (1,1-DCA)	µg/L	133	16	239	0.62	0.548	1130	77.7	SB-141	10-Jan-01	A-Zone	0.5	125	2	118	3	0.81
	1,1-Dichloroethene (1,1-DCE)	µg/L	105	9	239	0.48	0.51	3730	138	SB-141	10-Jan-01	A-Zone	0.5	125	0.046	105	9	1
	1,2,3-Trichlorobenzene	µg/L	0	6	182	0.03	-	-	-	-	-	-	0.5	1000	- ^g	NA	NA	NA
	1,2,4-Trichlorobenzene	µg/L	0	3	182	0.02	-	-	-	-	-	-	0.5	0.5	5	0	0	0
	1,2,4-Trimethylbenzene	µg/L	4	6	182	0.05	0.665	9.52	4.2	SB-011	20-Oct-99	A-Zone	0.5	1000	12	0	1	0.10
	1,2-Dichlorobenzene	µg/L	0	1	220	0.00	-	-	-	-	-	-	0.5	0.5	10	0	0	0
	1,2-Dichloroethane	µg/L	13	24	239	0.15	0.5	8.64	2.50	SB-019	22-Oct-99	A-Zone	0.5	125	0.12	13	24	1.00
	1,3,5-Trimethylbenzene	µg/L	1	0	182	0.01	0.552	0.552	0.6	SB-164	22-Feb-01	A-Zone	-	-	12	0	0	0
	1,4-Dioxane	µg/L	18	17	160	0.22	55	363	118	SB-019	22-Oct-99	A-Zone	50	4000	3	18	17	1
	2-Butanone (MEK)	µg/L	5	11	183	0.09	5.08	54.5	21.76	SB-011	20-Oct-99	A-Zone	5	5	1,900	0	0	0
	4-Methyl-2-pentanone	µg/L	1	0	183	0.01	5.71	5.71	5.71	SB-165	22-Feb-01	A-Zone	-	-	160	0	0	0
	Acetone	µg/L	13	27	192	0.21	10.5	728	91.20	SB-020	22-Oct-99	A-Zone	10	50	610	1	0	0
	Benzene	µg/L	12	40	201	0.26	0.507	3.58	1.424	SB-011	20-Oct-99	A-Zone	0.5	2.5	0.14	12	40	1.00
	Bromodichloromethane	µg/L	1	1	239	0.01	1.74	1.74	1.740	SB-140	23-Feb-01	A-Zone	0.5	0.5	0.18	1	1	1
	Bromoform	µg/L	1	1	239	0.01	2.04	2.04	2.04	SB-140	23-Feb-01	A-Zone	0.5	0.5	2	1	0	0.50
	Bromomethane	µg/L	1	0	239	0.00	3.49	3.49	3.49	SB-063	08-Dec-99	B-Zone	-	-	8.7	0	0	0
	Chloroethane	µg/L	15	11	239	0.11	0.593	59	9.38	SB-125	07-Dec-00	A-Zone	0.5	125	4.6	5	3	0.31

TABLE 5-1-2a
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
VOC	Chloroform	µg/L	10	11	239	0.09	0.59	11.8	3.78	SB-140	23-Feb-01	A-Zone	0.5	100	0.16	10	11	1.00
	Chloromethane	µg/L	0	3	239	0.01	-	-	-	-	-	-	0.5	0.5	1.5	0	0	0
	cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/L	109	10	232	0.51	0.525	5120	159	SB-120	06-Dec-00	A-Zone	0.5	250	6	62	2	0.54
	Dibromochloromethane	µg/L	2	0	239	0.01	0.521	1.35	0.936	SB-140	23-Feb-01	A-Zone	-	-	0.13	2	0	1
	Dichlorodifluormethane	µg/L	2	0	239	0.01	0.47	1.2	0.835	Rem-07	04-Oct-95	A-Zone	-	-	390	0	0	0
	Ethylbenzene	µg/L	2	3	201	0.02	0.619	1.83	1.225	SB-061	07-Dec-99	B-Zone	0.5	0.5	29	0	0	0
	Hexachlorobutadiene	µg/L	0	1	182	0.01	-	-	-	-	-	-	125	125	0.86	0	1	1
	Isopropylbenzene	µg/L	0	2	182	0.01	-	-	-	-	-	-	0.5	0.5	0.8	0	0	0
	m,p-Xylene	µg/L	6	2	173	0.05	0.579	8.23	2.43	SB-061	07-Dec-99	B-Zone	0.5	0.5	17	0	0	0
	Methyl tert-butyl ether (MTBE)	µg/L	46	18	201	0.32	0.665	13	3.55	SB-092	26-Jul-00	A-Zone	0.5	25	5	9	1	0.16
	Methylene chloride	µg/L	3	39	239	0.18	1.17	1.5	1.36	SB-089	25-Jul-00	A-Zone	0.5	125	4	0	10	0.24
	n-Butylbenzene	µg/L	0	3	182	0.02	-	-	-	-	-	-	0.5	0.5	61	0	0	0
	n-Propylbenzene	µg/L	0	2	182	0.01	-	-	-	-	-	-	0.5	0.5	61	0	0	0
	o-Xylene	µg/L	2	5	173	0.04	1.18	3	2.090	SB-061	07-Dec-99	B-Zone	0.5	0.5	17	0	0	0
	p-Isopropyltoluene	µg/L	0	1	182	0.01	-	-	-	-	-	-	0.5	0.5	- ^g	NA	NA	NA
	sec-Butylbenzene	µg/L	0	3	182	0.02	-	-	-	-	-	-	0.5	0.5	61	0	0	0
	Tetrachloroethene (PCE)	µg/L	60	5	239	0.27	0.601	10300	383	SB-088	06-Jun-00	A-Zone	0.5	2	0.056	60	5	1
	Toluene	µg/L	5	22	201	0.13	0.515	48	17.55	SB-011	20-Oct-99	A-Zone	0.5	2.5	40	1	0	0.04
	trans-1,2-Dichloroethene	µg/L	2	14	239	0.07	0.531	0.89	0.71	SB-091	25-Jul-00	A-Zone	0.5	125	10	0	4	0.25
	Trichloroethene (TCE)	µg/L	83	6	239	0.37	0.501	3000	113	GB-7	19-Aug-94	A-Zone	0.5	125	0.8	78	4	0.92
	Trichlorofluoromethane	µg/L	4	0	239	0.02	3.9	25	11.0	Rem-08	04-Oct-95	A-Zone	-	-	150	0	0	0
	Trichlorotrifluoroethane (Freon 113)	µg/L	48	8	201	0.28	0.769	3860	185	SB-033	22-Oct-99	A-Zone	0.5	100	1,200	2	0	0.04
	Vinyl chloride (VC)	µg/L	7	17	239	0.10	0.42	7.39	2.67	SB-011	20-Oct-99	A-Zone	0.5	25	0.024	7	17	1.0
	Xylenes (total)	µg/L	1	0	28	0.04	1	1	1.00	SB-091	25-Jul-00	A-Zone	-	-	17	0	0	0.0

Notes:

- a - Estimated detctions (Jo flags) are detections below the reporting limit.
- b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo Flags) over the total number of samples analyzed.
- c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).
- d - Information regarding the maximum detection does not consider estimated detections (Jo Flag samples). Five of the maximum detections were for duplicate samples (1,2,4-trimethylbenzene, 2-butanone, dichlorodifluormethane, toluene, and vinyl chloride); the remaining maximum detections were for primary samples.
- e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
- f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo Flags) over the number of detections and estimated detections (Jo flags).
- g - No screening criteria available.
- h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:

- mg/L - milligrams per liter
- µg/L - micrograms per liter
- PAH - polyaromatic hydrocarbon
- PCB - polychlorinated biphenyl
- VOC - volatile organic compound
- TPH - total petroleum hydrocarbons
- NA - not applicable

TABLE 5-1-2b
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN GROUNDWATER MONITORING WELL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
Gen Min	Total Magnesium	mg/L	6	0	6	1.00	17	148	56.2	W24A	28-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
Metals	Dissolved Antimony	mg/L	19	7	75	0.35	0.0607	2.68	0.799	TW3	20-Feb-01	A-Zone	0.06	0.06	0.06	19	0	0.73
	Dissolved Arsenic	mg/L	43	37	88	0.91	0.00566	0.203	0.0370	TW5	20-Feb-01	A-Zone	0.005	0.005	0.0645	5	0	0.06
	Dissolved Beryllium	mg/L	11	42	75	0.71	0.00198	0.00881	0.00442	TW3	20-Feb-01	A-Zone	0.001	0.001	0.004	6	0	0.11
	Dissolved Cadmium	mg/L	10	0	97	0.10	0.000534	0.0204	0.00401	W36A	21-Feb-01	A-Zone	-	-	0.0005	10	0	1.00
	Dissolved Copper	mg/L	2	11	93	0.14	0.0163	0.0196	0.01795	CW	26-Oct-99	A-Zone	0.01	0.01	0.17	0	0	0.00
	Dissolved Iron	mg/L	13	1	43	0.33	0.23	102	21.5	TW5	27-Nov-00	A-Zone	0.3	0.3	0.3	12	0	0.86
	Dissolved Lead	mg/L	1	15	93	0.17	0.05	0.05	0.05000	W9A	19-Apr-96	A-Zone	0.005	0.005	0.00653	1	0	0.06
	Dissolved Mercury	mg/L	0	38	75	0.51	-	-	-	-	-	-	0.0002	0.0002	0.0012	0	0	0.00
	Dissolved Manganese	mg/L	36	3	39	1.00	0.0317	41.9	4.20	TW5	22-Jan-01	A-Zone	0.0100	0.200	0.050	33	2	0.90
	Dissolved Nickel	mg/L	9	11	93	0.22	0.01	0.253	0.0885	TW1	20-Feb-01	A-Zone	0.03	0.06	0.1	4	0	0.20
	Dissolved Selenium	mg/L	0	7	75	0.09	-	-	-	-	-	-	0.005	0.005	0.01	0	0	0.00
	Dissolved Silver	mg/L	1	28	75	0.39	0.00746	0.00746	0.00746	W24A	21-Feb-01	A-Zone	0.007	0.014	0.035	0	0	0.00
	Dissolved Thallium	mg/L	0	7	75	0.09	-	-	-	-	-	-	0.005	0.005	0.005	0	0	0.00
	Dissolved Zinc	mg/L	27	8	97	0.36	0.01	0.383	0.0503	W7	22-Feb-01	A-Zone	0.02	0.04	2.1	0	0	0.00
	Total Antimony	mg/L	3	0	6	0.50	0.543	1.34	1.02	W21A	28-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
	Total Arsenic	mg/L	3	0	6	0.50	0.008	0.016	0.0108	W22A	28-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
	Total Beryllium	mg/L	3	0	6	0.50	0.00106	0.00238	0.00178	W21A	28-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
	Total Copper	mg/L	6	0	11	0.55	0.0102	0.14	0.0478	W8C	16-Sep-94	C-Zone	-	-	- ^g	NA	NA	NA
	Total Iron	mg/L	26	1	30	0.90	0.415	186	24.0	TW7	24-Oct-00	A-Zone	3	3	- ^g	NA	NA	NA
	Total Lead	mg/L	1	0	6	0.17	0.00611	0.00611	0.00611	W22A	28-Oct-99	A-Zone	-	-	- ^g	NA	NA	NA
	Total Manganese	mg/L	26	0	26	1.00	0.0704	96.6	6.68	TW5	24-Oct-00	A-Zone	-	-	- ^g	NA	NA	NA
	Total Nickel	mg/L	1	0	6	0.17	0.02	0.02	0.0200	EW1B	22-Jan-97	B-Zone	-	-	- ^g	NA	NA	NA
	Total Thallium	mg/L	1	0	6	0.17	0.08	0.08	0.0800	EW1B	22-Jan-97	B-Zone	-	-	- ^g	NA	NA	NA
	Total Zinc	mg/L	7	0	11	0.64	0.01	0.21	0.0602	W8C	16-Sep-94	C-Zone	-	-	- ^g	NA	NA	NA
	Dissolved Chromium	mg/L	342	24	592	0.62	0.001	820	62.1	W7	18-May-92	A-Zone	0.005	0.005	0.0605	242	0	0.66
	Hexavalent Chromium	mg/L	253	18	614	0.44	0.0029	900	93.0	W3	21-Sep-90	C-Zone	0.005	0.5	0.005	251	4	0.94
	Total Chromium	mg/L	102	0	120	0.85	0.0012	960	52.8	W1	18-Sep-90	B-Zone	-	-	- ^g	NA	NA	NA
PAH	Naphthalene ^h	µg/L	9	17	369	0.07	3.47	12.2	9.01	W7	28-Oct-99	A-Zone	0.5	50	6.2	7	6	0.50
PCB	Aroclor 1016	µg/L	1	0	10	0.10	2.86	2.86	2.86	W7	22-Feb-01	A-Zone	-	-	0.045	1	0	1.00
Pesticide	beta BHC	µg/L	0	1	11	0.09	-	-	-	-	-	-	0.05	0.05	0.025	0	1	1.00
	DDD,p,p	µg/L	0	1	11	0.09	-	-	-	-	-	-	0.05	0.05	1	0	0	0.00
	DDE44	µg/L	0	2	11	0.18	-	-	-	-	-	-	0.05	0.05	1	0	0	0.00
	DDT,p,p	µg/L	0	1	11	0.09	-	-	-	-	-	-	0.05	0.05	1	0	0	0.00
TPH	Extractable Range Organics (C10-C24)	mg/L	58	10	146	0.47	0.051	10.4	0.598	TW7	21-Feb-01	A-Zone	0.05	0.05	0.1	38	0	0.56
	TPH-motor oil	mg/L	10	5	230	0.07	0.255	0.554	0.355	W15A	12-Jul-00	A-Zone	0.25	0.25	- ^g	NA	NA	NA
	Purgeable Range Organics (C6-C12)	mg/L	36	5	128	0.32	0.054	3.01	0.340	W38A	19-Feb-01	A-Zone	0.05	0.05	0.005	36	5	1.00
	TPH-diesel	mg/L	225	25	444	0.56	0.0512	14.7	0.729	TW7	27-Dec-00	A-Zone	0.05	0.0833	0.1	171	0	0.68
	TPH-gasoline	mg/L	70	17	365	0.24	0.032	2.27	0.309	W25A	19-Oct-00	A-Zone	0.05	0.05	0.005	70	17	1.00
	1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	358	43	610	0.66	0.4	4050	79.3	W29A	12-Jul-00	A-Zone	0.5	100	200	22	0	0.05
	1,1,2,2-Tetrachloroethane	µg/L	1	0	599	0.002	33	33	33.0	W8A	16-Sep-94	A-Zone	-	-	0.055	1	0	1.00

TABLE 5-1-2b
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN GROUNDWATER MONITORING WELL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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	Compound	Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
VOC	1,1,2-Trichloroethane	µg/L	3	39	599	0.07	3.83	5.98	5.05	W21A	22-Feb-01	A-Zone	0.5	50	0.2	3	39	1.00
	1,1-Dichloroethane (1,1-DCA)	µg/L	447	34	610	0.79	0.52	2430	61.2	W38A	19-Feb-01	A-Zone	0.5	125	2	392	15	0.85
	1,1-Dichloroethene (1,1-DCE)	µg/L	371	43	610	0.68	0.502	6070	95.0	W29A	12-Jul-00	A-Zone	0.5	250	0.046	371	43	1.00
	1,2,3-Trichlorobenzene	µg/L	0	2	365	0.01	-	-	-	-	-	-	0.5	10	- ^g	NA	NA	NA
	1,2,4-Trichlorobenzene	µg/L	0	1	367	0.003	-	-	-	-	-	-	10	10	5	0	1	1.00
	1,2,4-Trimethylbenzene	µg/L	0	5	365	0.01	-	-	-	-	-	-	0.5	1	12	0	0	0.00
	1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	µg/L	3	3	3	2.00	20	200	100	TW4	36942	A-Zone	0	0	- ^g	NA	NA	NA
	1,2-Dichlorobenzene	µg/L	9	5	507	0.03	0.674	1	0.768	W7	16-Feb-94	A-Zone	0.5	2.5	10	0	0	0.00
	1,2-Dichloroethane	µg/L	19	97	599	0.19	0.44	25.9	3.10	W38A	19-Feb-01	A-Zone	0.5	100	0.12	19	97	1.00
	1,2-Dichloropropane	µg/L	1	1	609	0.003	11	11	11.00	W7	24-Jun-91	A-Zone	0.5	0.5	0.16	1	1	1.00
	1,3,5-Trimethylbenzene	µg/L	0	1	365	0.003	-	-	-	-	-	-	0.5	0.5	12	0	0	0.00
	1,3-Dioxolane (TIC)	µg/L	1	1	1	2.00	12.5	12.5	12.5	W28A	36943	A-Zone	2.5	2.5	- ^g	NA	NA	NA
	1,4-Dichlorobenzene	µg/L	0	2	507	0.004	-	-	-	-	-	-	0.5	0.5	0.5	0	0	0.00
	1,4-Dioxane	µg/L	278	74	660	0.53	0.0029	2200	102	W29A1	02-Aug-01	A-Zone	50	10000	3	72	74	0.41
	1-Methylnaphthalene (TIC)	µg/L	1	1	1	2.00	200	200	200	W25A	36944	A-Zone	0	0	- ^g	NA	NA	NA
	1-propanol (TIC)	µg/L	1	1	1	2.00	15	15	15	W26A	36943	A-Zone	5	5	23,000	0	0	0.00
	2-butanol (TIC)	µg/L	1	1	1	2.00	20	20	20	TW5	36942	A-Zone	0	0	19,000	0	0	0.00
	2-Butanone (MEK)	µg/L	19	14	480	0.07	5.3	18000	2465	TW1	20-Feb-01	A-Zone	5	1250	1,900	8	0	0.24
	2-Hexanone	µg/L	1	0	480	0.00	12.1	12.1	12.1	W11A	13-Jul-00	A-Zone	-	-	250	0	0	0.00
	2-Methylnaphthalene (TIC)	µg/L	1	1	3	0.67	200	200	200	W25A	36944	A-Zone	0	0	- ^g	NA	NA	NA
	Acetone	µg/L	29	65	480	0.20	10	13400	2047	TW1	20-Feb-01	A-Zone	10	2500	610	18	1	0.20
	Arsenous acid (TIC)	µg/L	1	1	1	2.00	25	25	25	W26A	36943	A-Zone	5	5	- ^g	NA	NA	NA
	Benzene	µg/L	21	115	480	0.28	0.517	8.88	1.689	TW2	20-Feb-01	A-Zone	0.5	25	0.14	21	115	1.00
	Bromodichloromethane	µg/L	0	2	598	0.003	-	-	-	-	-	-	0.5	0.5	0.18	0	2	1.00
	Bromomethane	µg/L	1	0	599	0.002	0.628	0.628	0.628	TW11	25-Oct-00	A-Zone	-	-	8.7	0	0	0.00
	Carbon disulfide	µg/L	8	11	480	0.04	5.67	197	44.1	W1	27-Oct-00	B-Zone	5	100	0.39	8	11	1.00
	Carbon tetrachloride	µg/L	0	1	599	0.002	-	-	-	-	-	-	1.25	1.25	0.1	0	1	1.00
	Chloroethane	µg/L	26	47	610	0.12	0.606	66	25.1	B2	18-Apr-96	B-Zone	0.5	50	4.6	18	12	0.41
	Chloroform	µg/L	48	75	599	0.21	0.42	5.12	1.23	W21A	28-Oct-99	A-Zone	0.5	50	0.16	48	75	1.00
	Chloromethane	µg/L	1	13	599	0.02	0.988	0.988	0.99	W19A	24-Oct-00	A-Zone	0.5	25	1.5	0	5	0.36
	cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/L	321	30	583	0.60	0.536	1100	58.9	W26A	26-Oct-00	A-Zone	0.5	25	6	219	12	0.66
	Di-isopropyl ether (TIC)	µg/L	2	2	2	2.00	20	45	32.5	W24A	36943	A-Zone	0	5	0.8	2	1	0.75
	Dichlorodifluormethane	µg/L	3	5	568	0.01	0.75	2.8	2.12	W8A	10/3/1995 & 8/26/98	A-Zone	2.5	25	390	0	0	0.00
	dimethyl sulfide (TIC)	µg/L	2	2	2	2.00	30	80	55	TW5	36942	A-Zone	0	0	- ^g	NA	NA	NA
	Ethylbenzene	µg/L	1	4	480	0.01	1.02	1.02	1.020	W1	28-Oct-99	B-Zone	0.5	2.5	29	0	0	0.00
	Hexachlorobutadiene	µg/L	0	1	367	0.003	-	-	-	-	-	-	25	25	0.86	0	1	1.00
	Isopropylbenzene	µg/L	0	5	365	0.01	-	-	-	-	-	-	0.5	0.5	0.8	0	0	0.00
	m,p-Xylene	µg/L	6	9	365	0.04	0.594	4.16	1.61	W1	28-Oct-99	B-Zone	0.5	2.5	17	0	0	0.00
	methyl cyclohexane (TIC)	µg/L	1	1	1	2.00	5	5	5	W24A	36943	A-Zone	0	0	150	0	0	0.00
	Methyl tert-butyl ether (MTBE)	µg/L	88	54	428	0.33	0.507	279	10.08	MW-1	11-Sep-00	A-Zone	0.5	125	5	14	8	0.15

TABLE 5-1-2b
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN GROUNDWATER MONITORING WELL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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		Working Units	Number of Detections	Number of Estimated Detections (Jo Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (Jo Flag)	Maximum Reporting Limit for Estimated Detection (Jo Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (Jo Flag) ^e	Frequency of Exceedence ^f
VOC	Methylene chloride	µg/L	15	99	599	0.19	0.513	300	29.07	W1	16-Nov-93	B-Zone	0.5	250	4	6	30	0.32
	n-Butylbenzene	µg/L	1	5	365	0.02	0.501	0.501	0.501	W7	05-Apr-00	A-Zone	0.5	1	61	0	0	0.00
	n-Propylbenzene	µg/L	0	1	365	0.003	-	-	-	-	-	-	0.5	0.5	61	0	0	0.00
	o-Xylene	µg/L	8	30	365	0.10	0.501	1.7	0.774	W1	28-Oct-99	B-Zone	0.5	2.5	17	0	0	0.00
	p-Isopropyltoluene	µg/L	0	2	365	0.01	-	-	-	-	-	-	0.5	0.5	- ^g	NA	NA	NA
	sec-Butylbenzene	µg/L	1	10	365	0.03	0.557	0.557	0.557	W7	05-Apr-00	A-Zone	0.5	1	61	0	0	0.00
	tert-Butylbenzene	µg/L	0	9	365	0.02	-	-	-	-	-	-	0.5	1	61	0	0	0.00
	Tetrachloroethene (PCE)	µg/L	209	62	610	0.44	0.5	7030	205	W25A	19-Oct-00	A-Zone	0.5	50	0.056	209	62	1.00
	Toluene	µg/L	20	38	480	0.12	0.501	13.5	1.86	TW2	20-Feb-01	A-Zone	0.5	5	40	0	0	0.00
	trans-1,2-Dichloroethene	µg/L	22	58	609	0.13	0.504	1.51	0.954	TW11	21-Feb-01	A-Zone	0.5	12.5	10	0	2	0.03
	Trichloroethene (TCE)	µg/L	294	53	610	0.57	0.41	2280	59.4	W26A	26-Oct-00	A-Zone	0.5	50	0.8	277	29	0.88
	Trichlorofluoromethane	µg/L	6	0	568	0.01	0.74	17	9.44	B4	18-May-92	A-Zone	-	-	150	0	0	0.00
	Trichlorotrifluoroethane (Freon 113)	µg/L	126	75	474	0.42	0.679	1290	165	W17B	22-Feb-01	B-Zone	0.5	125	1,200	3	0	0.01
	Vinyl Acetate	µg/L	0	1	480	0.002	-	-	-	-	-	-	10	10	88	0	0	0.00
	Vinyl chloride (VC)	µg/L	6	75	599	0.14	0.597	5.74	2.311	W26A	13-Jul-00	A-Zone	0.5	25	0.024	6	75	1.00
	Xylenes (total)	µg/L	1	0	115	0.01	0.8	0.8	0.800	W7	26-Aug-98	A-Zone	-	-	17	0	0	0.00

- Notes:**
a - Estimated detctions (Jo flags) are detections below the reporting limit.
b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo Flags) over the total number of samples analyzed.
c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).
d - Information regarding the maximum detection does not consider estimated detections (Jo Flag samples).
e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo Flags) over the number of detections and estimated detections (Jo flags).
g - No screening criteria available.
h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:
mg/L - milligrams per liter
µg/L - micrograms per liter
PAH - polyaromatic hydrocarbon
PCB - polychlorinated biphenyl
TPH - total petroleum hydrocarbons
VOC - volatile organic compound
NA - not applicable or not available

TABLE 5-1-2c
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN PRIVATE WELL GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California

	Compound	Working Units	Number of Detections	Number of Estimated Detections (J _o Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Aquifer Zone of Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (J _o Flag)	Maximum Reporting Limit for Estimated Detection (J _o Flag)		Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (J _o Flag) ^e	Frequency of Exceedence ^f
Metals	Total Copper	mg/L	1	0	1	1	0.0376	0.0376	0.0376	OW-22	09-Nov-99	NA	-	-		- ^g	NA	NA	NA
	Total Zinc	mg/L	1	0	1	1.00	0.0393	0.0393	0.0393	OW-22	09-Nov-99	NA	-	-		- ^g	NA	NA	NA
	Dissolved Chromium	mg/L	5	0	38	0.13	0.0011	0.0016	0.00130	OW-17	28-May-98	NA	-	-		0.0605	0	0	0.00
	Total Chromium	mg/L	11	0	33	0.33	0.0012	0.013	0.00408	OW-11	17-Dec-97	NA	-	-		- ^g	NA	NA	NA
TPH	Extractable Range Organics (C10-C24)		0	1	10	-	-	-	-	-	-	-	0.05	0.05		- ^g	NA	NA	NA
	Purgeable Range Organics (C6-C12)	mg/L	3	0	9	0.33	0.11	0.21	0.153	OW-17	28-May-98	NA	-	-		0.005	3	0	1.00
	TPH-diesel	mg/L	3	2	38	0.13	0.054	3.4	1.218	OW-01	17-Jan-98	NA	0.05	0.05		0.1	2	0	0.40
PAH	Naphthalene ^h	µg/L	0	2	13	0.15	-	-	-	-	-	-	0.5	0.5		6.2	0	0	0.00
VOC	1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	8	2	40	0.25	0.54	110	47.7	OW-17	28-May-98	NA	0.5	0.5		200	0	0	0.00
	1,1-Dichloroethane (1,1-DCA)	µg/L	4	1	40	0.13	46	56	51.5	OW-17	17-Dec-97	NA	0.5	0.5		2	4	0	0.80
	1,1-Dichloroethene (1,1-DCE)	µg/L	4	0	40	0.10	27	34	30.5	OW-17	28-May-98	NA	-	-		0.046	4	0	1.00
	Bromodichloromethane	µg/L	2	0	40	0.05	1.4	4.47	2.94	27 Franklin	26-Oct-99	NA	-	-		0.18	2	0	1.00
	Chloroform	µg/L	4	2	40	0.15	0.56	21.2	8.47	27 Franklin	26-Oct-99	NA	0.5	0.5		0.16	4	2	1.00
	Chloromethane	µg/L	0	1	40	0.03	-	-	-	-	-	-	0.5	0.5		1.5	0	0	0.00
	cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/L	4	0	40	0.10	35	67	47.0	OW-17	28-May-98	NA	-	-		6	4	0	1.00
	Methyl tert-butyl ether (MTBE)	µg/L	4	1	31	0.16	1.4	14	7.03	OW-07	18-Dec-97	NA	0.5	0.5		5	2	0	0.40
	Methylene chloride	µg/L	1	2	40	0.08	44	44	44.0	OW-24	18-Dec-97	NA	0.5	0.5		4	1	0	0.33
	Tetrachloroethene (PCE)	µg/L	4	0	40	0.10	51	100	80.0	OW-17	28-May-98	NA	-	-		0.056	4	0	1.00
	Toluene	µg/L	1	0	23	0.04	8.01	8.01	8.01	OW-33	14-Dec-00	NA	-	-		40	0	0	0.00
	Trichloroethene (TCE)	µg/L	4	0	40	0.10	62	71	66.5	OW-17	28-May-98	NA	-	-		0.8	4	0	1.00
	Trichlorotrifluoroethane (Freon 113)	µg/L	3	0	18	0.17	9.1	16	12.4	OW-17	28-May-98	NA	-	-		1,200	0	0	0.00

Notes:
a - Estimated detctions (Jo flags) are detections below the reporting limit.
b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo Flags) over the total number of samples analyzed.
c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).
d - Information regarding the maximum detection does not consider estimated detections (Jo flag samples). Five of the maximum detections were for duplicate samples (1,1,1-TCA, 1,1-DCE, PCE, TCE, and Freon 113); the remaining maximum detections were for primary samples.
e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo Flags) over the number of detections and estimated detections (Jo flags).
g - No screening criteria available.
h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:
mg/L - milligrams per liter
µg/L - micrograms per liter
TPH - total petroleum hydrocarbons
VOC - volatile organic compound
NA - not applicable

TABLE 5-1-3
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN STORM WATER
Former Remco Hydraulics Facility
Willits, California

	Compound	Working Units	Number of Detections	Number of Estimated Detections (J _o Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (J _o Flag)	Maximum Reporting Limit for Estimated Detection (J _o Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (J _o Flag) ^e	Frequency of Exceedence ^f
Metals	Dissolved Arsenic	mg/L	0	1	1	1.00	-	-	-	-	-	0.005	0.005	0.000018	0	1	1.00
	Dissolved Beryllium	mg/L	0	1	1	1.00	-	-	-	-	-	0.001	0.001	0.0053	0	0	0.00
	Dissolved Copper	mg/L	0	1	1	1.00	-	-	-	-	-	0.01	0.01	1	0	0	0.00
	Dissolved Iron	mg/L	0	1	8	0.13	-	-	-	-	-	0.3	0.3	0.3	0	0	0.00
	Dissolved Manganese	mg/L	4	4	8	1.00	0.0126	0.0573	0.0256	SWD-7	30-Nov-00	0.01	0.01	0.05	1	0	0.13
	Dissolved Mercury	mg/L	0	1	1	1.00	-	-	-	-	-	0.0002	0.0002	0.00005	0	1	1.00
	Dissolved Zinc	mg/L	1	0	1	1.00	0.265	0.265	0.265	SWD-7	22-Feb-01	-	-	5	0	0	0.00
	Total Iron	mg/L	4	0	4	1.00	0.617	1.69	1.11	SWD-4	09-Oct-00	-	-	_ ^g	NA	NA	NA
	Total Manganese	mg/L	4	0	4	1.00	0.0449	0.0849	0.0656	SWD-7	09-Oct-00	-	-	_ ^g	NA	NA	NA
	Dissolved Chromium	mg/L	11	5	27	0.59	0.00726	0.49	0.0747	SWD	13-Feb-98	0.01	0.01	_ ^g	NA	NA	NA
	Hexavalent Chromium	mg/L	38	1	97	0.40	0.006	0.66	0.103	SWD-7	16-Mar-93	0.005	0.005	0.016	24	0	0.62
	Total Chromium	mg/L	44	5	62	0.79	0.0061	0.922	0.123	SWD-6	14-Dec-00	0.005	0.01	_ ^g	NA	NA	NA
TPH	Extractable Range Organics (C10-C24)	mg/L	3	0	5		0.31	0.67	0.487	SWD-9	06-May-98	-	-	_ ^g	NA	NA	NA
	TPH-motor oil	mg/L	1	0	7	0.14	0.862	0.862	0.862	SWD-6	03-Feb-00	-	-	_ ^g	NA	NA	NA
	TPH-diesel	mg/L	25	0	33	0.76	0.0566	1.76	0.279	SWD-7	27-Oct-99	-	-	_ ^g	NA	NA	NA
PAH	Naphthalene ^h	µg/L	0	7	40	0.18	-	-	-	-	-	0.5	0.5	620	0	0	0.00
VOC	1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	49	8	105	0.54	0.9	120	21.2	Stormwater Runoff and SWD-7	1/6/1992 & 2/7/1994	0.5	0.5	18000	0	0	0.00
	1,1-Dichloroethane (1,1-DCA)	µg/L	44	6	105	0.48	0.4	40	6.32	C2	05-Jan-94	0.5	0.5	_ ^g	NA	NA	NA
	1,1-Dichloroethene (1,1-DCE)	µg/L	27	0	105	0.26	0.538	35	7.57	C2	05-Jan-94	-	-	0.057	27	0	1.00
	1,2,3-Trichlorobenzene	µg/L	0	1	41	0.02	-	-	-	-	-	0.5	0.5	50	0	0	0.00
	1,2,4-Trichlorobenzene	µg/L	0	1	41	0.02	-	-	-	-	-	0.5	0.5	50	0	0	0.00
	1,2,4-Trimethylbenzene	µg/L	6	3	41	0.22	0.567	1.34	0.826	SWD-4	27-Oct-99	0.5	0.5	_ ^g	NA	NA	NA
	1,3,5-Trimethylbenzene	µg/L	1	4	41	0.12	0.504	0.504	0.504	SWD-4	09-Oct-00	0.5	0.5	_ ^g	NA	NA	NA
	2-Butanone (MEK)	µg/L	1	5	49	0.12	5.55	5.55	5.55	SWD-1	27-Oct-99	5	5	_ ^g	NA	NA	NA
	Acetone	µg/L	8	14	49	0.45	10.4	30.5	14.46	SWD-3	30-Nov-00	10	10	_ ^g	NA	NA	NA
	Chloroform	µg/L	3	0	105	0.03	0.6	0.9	0.700	SWD-7	16-Mar-93	-	-	5.7	0	0	0.00
	Chloromethane	µg/L	0	3	105	0.03	-	-	-	-	-	0.5	0.5	11,000	0	0	0.00
	cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/L	31	3	83	0.41	0.5	50	11.1	C2	25-May-93	0.5	0.5	11600	0	0	0.00
	Isopropylbenzene	µg/L	0	3	41	0.07	-	-	-	-	-	0.5	0.5	_ ^g	NA	NA	NA
	m,p-Xylene	µg/L	1	0	41	0.02	1.04	1.04	1.04	SWD-7	27-Oct-99			_ ^g	NA	NA	NA
	Methyl tert-butyl ether (MTBE)	µg/L	1	13	45	0.31	0.8	0.8	0.800	SWD-7	18-Dec-98	0.5	0.5	_ ^g	NA	NA	NA
	Methylene chloride	µg/L	1	12	105	0.12	0.641	0.641	0.641	SWD-3	30-Nov-00	0.5	0.5	4.7	0	0	0.00
	n-Propylbenzene	µg/L	1	4	41	0.12	0.707	0.707	0.707	SWD-4	27-Oct-99	0.5	0.5	_ ^g	NA	NA	NA
	o-Xylene	µg/L	0	5	41	0.12	-	-	-	-	-	0.5	0.5	_ ^g	NA	NA	NA
	Tetrachloroethene (PCE)	µg/L	54	8	103	0.60	0.571	89	15.1	SWD-7	07-Feb-94	0.5	0.5	0.8	50	0	0.81
	Toluene	µg/L	1	0	49	0.02	1.12	1.12	1.12	SWD-7	27-Oct-99	-	-	6800	0	0	0.00
	Trichloroethene (TCE)	µg/L	34	2	105	0.34	0.4	23	6.59	C2	05-Jan-94	0.5	0.5	2.7	20	0	0.56

TABLE 5-1-4
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN SURFACE WATER
Former Remco Hydraulics Facility
Willits, California

	Compound	Working Units	Number of Detections	Number of Estimated Detections (J _o Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Minimum Reporting Limit for Estimated Detection (J _o Flag)	Maximum Reporting Limit for Estimated Detection (J _o Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (J _o Flag) ^e	Frequency of Exceedence ^f
Metals	Total Copper	mg/L	11	0	11	1.00	0.0148	0.0533	0.0233	SW-04	10-Nov-99	-	-	1.0	0	0	0.00
	Total Lead	mg/L	2	0	13	0.15	0.00477	0.0103	0.00754	SW-03	10-Nov-99	-	-	- ^g	NA	NA	NA
	Total Zinc	mg/L	11	0	11	1.00	0.0255	0.203	0.0732	SW-03	10-Nov-99	-	-	5.0	0	0	0.00
	Total Chromium	mg/L	2	0	23	0.09	0.0017	0.0043	0.0030	S-01	06-May-98	-	-	- ^g	NA	NA	NA
TPH	TPH-diesel	mg/L	10	0	20	0.50	0.0648	0.312	0.142	SW-09	09-Nov-99	-	-	- ^g	NA	NA	NA
VOC	1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	1	0	17	0.06	1.5	1.5	1.500	SDD-2	16-Dec-97	-	-	200	0	0	0.00
	1,1-Dichloroethane (1,1-DCA)	µg/L	1	0	17	0.06	0.72	0.72	0.720	SDD-2	16-Dec-97	-	-	5	NA	NA	NA
	Chloroform	µg/L	1	0	17	0.06	0.66	0.66	0.660	SDD-2	16-Dec-97	-	-	5.7	0	0	0.00
	cis-1,2-Dichloroethene (cis 1,2-DCE)	µg/L	1	0	17	0.06	0.86	0.86	0.860	SDD-2	16-Dec-97	-	-	6	0	0	0.00
	Methyl tert-butyl ether (MTBE)	µg/L	2	0	14	0.14	0.638	2.7	1.669	SDD-2	16-Dec-97	-	-	5	NA	NA	NA
	Tetrachloroethene (PCE)	µg/L	1	0	17	0.06	0.84	0.84	0.840	SDD-2	16-Dec-97	-	-	0.8	1	0	0.06
	Trichloroethene (TCE)	µg/L	1	0	17	0.06	0.57	0.57	0.570	SDD-2	16-Dec-97	-	-	2.7	0	0	0.00

Notes:

a - Estimated detctions (Jo flags) are detections below the reporting limit.

b - Frequency of detection was calculated as the sum of the detections and estimated detections (J_o flags) over the total number of samples analyzed.

c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (J_o flag samples).

d - Information regarding the maximum detection does not consider estimated detections (J_o flag samples).

e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.

f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo flags) over the number of detections and estimated detections (Jo flags).

g - No screening criteria available.

Acronyms:

mg/L - milligrams per liter

µg/L - micrograms per liter

TPH - total petroleum hydrocarbons

VOC - volatile organic compound

NA - not applicable

TABLE 5-1-5
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN SEDIMENT
Former Remco Hydraulics Facility
Willits, California

	Compound	Working Units	Number of Detections	Number of Estimated Detections (J _o Flag) ^a	Number of Samples Analyzed	Frequency of Detection ^b	Minimum Detection	Maximum Detection	Average Detected Concentration ^c	Location of Maximum Detection ^d	Sample Date for Maximum Detection ^d	Depth of Maximum Detection ^d (feet bgs)	Minimum Reporting Limit for Estimated Detection (J _o Flag)	Maximum Reporting Limit for Estimated Detection (J _o Flag)	Preliminary Screening Criteria	Number of Detections Exceeding Criteria	Number of Estimated Detections Exceeding Criteria (J _o Flag) ^e	Frequency of Exceedence ^f
Metals	Total Arsenic	mg/kg	10	0	17	0.59	1.02	10.3	3.75	BC-4	10-Nov-99	0	-	-	8.2	1	0	0.10
	Total Beryllium	mg/kg	16	0	16	1.00	0.33	0.527	0.45	BC-5	10-Nov-99	0	-	-	- ^g	NA	NA	NA
	Total Cadmium	mg/kg	7	1	16	0.50	0.0626	0.123	0.081	S-05	20-Sep-00	0.1	0.0338	0.0338	1.2	0	0	0.00
	Total Copper	mg/kg	16	0	16	1.00	18.9	70.8	34.2	SDD-6	10-Nov-99	0	-	-	34	7	0	0.44
	Total Lead	mg/kg	13	0	16	0.81	3.9	84	16.4	SDD-6	10-Nov-99	0	-	-	46.7	1	0	0.08
	Total Mercury	mg/kg	11	0	16	0.69	0.0192	0.195	0.0609	BC-2	10-Nov-99	0	-	-	0.15	2	0	0.18
	Total Nickel	mg/kg	16	0	16	1.00	35.1	88.6	55.5	S-05	20-Sep-00	0.1	-	-	20.9	16	0	1.00
	Total Selenium	mg/kg	0	3	16	0.19	-	-	-	-	-	-	0.338	0.397	- ^g	NA	NA	NA
	Total Thallium	mg/kg	0	7	17	0.41	-	-	-	-	-	-	0.321	0.446	- ^g	NA	NA	NA
	Total Zinc	mg/kg	16	0	16	1.00	53.3	169	85.7	BC-3	10-Nov-99	0	-	-	150	2	0	0.13
	Hexavalent Chromium	mg/kg	1	3	36	0.11	5.9	5.9	5.9	DD-2	16-Dec-97	0	0.026	0.026	- ^g	NA	NA	NA
PAH	Total Chromium	mg/kg	28	0	28	1.00	25	110	43.2	S-01	06-May-98	0	-	-	81	1	0	0.04
	Fluoranthene	µg/kg	1	0	8	0.13	223	223	223	BC-3	10-Nov-99	0	-	-	600,000	0	0	0.00
	Naphthalene ^h	µg/kg	0	1	24	0.04	-	-	-	-	-	-	5	5	160,000	0	0	0.00
TPH	Extractable Range Organics (C10-C24)	mg/kg	2	0	2	1.00	48	60	54	S-01	06-May-98	0	-	-	- ^g	NA	NA	NA
	TPH-diesel	mg/kg	12	5	28	0.61	2.6	65.8	19.3	BC-3	10-Nov-99	0	5	10	- ^g	NA	NA	NA
VOC	2-Hexanone	µg/kg	0	1	18	0.06	-	-	-	-	-	-	10	10	- ^g	NA	NA	NA
	Acetone	µg/kg	1	8	18	0.50	47.6	47.6	47.6	SDD-6	10-Nov-99	0	50	125	- ^g	NA	NA	NA
	Methylene chloride	µg/kg	0	3	18	0.17	-	-	-	-	-	-	5	12.5	- ^g	NA	NA	NA
	Toluene	µg/kg	1	0	18	0.06	21.3	21.3	21.3	BC-3	10-Nov-99	0	-	-	- ^g	NA	NA	NA

Notes:
a - Estimated detctions (Jo flags) are detections below the reporting limit.
b - Frequency of detection was calculated as the sum of the detections and estimated detections (J_o flags) over the total number of samples analyzed.
c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (J_o flag samples).
d - Information regarding the maximum detection does not consider estimated detections (J_o flag samples).
e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo flags) over the number of detections and estimated detections (Jo flags).
g - No screening criteria available.
h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:
bgs - below ground surface
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
PAH - polyaromatic hydrocarbon
TPH - total petroleum hydrocarbons
VOC - volatile organic compound
NA - not applicable

TABLE 5-1-3
STATISTICAL ANALYSIS OF CONSTITUENTS DETECTED IN STORM WATER
Former Remco Hydraulics Facility
Willits, California

Notes:

- a - Estimated detctions (Jo flags) are detections below the reporting limit.
- b - Frequency of detection was calculated as the sum of the detections and estimated detections (Jo Flags) over the total number of samples analyzed.
- c -The average detected concentration is calculated as the sum of the detected concentrations over the number of detections; this number does not include estimated detections (Jo Flag samples).
- d - Information regarding the maximum detection does not consider estimated detections (Jo Flag samples).
- e - Number of estimated detections exceeding screening criteria was calculated based on number of estimated detections with reporting limits exceeding the screening criteria.
- f - Frequency of exceedences was calculated as the sum of the exceedences and the estimated exceedences (Jo Flags) over the number of detections and estimated detections (Jo flags).
- g - No screening criteria available.
- h- Naphthalene was analyzed using either Method 8310 (PAHs) or Method 8260 (VOCs); for purposes of this table, all results for naphthalene are summarized under PAHs.

Acronyms:

- mg/L - milligrams per liter
- µg/L - micrograms per liter
- TPH - total petroleum hydrocarbons
- VOC - volatile organic compound
- NA - not applicable

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-005	SB-006	SB-008	SB-009	SB-011	SB-012	SB-013	SB-014	SB-016
Sample Date	10/13/99	10/13/99	10/13/99	10/15/99	10/19/99	10/18/99	10/18/99	7/25/00	10/18/99	10/18/99
Sample Depth (feet bgs)	9	6	8	13	11	15	10	12	12.5	12.5
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	5.06	<5.00	6.38	<5.00	11.3	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	46.4	<5.00	8.02	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 J _o	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	41.2	<20.0	<20.0
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-005	SB-006	SB-008	SB-009	SB-011	SB-012	SB-013	SB-014	SB-016
Sample Date	10/13/99	10/13/99	10/13/99	10/15/99	10/19/99	10/18/99	10/18/99	7/25/00	10/18/99	10/18/99
Sample Depth (feet bgs)	9	6	8	13	11	15	10	12	12.5	12.5
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.87	<5.00	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-019	SB-020	SB-020	SB-021	SB-021	SB-021	SB-021	SB-021
Sample Date	10/18/99	10/18/99	10/20/99	10/20/99	12/17/98	12/17/98	12/17/98	12/17/98	12/17/98
Sample Depth (feet bgs)	10.5	13	7	10	2	11	20	27	31
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	142	<20000	<5.00	<25	<5	<5	<5	<5
1,1,2-Trichloroethane	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	<5.00	191	<20000	8.02	<25	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5.00	159	<20000	<5.00	<25	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
1,2,4-Trimethylbenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
1,2-Dichlorobenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
1,2-Dichloroethane	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
2-Butanone (MEK)	<10.0	<10.0	<40000	<10.0	<50	<10	<10	<10	<10
2-Hexanone	<10.0	<10.0	<40000	<10.0	<50	<10	<10	<10	<10
4-Methyl-2-pentanone	<10.0	<10.0	<40000	<10.0	<50	<10	<10	<10	<10
Acetone	<20.0	<20.0	<80000	<20.0	85	20	50	50	60
Bromomethane	<5.00	<5.00	<20000	<5.00	<50	<10	<10	<10	<10
Carbon disulfide	<10.0	<10.0	<40000	<10.0	130	<5	<5	<5	<5
Chlorobenzene	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Chloroethane	<5.00	<5.00	<20000	<5.00	<50	<10	<10	<10	<10
Chloroform	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-019	SB-020	SB-020	SB-021	SB-021	SB-021	SB-021	SB-021
Sample Date	10/18/99	10/18/99	10/20/99	10/20/99	12/17/98	12/17/98	12/17/98	12/17/98	12/17/98
Sample Depth (feet bgs)	10.5	13	7	10	2	11	20	27	31
Chloromethane	<5.00	<5.00	<20000	<5.00	<50	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Dibromochloromethane	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Ethylbenzene	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Isopropylbenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
m,p-Xylene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<10000	<5.00	<50	<10	<10	<10	<10
Methylene chloride	<5.00	8.66	<20000	<5.00	<25	7.1	7.5	6.9	6.8
n-Butylbenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
Naphthalene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
o-Xylene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
p-Isopropyltoluene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
sec-Butylbenzene	<5.00	<5.00	<20000	<5.00	--	--	--	--	--
Tetrachloroethene (PCE)	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Toluene	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
trans-1,2-Dichloroethene	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Trichloroethene (TCE)	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<20000	<5.00	<25	<5	<5	<5	<5
Xylenes (total)	--	--	--	--	<25	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-022	SB-023	SB-024	SB-026	SB-027	SB-027	SB-028	SB-029	SB-030	SB-031
Sample Date	10/19/99	10/18/99	10/19/99	10/14/99	10/14/99	10/14/99	10/14/99	3/22/00	3/22/00	3/22/00
Sample Depth (feet bgs)	6	18	12.5	7	8	11.5	5.5	7	6.5	11
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0
Acetone	<20.0	<20.0	<20.0	<20.0	<20.0	--	<20.0	38.8	<20.0	<20.0
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
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Sample Location	SB-022	SB-023	SB-024	SB-026	SB-027	SB-027	SB-028	SB-029	SB-030	SB-031
Sample Date	10/19/99	10/18/99	10/19/99	10/14/99	10/14/99	10/14/99	10/14/99	3/22/00	3/22/00	3/22/00
Sample Depth (feet bgs)	6	18	12.5	7	8	11.5	5.5	7	6.5	11
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	<5.00	--	--	--	--

Notes:

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-- = not analyzed

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-032	SB-033	SB-034	SB-035	SB-035	SB-035	SB-035	SB-035	SB-036
Sample Date	10/13/99	10/19/99	10/19/99	12/18/98	12/18/98	12/18/98	12/18/98	12/18/98	12/17/98
Sample Depth (feet bgs)	8	10.5	14	3	10	22	24	31	2
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	17
1,1-Dichloroethane (1,1-DCA)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	<5.00	<12.5	<5.00	--	--	--	--	--	--
1,2-Dichlorobenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
1,2-Dichloroethane	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
2-Butanone (MEK)	<10.0	<25.0	<10.0	<10	<10	<10	<10	<10	940
2-Hexanone	<10.0	<25.0	<10.0	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	<10.0	<25.0	<10.0	<10	<10	<10	<10	<10	<10
Acetone	<20.0	<50.0	<20.0	30	23	44	60	49	2300
Bromomethane	<5.00	<12.5	<5.00	<10	<10	<10	<10	<10	<10
Carbon disulfide	<10.0	<25.0	<10.0	<5	<5	<5	<5	<5	13
Chlorobenzene	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
Chloroethane	<5.00	<12.5	<5.00	<10	<10	<10	<10	<10	51
Chloroform	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5

Notes:

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< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-032	SB-033	SB-034	SB-035	SB-035	SB-035	SB-035	SB-035	SB-036
Sample Date	10/13/99	10/19/99	10/19/99	12/18/98	12/18/98	12/18/98	12/18/98	12/18/98	12/17/98
Sample Depth (feet bgs)	8	10.5	14	3	10	22	24	31	2
Chloromethane	<5.00	<12.5	<5.00	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	12
Ethylbenzene	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	140
Isopropylbenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
m,p-Xylene	<5.00	<12.5	<5.00	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<5.00	<12.5	<5.00	<10	<10	<10	<10	<10	<10
Methylene chloride	<5.00	<12.5	<5.00	5.5	5.6	11	7.9	6.6	33
n-Butylbenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
Naphthalene	<5.00	<12.5	<5.00	--	--	--	--	--	--
o-Xylene	<5.00	<12.5	<5.00	--	--	--	--	--	--
p-Isopropyltoluene	<5.00	<12.5	<5.00	--	--	--	--	--	--
sec-Butylbenzene	<5.00	<12.5	<5.00	--	--	--	--	--	--
Tetrachloroethene (PCE)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	20
Toluene	<5.00	<12.5	<5.00	<5	<5	<5	6	<5	34
trans-1,2-Dichloroethene	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
Trichloroethene (TCE)	<5.00	<12.5	<5.00	<5	<5	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5.00	355	72.7	<5	<5	<5	<5	<5	<5
Xylenes (total)	--	--	--	<5	<5	<5	<5	<5	190

Notes:

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For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-036	SB-036	SB-036	SB-036	SB-036	SB-037	SB-037	SB-037
Sample Date	12/17/98	12/18/98	12/18/98	12/18/98	12/18/98	12/15/98	12/15/98	12/15/98
Sample Depth (feet bgs)	19	24	30	32	35	3	14	16
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--	--	--	--	--
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<10	<10	<10	<10	<10	--	--	--
2-Hexanone	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	<10	<10	<10	<10	<10	--	--	--
Acetone	44	52	54	39	75	30	32	45
Bromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

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< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-036	SB-036	SB-036	SB-036	SB-036	SB-037	SB-037	SB-037
Sample Date	12/17/98	12/18/98	12/18/98	12/18/98	12/18/98	12/15/98	12/15/98	12/15/98
Sample Depth (feet bgs)	19	24	30	32	35	3	14	16
Chloromethane	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	6.5	7.4	8.7	8.2	9.2	<5	<5	<5
n-Butylbenzene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene (TCE)	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes (total)	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-037	SB-037	SB-038	SB-038	SB-039	SB-039	SB-039	SB-039
Sample Date	12/15/98	12/15/98	10/18/99	10/18/99	12/16/98	12/16/98	12/17/98	12/17/98
Sample Depth (feet bgs)	27	35	6.5	27.5	1	14	21	29
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5.00	<5.00	<5	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
1,2,3-Trichlorobenzene	--	--	<5.00	<5.00	--	--	--	--
1,2,4-Trimethylbenzene	--	--	<5.00	<5.00	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	<5.00	<5.00	--	--	--	--
1,2-Dichlorobenzene	--	--	<5.00	<5.00	--	--	--	--
1,2-Dichloroethane	<5	<5	<5.00	<5.00	<5	<5	<5	<5
1,3,5-Trimethylbenzene	--	--	<5.00	<5.00	--	--	--	--
2-Butanone (MEK)	--	--	<10.0	<10.0	<10	<10	<10	<10
2-Hexanone	<10	<10	<10.0	<10.0	<10	<10	<10	<10
4-Methyl-2-pentanone	--	--	<10.0	<10.0	<10	<10	<10	<10
Acetone	30	90	<20.0	<20.0	28	25	44	49
Bromomethane	<10	<10	<5.00	<5.00	<10	<10	<10	<10
Carbon disulfide	<5	<5	<10.0	<10.0	<5	<5	<5	43
Chlorobenzene	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Chloroethane	<10	<10	<5.00	<5.00	<10	<10	<10	<10
Chloroform	<5	<5	<5.00	<5.00	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-037	SB-037	SB-038	SB-038	SB-039	SB-039	SB-039	SB-039
Sample Date	12/15/98	12/15/98	10/18/99	10/18/99	12/16/98	12/16/98	12/17/98	12/17/98
Sample Depth (feet bgs)	27	35	6.5	27.5	1	14	21	29
Chloromethane	<10	<10	<5.00	<5.00	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Isopropylbenzene	--	--	<5.00	<5.00	--	--	--	--
m,p-Xylene	--	--	<5.00	<5.00	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10	<10	<5.00	<5.00	<10	<10	<10	<10
Methylene chloride	<5	6.3	<5.00	<5.00	8.1	8.5	5.5	<5
n-Butylbenzene	--	--	<5.00	<5.00	--	--	--	--
Naphthalene	--	--	<5.00	<5.00	--	--	--	--
o-Xylene	--	--	<5.00	<5.00	--	--	--	--
p-Isopropyltoluene	--	--	<5.00	<5.00	--	--	--	--
sec-Butylbenzene	--	--	<5.00	<5.00	--	--	--	--
Tetrachloroethene (PCE)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Toluene	<5	<5	<5.00	<5.00	<5	<5	<5	<5
trans-1,2-Dichloroethene	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Trichloroethene (TCE)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5.00	<5.00	<5	<5	<5	<5
Xylenes (total)	<5	<5	--	--	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-039	SB-039	SB-040	SB-040	SB-040	SB-040	SB-040	SB-040
Sample Date	12/17/98	12/17/98	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Sample Depth (feet bgs)	45	52	8	16	24	29	34	52
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--	--	--	--	--
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<10	<10	--	--	--	--	--	<10
2-Hexanone	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	<10	<10	--	--	--	--	--	<10
Acetone	32	61	27	18	75	23	24	76
Bromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-039	SB-039	SB-040	SB-040	SB-040	SB-040	SB-040	SB-040
Sample Date	12/17/98	12/17/98	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Sample Depth (feet bgs)	45	52	8	16	24	29	34	52
Chloromethane	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	8.2	9.9	<5	5.8	9.5	6.8	5.9	5.2
n-Butylbenzene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	<5	5.1	<5	<5	5.8	<5	<5	5.2
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene (TCE)	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes (total)	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-041	SB-041	SB-041	SB-041	SB-041	SB-041	SB-041	SB-042
Sample Date	12/14/98	12/14/98	12/14/98	12/14/98	12/14/98	12/14/98	12/15/98	10/21/99
Sample Depth (feet bgs)	5.5	19	24	30	33	46	62	10
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5	<5	<5	<5	<5	<5.00
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5.00
1,1-Dichloroethane (1,1-DCA)	<5	<5	<5	<5	<5	<5	<5	<5.00
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<5	<5	<5	<5	<5.00
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	<5.00
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	<5.00
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	<5.00
1,2-Dichlorobenzene	--	--	--	--	--	--	--	<5.00
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5.00
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	<5.00
2-Butanone (MEK)	--	--	--	--	--	--	--	<10.0
2-Hexanone	<10	<10	<10	<10	<10	<10	<10	<10.0
4-Methyl-2-pentanone	--	--	--	--	--	--	--	<10.0
Acetone	28	32	47	22	28	30	85	<20.0
Bromomethane	<10	<10	<10	<10	<10	<10	<10	<5.00
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5	<10.0
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5.00
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<5.00
Chloroform	<5	<5	<5	<5	<5	<5	<5	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-041	SB-041	SB-041	SB-041	SB-041	SB-041	SB-041	SB-042
Sample Date	12/14/98	12/14/98	12/14/98	12/14/98	12/14/98	12/14/98	12/15/98	10/21/99
Sample Depth (feet bgs)	5.5	19	24	30	33	46	62	10
Chloromethane	<10	<10	<10	<10	<10	<10	<10	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<5	<5	<5	<5	<5.00
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5.00
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5.00
Isopropylbenzene	--	--	--	--	--	--	--	<5.00
m,p-Xylene	--	--	--	--	--	--	--	<5.00
Methyl tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<5.00
Methylene chloride	7.6	7.3	10	8.8	<5	<5	9.3	<5.00
n-Butylbenzene	--	--	--	--	--	--	--	<5.00
Naphthalene	--	--	--	--	--	--	--	<5.00
o-Xylene	--	--	--	--	--	--	--	<5.00
p-Isopropyltoluene	--	--	--	--	--	--	--	<5.00
sec-Butylbenzene	--	--	--	--	--	--	--	<5.00
Tetrachloroethene (PCE)	<5	<5	<5	<5	<5	<5	<5	<5.00
Toluene	<5	<5	<5	<5	<5	<5	6.3	<5.00
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5.00
Trichloroethene (TCE)	<5	<5	<5	<5	<5	<5	<5	<5.00
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5	<5	<5	<5	<5	<5.00
Xylenes (total)	<5	<5	<5	<5	<5	<5	<5	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-043	SB-043	SB-043	SB-047	SB-048	SB-048	SB-049	SB-049	SB-049
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/15/99	10/15/99	10/19/99	10/19/99	10/19/99
Sample Depth (feet bgs)	8	26.5	62.5	67	6	10	32	9	27.5	62.5
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<4000	<10.0	<10.0	<10.0	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<4000	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<4000	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<20.0	<20.0	<20.0	27.5	<8000	<20.0	<20.0	<20.0	28.1	39.3
Bromomethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<4000	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-043	SB-043	SB-043	SB-047	SB-048	SB-048	SB-049	SB-049	SB-049
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/15/99	10/15/99	10/19/99	10/19/99	10/19/99
Sample Depth (feet bgs)	8	26.5	62.5	67	6	10	32	9	27.5	62.5
Chloromethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<1000	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	10.7
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<2000	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
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Sample Location	SB-058	SB-060	SB-061	SB-062	SB-066	SB-083	SB-083	SB-083	SB-084	SB-084
Sample Date	12/10/99	12/6/99	12/2/99	12/6/99	12/28/99	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Sample Depth (feet bgs)	2	2	2	2	3	5	10	16	3	8
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	2640	<5.00	<5.00	<5.00	40.8	<5.00 J _o	434	<5.00 J _o	<5.00 J _o
1,1,2-Trichloroethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	<2500	<5.00	<5.00	<5.00	<5.00 J _o	<5.00 J _o	48.3	6.21	<5.00 J _o
1,1-Dichloroethene (1,1-DCE)	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	168	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<10.0	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
1,2-Dichloroethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0 J _o	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
2-Butanone (MEK)	<10.0	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	13.7 J-	<10.0
2-Hexanone	<10.0	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0
Acetone	<20.0	<10000	<20.0	24.7	<20.0	<50.0 J _o	<50.0 J _o	<100 J _o	65.4 J-	<50.0 J _o
Bromomethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0 UJ-	<5.00 UJ-	<5.00 UJ-
Carbon disulfide	<10.0	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0
Chlorobenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<10.0 J _o	<5.00	<5.00
Chloroethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Chloroform	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-058	SB-060	SB-061	SB-062	SB-066	SB-083	SB-083	SB-083	SB-084	SB-084
Sample Date	12/10/99	12/6/99	12/2/99	12/6/99	12/28/99	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Sample Depth (feet bgs)	2	2	2	2	3	5	10	16	3	8
Chloromethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<2500	<5.00	<5.00	<5.00	<5.00 J _o	<5.00 J _o	<10.0 J _o	31.7	<5.00 J _o
Dibromochloromethane	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Ethylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Isopropylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
m,p-Xylene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Methylene chloride	<5.00	<2500	<5.00	<5.00	<5.00	<5.00 J _o	<5.00 J _o	11.0	<5.00 J _o	<5.00 J _o
n-Butylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Naphthalene	15.9	<2500	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<10.0	<5.00	<5.00
o-Xylene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
p-Isopropyltoluene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
sec-Butylbenzene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<2500	<5.00	<5.00	<5.00	33.2	<5.00 J _o	78.2	<5.00 J _o	18.5
Toluene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<2500	<5.00	<5.00	<5.00	6.85	<5.00 J _o	320	<5.00	<5.00 J _o
Trichlorotrifluoroethane (Freon 113)	<5.00	<2500	<5.00	<5.00	<5.00	<5.00	<5.00	55.7	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-084	SB-085	SB-085	SB-085	SB-086	SB-086	SB-086	SB-087	SB-087	SB-087
Sample Date	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/6/00	6/6/00	6/6/00
Sample Depth (feet bgs)	14	4	10	14	3	10	14	3	10	12
1,1,1-Trichloroethane (1,1,1-TCA)	9.63	6.59	<5.00 J _o	24.9	<5.00	7.94	19.8	<5.00	16.9	8.56
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	9.23	7.16	<5.00 J _o	10.5	<5.00	<5.00 J _o	6.45	<5.00	<5.00 J _o	<5.00 J _o
1,1-Dichloroethene (1,1-DCE)	7.10	<5.00 J _o	<5.00	11.2	<5.00	<5.00 J _o	6.15	<5.00	<5.00 J _o	<5.00 J _o
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o
Bromomethane	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-	<5.00 UJ-
Carbon disulfide	<10.0 J _o	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-084	SB-085	SB-085	SB-085	SB-086	SB-086	SB-086	SB-087	SB-087	SB-087
Sample Date	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/6/00	6/6/00	6/6/00
Sample Depth (feet bgs)	14	4	10	14	3	10	14	3	10	12
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00 J _o	9.54	<5.00 J _o	<5.00	<5.00	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	11.9
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00 J _o	<5.00 J _o	7.15	<5.00 J _o	<5.00 J _o	5.07	5.79	<5.00 J _o	<5.00 J _o	7.83
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00 J _o	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	35.7	39.3	10.6	<5.00	<5.00	19.5	20.7	<5.00 J _o	28.5	52.0
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	54.3	17.7	<5.00 J _o	<5.00 J _o	<5.00	7.28	28.7	<5.00	9.56	13.3
Trichlorotrifluoroethane (Freon 113)	<5.00 J _o	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

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< = less than

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-- = not analyzed

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For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-087	SB-088	SB-088	SB-088	SB-089	SB-089	SB-089	SB-090	SB-090	SB-090
Sample Date	6/6/00	6/6/00	6/6/00	6/6/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00
Sample Depth (feet bgs)	16	3	9	16	2	6	10	2	6	10
1,1,1-Trichloroethane (1,1,1-TCA)	16.2	<5.00 J _o	<500	<5.00 J _o	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00 J _o	<5.00	<500	<5.00 J _o	0.859 J	<2000	<10.0	<1250	1.06 J	0.933 J
1,1-Dichloroethene (1,1-DCE)	<5.00 J _o	<5.00	<500	<5.00 J _o	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<500 J _o	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<500 J _o	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<500 J _o	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<1000 J _o	<10.0	<10.0	<4000	<20.0	<2500	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<1000	<10.0	<10.0	<4000	<20.0	<2500	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<1000	<10.0	<10.0	<4000	<20.0	<2500	<10.0	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<5000 J _o	<50.0 J _o	7.33 J	<20000	15.2	<12500	9.18 J	9.93 J
Bromomethane	<5.00 UJ-	<5.00	<500	<5.00 UJ-	<5.00	<2000 UJ+	<10.0	<1250 UJ+	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<1000	<10.0	<10.0	<4000	<20.0	<2500	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Chloroethane	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Chloroform	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00

Notes:

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< = less than

µg/kg = micrograms per kilogram

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TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-087	SB-088	SB-088	SB-088	SB-089	SB-089	SB-089	SB-090	SB-090	SB-090
Sample Date	6/6/00	6/6/00	6/6/00	6/6/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00
Sample Depth (feet bgs)	16	3	9	16	2	6	10	2	6	10
Chloromethane	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00 J _o	<5.00 J _o	<500	<5.00 J _o	7.39	<2000	<10.0	<1250	1.87 J	2.27 J
Dibromochloromethane	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Methylene chloride	5.29	<5.31 U	<500	<5.00 J _o	1.56 J	<2000	<10.0	<1250	0.854 J	2.69 J
n-Butylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Naphthalene	<5.00	<5.00	<500 J _o	<5.00 J _o	<5.00	<2000	<10.0	<1250	<5.00	<5.00
o-Xylene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Tetrachloroethene (PCE)	31.8	69.7	1730	227	108	3710	29.6	<1250	<5.00	3.72 J
Toluene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Trichloroethene (TCE)	36.1	<5.00 J _o	<500	23.0	10.8	<2000	<10.0	<1250	2.48 J	10.8
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<500	<5.00	<5.00	<2000	<10.0	<1250	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

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< = less than

µg/kg = micrograms per kilogram

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Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-091	SB-091	SB-091	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097	SB-104
Sample Date	7/25/00	7/25/00	7/25/00	7/26/00	7/26/00	7/26/00	7/27/00	7/27/00	7/26/00	11/15/00
Sample Depth (feet bgs)	3	6	10	7	9	7	6	11	15	3
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	21.9	19.7	<50.0 J _o	<50.0
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.06	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-091	SB-091	SB-091	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097	SB-104
Sample Date	7/25/00	7/25/00	7/25/00	7/26/00	7/26/00	7/26/00	7/27/00	7/27/00	7/26/00	11/15/00
Sample Depth (feet bgs)	3	6	10	7	9	7	6	11	15	3
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	2.87	4.75	<5.00 J _o	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	23.4	7.35	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 J _o
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	13.9
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00 J _o	<5.00	<5.00 J _o	<5.00	10.7	<5.00	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00 J _o	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-104	SB-105	SB-105	SB-106	SB-106	SB-107	SB-107	SB-109	SB-110	SB-110
Sample Date	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00	2/23/01	2/23/01	11/15/00	12/6/00	12/6/00
Sample Depth (feet bgs)	7	3	7	3	7	2	6	3	6	15
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<10.0	<10000	<10.0 J _o	<10.0	<25.0 UJ-	<25.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10000	<10.0	<10.0	<25.0 UJ-	<25.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10000	<10.0	<10.0	<25.0 UJ-	<25.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0	<50.0 J _o	<50000	<50.0 J _o	<50.0	<125 J _o UJ-	<125 J _o
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10000	<10.0	<10.0	<25.0 UJ-	<25.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-104	SB-105	SB-105	SB-106	SB-106	SB-107	SB-107	SB-109	SB-110	SB-110
Sample Date	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00	2/23/01	2/23/01	11/15/00	12/6/00	12/6/00
Sample Depth (feet bgs)	7	3	7	3	7	2	6	3	6	15
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5000 J _o	<5.00 J _o	<5.00	<12.5 J _o UJ-	<12.5 J _o
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Naphthalene	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Tetrachloroethene (PCE)	5.34	<5.00	<5.00 J _o	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00	<5.00	<12.5 UJ-	<12.5
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<5.00	<5000	<5.00 J _o	<5.00	<12.5 UJ-	<12.5
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

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< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-112	SB-113	SB-113	SB-114	SB-115	SB-116	SB-116	SB-117	SB-117	SB-120
Sample Date	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/6/00
Sample Depth (feet bgs)	12	2	5	2	2	2	5	2	4	3
1,1,1-Trichloroethane (1,1,1-TCA)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,1,2-Trichloroethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,1-Dichloroethane (1,1-DCA)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5 J _o
1,1-Dichloroethene (1,1-DCE)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,2,3-Trichlorobenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,2,4-Trimethylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,2-Dibromo-3-chloropropane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,2-Dichlorobenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,2-Dichloroethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
1,3,5-Trimethylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
2-Butanone (MEK)	<25.0	<25.0	<25.0 J _o	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<25.0 J _o
2-Hexanone	<25.0	<25.0	<25.0	<10.0	<10.0	<10.0	<10.0 J _o	<10.0	<10.0	<25.0
4-Methyl-2-pentanone	<25.0	<25.0	<25.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<25.0
Acetone	<125 J _o	<125 J _o	<125 J _o	<50.0 J _o	<50.0	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<125 J _o
Bromomethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Carbon disulfide	<25.0	<25.0	<25.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<25.0
Chlorobenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Chloroethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Chloroform	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5

Notes:

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µg/kg = micrograms per kilogram

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TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 30 of 48

Sample Location	SB-112	SB-113	SB-113	SB-114	SB-115	SB-116	SB-116	SB-117	SB-117	SB-120
Sample Date	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/6/00
Sample Depth (feet bgs)	12	2	5	2	2	2	5	2	4	3
Chloromethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	45.3
Dibromochloromethane	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Ethylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Isopropylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
m,p-Xylene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Methyl tert-butyl ether (MTBE)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Methylene chloride	<12.5 J _o	<12.5 J _o	<12.5 J _o	<12.5 J _o	<5.00	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<12.5 J _o
n-Butylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Naphthalene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<12.5
o-Xylene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
p-Isopropyltoluene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
sec-Butylbenzene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Tetrachloroethene (PCE)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Toluene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
trans-1,2-Dichloroethene	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Trichloroethene (TCE)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Trichlorotrifluoroethane (Freon 113)	<12.5	<12.5	<12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-121	SB-121	SB-122	SB-122	SB-123	SB-123	SB-124	SB-124	SB-125
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	6	3	6	3	6	3	6	3	6	3
1,1,1-Trichloroethane (1,1,1-TCA)	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5 J _o	9020	80.4	115
1,1,2-Trichloroethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5 J _o	<12.5 J _o	580	50.0	19.0
1,1-Dichloroethene (1,1-DCE)	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5 J _o	<12.5 J _o	<500 J _o	16.4	12.2
1,2,3-Trichlorobenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,2,4-Trimethylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,2-Dichlorobenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,2-Dichloroethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
1,3,5-Trimethylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
2-Butanone (MEK)	<25.0	<25.0 J _o	<25.0	<25.0	<25.0 J _o	<25.0	<25.0	<1000 J _o	<10.0	13.3
2-Hexanone	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<1000	<10.0	<10.0
4-Methyl-2-pentanone	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<1000	<10.0	<10.0
Acetone	<125 J _o	<125 J _o	<125 J _o	<125 J _o	<125 J _o	<125 J _o	<125 J _o	<5000	<50.0 J _o	63.6
Bromomethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Carbon disulfide	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<1000	<10.0	<10.0
Chlorobenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Chloroethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00 J _o
Chloroform	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500 J _o	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-121	SB-121	SB-122	SB-122	SB-123	SB-123	SB-124	SB-124	SB-125
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	6	3	6	3	6	3	6	3	6	3
Chloromethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	84.1	<12.5	<12.5	<12.5	<12.5	<12.5 J _o	<12.5 J _o	<500 J _o	9.48	<5.00 J _o
Dibromochloromethane	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Ethylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Isopropylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
m,p-Xylene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Methylene chloride	<12.5 J _o	<12.5 J _o	<12.5 J _o	<12.5	<12.5 J _o	<12.5 J _o	<12.5 J _o	<500	<5.00	<5.00
n-Butylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Naphthalene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
o-Xylene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
p-Isopropyltoluene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
sec-Butylbenzene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Tetrachloroethene (PCE)	25.1	<12.5	<12.5	<12.5	<12.5 J _o	<12.5 J _o	<12.5 J _o	<500 J _o	<5.00	<5.00
Toluene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
trans-1,2-Dichloroethene	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Trichloroethene (TCE)	<12.5 J _o	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5 J _o	<500	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<500	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-125	SB-126	SB-126	SB-127	SB-127	SB-129	SB-129	SB-129	SB-130	SB-130
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00	12/8/00	12/8/00	12/8/00
Sample Depth (feet bgs)	6	3	6	3	6	9	2	6	2	6
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	32.2	<10000	<10000	<500	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<20000	<20000	<1000	<1000 J _o	<25000	10.3	<10.0	24.0 J+	<10.0
2-Hexanone	<10.0	<20000	<20000	<1000	<1000	<25000	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<20000	<20000	<1000	<1000	<25000	<10.0	<10.0	<10.0	<10.0
Acetone	<50.0 J _o	<100000	<100000	<5000 J _o	<5000	<125000	<50.0 J _o	<50.0 J _o	95.4 J+	<50.0 J _o
Bromomethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<20000	<20000	<1000	<1000	<25000	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<10000	<10000	<500 J _o	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-125	SB-126	SB-126	SB-127	SB-127	SB-129	SB-129	SB-129	SB-130	SB-130
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00	12/8/00	12/8/00	12/8/00
Sample Depth (feet bgs)	6	3	6	3	6	9	2	6	2	6
Chloromethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	8.21	<10000	<10000	1960	1130	<12500	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<10000	<10000	<500	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
n-Butylbenzene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Naphthalene	24.1	<10000	<10000	<500	<500	<12500 J _o	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<10000	<10000	<500	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<10000	<10000	<500	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Toluene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<10000	<10000	<500	<500 J _o	<12500	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<10000	<10000	<500	<500	<12500	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

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µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-131	SB-131	SB-132	SB-132	SB-133	SB-133	SB-134	SB-134	SB-135	SB-136
Sample Date	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01
Sample Depth (feet bgs)	2	6	2	6	2	6	2	6	5	5
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	23.5	<5.00 J _o	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0 J _o	<5.00 J _o	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	9.49	<5.00	<5.00	<5.00	<5.00	158	75.0	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	22.1	5.03	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	5.18	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0 J _o	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	31.7	28.5 J+
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0 J _o	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0	<50.0 J _o	<100 J _o	<50.0	130	132 J+
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0 J _o	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-131	SB-131	SB-132	SB-132	SB-133	SB-133	SB-134	SB-134	SB-135	SB-136
Sample Date	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01
Sample Depth (feet bgs)	2	6	2	6	2	6	2	6	5	5
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	11.7	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00 J _o	<5.00
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<10.0	<5.00	<5.00 J _o	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<10.0	<5.00	6.83	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0 J _o	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	162	<5.00	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	29.6	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-136	SB-137	SB-137	SB-138	SB-138	SB-139	SB-139	SB-140	SB-140	SB-141
Sample Date	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	2/23/01	2/23/01	1/10/01
Sample Depth (feet bgs)	10	7	10	5	10	5	10	2	6	2
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	108000
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	18.7	<10000 J _o
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 J _o	<5.00 J _o	<10000
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
2-Butanone (MEK)	11.2	<10.0 J _o	<10.0	<10.0	<10.0	14.9	11.8	<10.0 J _o	<10.0	<20000
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20000
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20000
Acetone	<50.0 J _o	<50.0 J _o	<50.0	<50.0	<50.0	63.8	61.1	56.6	<50.0 J _o	<100000
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20000
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	5.50	<5.00	<10000
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-136	SB-137	SB-137	SB-138	SB-138	SB-139	SB-139	SB-140	SB-140	SB-141
Sample Date	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	2/23/01	2/23/01	1/10/01
Sample Depth (feet bgs)	10	7	10	5	10	5	10	2	6	2
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	5.03	<5.00 J _o	<10000
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Ethylbenzene	<5.00	<5.00	<5.00	6.11	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
m,p-Xylene	<5.00	<5.00	<5.00	30.6	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Methylene chloride	<5.00	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00	<5.00	<5.00	<10000
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
o-Xylene	<5.00	<5.00	<5.00	14.1	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10000
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-141	SB-142	SB-142	SB-146	SB-146	SB-147	SB-147	SB-160	SB-160
Sample Date	1/10/01	1/10/01	12/15/00	12/15/00	1/10/01	1/10/01	1/8/01	1/8/01	2/23/01	2/23/01
Sample Depth (feet bgs)	10	13	2	3	2	10	2	11	2	6
1,1,1-Trichloroethane (1,1,1-TCA)	<10000	<2500	<2500	<5000	<5.00	<5.00 J _o	33.5	33.2	<5.00 J _o	<5.00
1,1,2-Trichloroethane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<20000	<5000	<5000	<10000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Hexanone	<20000	<5000	<5000	<10000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<20000	<5000	<5000	<10000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<100000	<25000	<25000	<50000	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o
Bromomethane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<20000	<5000	<5000	<10000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroethane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-141	SB-142	SB-142	SB-146	SB-146	SB-147	SB-147	SB-160	SB-160
Sample Date	1/10/01	1/10/01	12/15/00	12/15/00	1/10/01	1/10/01	1/8/01	1/8/01	2/23/01	2/23/01
Sample Depth (feet bgs)	10	13	2	3	2	10	2	11	2	6
Chloromethane	<10000	<2500 J _o	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<10000	<2500	<2500	<5000	<5.00 J _o	<5.00	6.50	17.6	<5.00 J _o	<5.00
n-Butylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<10000	<2500 J _o	<2500	<5000	<5.00	<5.00	<5.00 J _o	<5.00	<5.00	<5.00
o-Xylene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
p-Isopropyltoluene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<10000	<2500	<2500	<5000	6.95	<5.00	<5.00	<5.00	<5.00	<5.00
Toluene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<10000	<2500	<2500 J _o	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<10000	<2500	<2500	<5000	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

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< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-161	SB-161	SB-162	SB-162	SB-163	SB-163	SB-164	SB-164	SB-165	SB-165
Sample Date	2/23/01	2/23/01	2/23/01	2/23/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	2	6	2	6	2	6	2	7	2	7
1,1,1-Trichloroethane (1,1,1-TCA)	10.1	<5.00	7.97	<500	<10000	<2500	<5000	<5000	<5.00	<5.00 J _o
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	13.9	<5.00 J _o	5.33	<500	<10000	<2500	<5000	<5000	8.40	<5.00 J _o
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<500 J _o	<10000	<2500	<5000	<5000	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<500	<10000 J _o	<2500 J _o	<5000 J _o	<5000 J _o	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<500 J _o	<10000	<2500	<5000	<5000	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<500	<10000 J _o	<2500 J _o	<5000 J _o	<5000	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<1000	<20000	<5000	<10000	<10000	26.5	<10.0 J _o
2-Hexanone	<10.0	<10.0	<10.0	<1000	<20000	<5000	<10000	<10000	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<1000	<20000	<5000	<10000	<10000	<10.0 J _o	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<5000	<100000	<25000	<50000	<50000	154	<50.0 J _o
Bromomethane	<5.00	<5.00 J _o	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<1000	<20000	<5000	<10000	<10000	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-161	SB-161	SB-162	SB-162	SB-163	SB-163	SB-164	SB-164	SB-165	SB-165
Sample Date	2/23/01	2/23/01	2/23/01	2/23/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	2	6	2	6	2	6	2	7	2	7
Chloromethane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	5.25	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00 J _o	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Methylene chloride	<5.00 J _o	<5.00 J _o	<5.00 J _o	<500	<10000	<2500	<5000	<5000	8.38	7.73
n-Butylbenzene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000 J _o	<5000	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<500 J _o	<10000 J _o	<2500 J _o	<5000 J _o	<5000	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000 J _o	<5000	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<500 J _o	<10000	<2500	<5000 J _o	<5000	<5.00	<5.00
Tetrachloroethene (PCE)	29.9	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<500 J _o	<10000	<2500	<5000	<5000	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Trichloroethene (TCE)	10.2	<5.00	<5.00	<500	<10000	<2500	<5000	<5000	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00 J _o	<5.00 J _o	<5.00	<500	<10000	<2500	<5000	<5000	<5.00 J _o	<5.00 J _o
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-166	SB-166	SB-167	SB-167	SB-169	SB-170	SB-171	SB-171	SB-172	SB-172
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/23/01	2/23/01	2/23/01	2/23/01
Sample Depth (feet bgs)	4	11	2	10	10	2	12	12	2	6
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<5.00	<5.00	20.7	<5.00	<5.00 UJ-	268	<10.0	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<5.00	<5.00	5.47	<5.00	<5.00 J _o UJ-	<10.0 J _o	<10.0 J _o	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0 J _o	<10.0 J _o	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
2-Butanone (MEK)	<10.0 J _o	<10.0	10.8	<10.0	<10.0 J _o	<10.0	<10.0 UJ-	<20.0	22.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ-	<20.0	<20.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ-	<20.0	<20.0	<10.0
Acetone	70.0	<50.0 J _o	86.9	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o UJ-	<100 J _o	<100 J _o	<50.0 J _o
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ-	<20.0	<20.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-166	SB-166	SB-167	SB-167	SB-169	SB-170	SB-171	SB-171	SB-172	SB-172
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/23/01	2/23/01	2/23/01	2/23/01
Sample Depth (feet bgs)	4	11	2	10	10	2	12	12	2	6
Chloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	75.5 J-	245	171	<5.00 J _o
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Methylene chloride	<5.00 J _o	5.02	<5.00 J _o	<5.00 J _o	5.91	<5.00	<5.00 J _o UJ-	<10.0	<10.0	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	10.2	<10.0	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0	<10.0	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ-	<10.0 J _o	<10.0	<5.00
Trichloroethene (TCE)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	33.4 J-	13.3	<10.0	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00	<5.00 J _o UJ-	<10.0	<10.0	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-173	SB-173	SB-174	SB-174	SB-195	SB-195	TW11	W21A	W22A	W22A
Sample Date	2/23/01	2/23/01	2/23/01	2/23/01	4/20/01	4/20/01	8/23/00	10/20/99	10/14/99	10/14/99
Sample Depth (feet bgs)	2	7	2	6	1	6	3	10.5	12	23
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	25.3	23.1	3170	<5.00	<5.00	<5.00	<5.00	<5.00
1,1,2-Trichloroethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,1-Dichloroethane (1,1-DCA)	10.5	<5.00 J _o	10.4	11.9	228	8.35	<5.00	16.3	<5.00	<5.00
1,1-Dichloroethene (1,1-DCE)	<5.00	<5.00 J _o	10.5	13.6	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,3-Trichlorobenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,2,4-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichlorobenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dichloroethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
1,3,5-Trimethylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
2-Butanone (MEK)	<10.0	<10.0	<10.0	<10.0	<1000	<10.0	<10.0 J _o	<10.0	<10.0	<10.0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<1000	<10.0	<10.0	<10.0	<10.0	<10.0
4-Methyl-2-pentanone	<10.0	<10.0	<10.0	<10.0	<1000	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	<50.0 J _o	<50.0 J _o	<50.0 J _o	<50.0 J _o	<5000	4.84	<50.0 J _o	<20.0	<20.0	<20.0
Bromomethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	<10.0	<10.0	<10.0	<10.0	<1000	<10.0	<10.0	<10.0	<10.0	<10.0
Chlorobenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Chloroform	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-173	SB-173	SB-174	SB-174	SB-195	SB-195	TW11	W21A	W22A	W22A
Sample Date	2/23/01	2/23/01	2/23/01	2/23/01	4/20/01	4/20/01	8/23/00	10/20/99	10/14/99	10/14/99
Sample Depth (feet bgs)	2	7	2	6	1	6	3	10.5	12	23
Chloromethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	5.56	<5.00 J _o	43.6	40.0	<5.00	<5.00	<5.00	<5.00
Dibromochloromethane	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Ethylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Isopropylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
m,p-Xylene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00 J _o	<5.00	<5.00	<5.00
Methyl tert-butyl ether (MTBE)	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	<5.00	<5.00	<5.00	<5.00	83.8	6.33	7.77	<5.00	<5.00	<5.00
n-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	197	<5.00	<5.00	<5.00	<5.00	<5.00
o-Xylene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00 J _o	<5.00	<5.00	<5.00
p-Isopropyltoluene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
sec-Butylbenzene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Tetrachloroethene (PCE)	<5.00	<5.00	25.0	11.7	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Toluene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
trans-1,2-Dichloroethene	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Trichloroethene (TCE)	<5.00	<5.00	7.82	5.15	<500	5.20	<5.00	<5.00	<5.00	<5.00
Trichlorotrifluoroethane (Freon 113)	<5.00	<5.00	<5.00	<5.00	<500	<5.00	<5.00	<5.00	<5.00	<5.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W24A	W37A
Sample Date	10/14/99	8/25/00
Sample Depth (feet bgs)	6	3
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<10000
1,1,2-Trichloroethane	<5.00	<10000
1,1-Dichloroethane (1,1-DCA)	5.49	<10000
1,1-Dichloroethene (1,1-DCE)	<5.00	<10000
1,2,3-Trichlorobenzene	<5.00	<10000
1,2,4-Trimethylbenzene	<5.00	<10000
1,2-Dibromo-3-chloropropane	<5.00	<10000
1,2-Dichlorobenzene	<5.00	<10000
1,2-Dichloroethane	<5.00	<10000
1,3,5-Trimethylbenzene	<5.00	<10000
2-Butanone (MEK)	<10.0	<20000
2-Hexanone	<10.0	<20000
4-Methyl-2-pentanone	<10.0	<20000
Acetone	<20.0	<100000
Bromomethane	<5.00	<10000
Carbon disulfide	<10.0	<20000
Chlorobenzene	<5.00	<10000
Chloroethane	<5.00	<10000
Chloroform	<5.00	<10000

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W24A	W37A
Sample Date	10/14/99	8/25/00
Sample Depth (feet bgs)	6	3
Chloromethane	<5.00	<10000
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<10000
Dibromochloromethane	<5.00	<10000
Ethylbenzene	<5.00	<10000
Isopropylbenzene	<5.00	<10000
m,p-Xylene	<5.00	<10000
Methyl tert-butyl ether (MTBE)	<5.00	<10000
Methylene chloride	<5.00	<10000
n-Butylbenzene	<5.00	<10000
Naphthalene	<5.00	<10000
o-Xylene	<5.00	<10000
p-Isopropyltoluene	<5.00	<10000
sec-Butylbenzene	<5.00	<10000
Tetrachloroethene (PCE)	<5.00	<10000
Toluene	<5.00	<10000
trans-1,2-Dichloroethene	<5.00	<10000
Trichloroethene (TCE)	<5.00	<10000
Trichlorotrifluoroethane (Freon 113)	<5.00	<10000
Xylenes (total)	--	--

Notes:

bgs = below ground surface

< = less than

µg/kg = micrograms per kilogram

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-001	SB-002	SB-003	SB-004	SB-006	SB-007
Sample Date	10/13/99	10/13/99	10/13/99	10/13/99	10/15/99	10/13/99	10/15/99
Sample Depth (feet bgs)	2	9	2	1	10	2	1
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00	<5.00	<5.00	117	<5.00	25.8
TPH-gasoline	<1.00	<1.00	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-007	SB-008	SB-008	SB-009	SB-009	SB-010	SB-010
Sample Date	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99	10/15/99	10/15/99
Sample Depth (feet bgs)	10.5	2	13	2	11	2.5	12
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	73.1	5.17	<5.00	7.84	<5.00	<5.00	<5.00
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-012	SB-013	SB-013	SB-013	SB-014	SB-015	SB-015
Sample Date	10/18/99	10/14/99	10/14/99	7/25/00	10/18/99	10/14/99	10/14/99
Sample Depth (feet bgs)	10	2.5	10.5	12	12.5	3.5	10.5
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00	<5.00	9.93	<5.00	<5.00	<5.00
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-017	SB-018	SB-019	SB-019	SB-020	SB-020
Sample Date	10/18/99	10/18/99	10/20/99	10/18/99	10/18/99	10/20/99	10/20/99
Sample Depth (feet bgs)	1.5	10.5	9.5	2	13	2	7
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	7.94	<5.00	<5.00	82.2	<5.00	11.3	648
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-020	SB-021	SB-024	SB-025	SB-026	SB-027	SB-027
Sample Date	10/20/99	12/17/98	10/19/99	10/13/99	10/14/99	10/14/99	10/14/99
Sample Depth (feet bgs)	10	2	12.5	2	2.5	2	11.5
Extractable Range Organics (C10-C24)	108	70	--	--	--	--	--
Motor Oil	262	<1	--	--	--	--	--
TPH-diesel	245	<1	<5.00	<5.00	<5.00	<5.00	--
TPH-gasoline	--	--	--	--	--	--	<1.00

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-028	SB-029	SB-030	SB-031	SB-032	SB-032	SB-033
Sample Date	10/14/99	3/22/00	3/22/00	3/22/00	10/13/99	10/13/99	10/19/99
Sample Depth (feet bgs)	4	7	6.5	11	2	8	1.5
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	5.73	<5.00	<5.00	<5.00	<5.00	<5.00	9.99
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-033	SB-035	SB-036	SB-039	SB-044	SB-045	SB-046
Sample Date	10/19/99	12/18/98	12/17/98	12/16/98	10/19/99	10/18/99	10/18/99
Sample Depth (feet bgs)	10.5	2	2	1	10.5	11	8.5
Extractable Range Organics (C10-C24)	--	<2	1300	--	--	--	--
Motor Oil	--	520	<10	<5	--	--	--
TPH-diesel	<5.00	420	<10	--	21.1	77.1	9.73
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-047	SB-050	SB-051	SB-054	SB-055	SB-058	SB-060
Sample Date	10/21/99	10/19/99	10/15/99	10/14/99	10/14/99	12/10/99	12/6/99
Sample Depth (feet bgs)	6	13	10.5	2.5	3	2	2
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	270	<5.00	<5.00	<5.00	157	<5.00	2940
TPH-gasoline	--	--	--	--	--	<1.00	11.8

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-061	SB-062	SB-066	SB-080	SB-081	SB-082	SB-089
Sample Date	12/2/99	12/6/99	12/28/99	3/23/00	3/22/00	3/23/00	7/25/00
Sample Depth (feet bgs)	2	2	3	5	10	7	2
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	108
TPH-gasoline	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-089	SB-089	SB-090	SB-090	SB-090	SB-091	SB-091
Sample Date	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00
Sample Depth (feet bgs)	6	10	2	6	10	3	6
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	53.4	4.26 J	213	0.959 J	1.14 J	<5.00	<5.00
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-091	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097
Sample Date	7/25/00	7/26/00	7/26/00	7/26/00	7/27/00	7/27/00	7/26/00
Sample Depth (feet bgs)	10	7	9	7	6	11	15
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00	<5.00	<5.00	1.92	2.71	<5.00 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
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Sample Location	SB-104	SB-104	SB-105	SB-105	SB-106	SB-106	SB-109
Sample Date	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00
Sample Depth (feet bgs)	3	7	3	7	3	7	3
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	7.37 Jy	<5.00 J _o	<5.00	<5.00 J _o	<5.00 J _o	<5.00 J _o	<5.00 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-109	SB-110	SB-110	SB-112	SB-113	SB-113	SB-114
Sample Date	11/15/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00
Sample Depth (feet bgs)	7	6	15	12	2	5	2
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	6760 Jy	<5.00 J _o	<10.0 J _o	<10.0 J _o	<10.0 J _o	<10.0 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-115	SB-116	SB-116	SB-117	SB-117	SB-120	SB-121
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/6/00	12/6/00
Sample Depth (feet bgs)	2	2	5	2	4	3	3
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<10.0	<5.00	<5.00	<15.0	<15.0	<10.0 J _o	<10.0 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-121	SB-122	SB-122	SB-123	SB-123	SB-124	SB-124
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00
Sample Depth (feet bgs)	6	3	6	3	6	3	6
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<10.0 J _o	<5.00 J _o	45.3 J_y	<5.00 J _o	<10.0 J _o	650	<5.00 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-125	SB-125	SB-126	SB-126	SB-127	SB-127	SB-129
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	3	6	3	6	3	6	9
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	8.61 Jy	8.56	3290 J+	645	309	1800	5930 J+
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-129	SB-129	SB-130	SB-130	SB-135	SB-135	SB-136
Sample Date	12/8/00	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01	1/16/01
Sample Depth (feet bgs)	2	6	2	6	5	10	5
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00 J _o	<5.00	18.2 Jy	<5.00	40.8 Jy	<5.00 J _o	42.9 Jy
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-136	SB-137	SB-137	SB-138	SB-138	SB-139	SB-139
Sample Date	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01
Sample Depth (feet bgs)	10	7	10	5	10	5	10
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00 J _o	5.85 NJz+	<5.00 J _o	<5.00 J _o	<5.00 J _o	7.27 Jy	<5.00 J _o
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-141	SB-141	SB-142	SB-142	SB-160	SB-160
Sample Date	1/10/01	1/10/01	1/10/01	12/15/00	12/15/00	2/23/01	2/23/01
Sample Depth (feet bgs)	2	10	13	2	3	2	6
Extractable Range Organics (C10-C24)	--	--	--	--	--	<5.00	<5.00
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	218 Jy+	2150	411	892 Jy	279 Jy	<5.00	<5.00
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-161	SB-161	SB-162	SB-162	SB-163	SB-163	SB-164
Sample Date	2/23/01	2/23/01	2/23/01	2/23/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	2	6	2	6	2	6	2
Extractable Range Organics (C10-C24)	11.5	<5.00 Jo	142	<5.00	<100	<10.0	<50.0
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00 Jo	<5.00	355	5540	615	1870
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-164	SB-165	SB-165	SB-166	SB-166	SB-167	SB-167
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	7	2	7	4	11	2	10
Extractable Range Organics (C10-C24)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 Jo	<5.00 Jo
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	303	61.2 Jy-	236 Jy-	76.2 Jy-	29.9 Jy-	<5.00 Jo	<5.00 Jo
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-169	SB-170	SB-187	SB-187	SB-188	SB-188	SB-189
Sample Date	2/22/01	2/22/01	3/29/01	3/29/01	3/29/01	3/29/01	3/29/01
Sample Depth (feet bgs)	10	2	2	6	2	6	2
Extractable Range Organics (C10-C24)	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	<25.0
Motor Oil	--	--	3760	231	181	140	741
TPH-diesel	21.5	63.2	3240	392	486	310	1850
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-189	SB-190	SB-190	SB-191	SB-192	SB-192	SB-193
Sample Date	3/29/01	3/30/01	3/30/01	4/20/01	4/20/01	4/20/01	4/20/01
Sample Depth (feet bgs)	6	2	6	2.5	2	6	2
Extractable Range Organics (C10-C24)	<5.00	<50.0	<5.00	<5.00	0.964	1.39	<5.00
Motor Oil	116	944	170	317	<10.0	<10.0	45.3
TPH-diesel	308	2150	422	462	0.964	1.39	60.2
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-193	SB-194	SB-195	SB-195	SB-196	SB-196	SB-197
Sample Date	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01
Sample Depth (feet bgs)	6	2	1	6	2	6	2
Extractable Range Organics (C10-C24)	<5.00	<5.00	<500	0.925	1.76	6.59	1.2
Motor Oil	39.2	16.7	11500	<10.0	<10.0	27.4	<10.0
TPH-diesel	51.9	11.8	8560	0.925	1.76	<5.00	1.2
TPH-gasoline	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
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Sample Location	SB-198	SB-198	SB-199	TW11	W1	W2	W24A
Sample Date	4/20/01	4/20/01	4/20/01	8/23/00	9/1/90	9/1/90	10/14/99
Sample Depth (feet bgs)	2	6	2	3	4	3	6
Extractable Range Organics (C10-C24)	2.36	<5.00	0.873	--	--	--	--
Motor Oil	10.2	<10.0	<10.0	1120	--	--	--
TPH-diesel	2.36	<5.00	0.873	115	<10	28	1160
TPH-gasoline	--	--	--	<1.00 Jo	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

Table 5-2-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W3	W37A	W4	W5	W6	W7
Sample Date	9/8/90	8/25/00	9/9/90	9/15/90	9/17/90	9/20/90
Sample Depth (feet bgs)	5	3	4	6.5	5.5	6
Extractable Range Organics (C10-C24)	--	--	--	--	--	--
Motor Oil	--	341	--	--	--	--
TPH-diesel	<10	495	<10	<10	<10	<10
TPH-gasoline	--	314 Jy	--	--	--	--

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-2b
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California

Sample Location	DD-5	SS-31	SS-32	SS-33	SS-34	SS-35	SS-36
Sample Date	12/16/97	7/27/00	7/27/00	7/27/00	7/27/00	7/27/00	7/27/00
Sample Depth (feet bgs)	0	0	0	0	0	0	0
TPH-diesel	8.1	51.4	164 J+	25.1 J+	30.4 J+	117 J+	220 J+

Notes:

bgs = below ground surface

mg/kg = milligrams per kilogram

< = less than

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	GB-1	GB-2	GB-3	GB-4	GB-5	GB-6	GB-7	GB-8	SB-001	SB-001
Sample Depth (feet bgs)	9	9	9	9	9	9	9	9	2	9
Sample Date	8/19/94	8/19/94	8/19/94	8/19/94	8/18/94	8/18/94	8/19/94	8/19/94	10/13/99	10/13/99
Hexavalent Chromium	<2	<2	<2	<2	<2	<2	<2	<2	<0.100	<0.100
Total Chromium	--	--	--	--	--	--	--	--	36.6	42.2

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-003	SB-007	SB-007	SB-008	SB-009	SB-009	SB-010
Sample Depth (feet bgs)	1	1	10.5	13	2	11	2.5
Sample Date	10/13/99	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99	10/15/99
Hexavalent Chromium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Total Chromium	35.6	47.1	51.8	62.6	45.4	62.1	54.6

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-010	SB-012	SB-013	SB-013	SB-013	SB-014	SB-015
Sample Depth (feet bgs)	12	10	2.5	10.5	12	12.5	10.5
Sample Date	10/15/99	10/18/99	10/14/99	10/14/99	7/25/00	10/18/99	10/14/99
Hexavalent Chromium	<0.100	<0.100	<0.100	<0.100	<0.144	<0.100	<0.100
Total Chromium	75.9	222	43.0	63.5	--	61.9	77.6

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-017	SB-018	SB-019	SB-019	SB-020	SB-021
Sample Depth (feet bgs)	1.5	10.5	9.5	2	13	2	2
Sample Date	10/18/99	10/18/99	10/20/99	10/18/99	10/18/99	10/20/99	12/17/98
Hexavalent Chromium	<0.100	<0.100	59.7	<0.100	<0.100	<0.100	--
Total Chromium	37.8	40.1	206	42.2	62.3	202	189

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-021	SB-021	SB-021	SB-021	SB-021	SB-024
Sample Depth (feet bgs)	11	20	20	27	31	12.5
Sample Date	12/17/98	12/17/98	12/17/98	12/17/98	12/17/98	10/19/99
Hexavalent Chromium	--	--	<2	--	--	<0.100
Total Chromium	278	91.2	--	70.9	55.9	66.8

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
 Former Remco Hydraulics Facility
 Willits, California
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Sample Location	SB-025	SB-026	SB-027	SB-028	SB-029	SB-030	SB-031
Sample Depth (feet bgs)	2	2.5	2	4	7	6.5	11
Sample Date	10/13/99	10/14/99	10/14/99	10/14/99	3/22/00	3/22/00	3/22/00
Hexavalent Chromium	<0.100	0.114	<0.100	<0.100	<5.00	<5.00	<5.00
Total Chromium	39.7	71.8	56.0	27.4	78.8	61.9	62.8

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-032	SB-032	SB-033	SB-034	SB-035	SB-035
Sample Depth (feet bgs)	2	8	10.5	14	3	10
Sample Date	10/13/99	10/13/99	10/19/99	10/19/99	12/18/98	12/18/98
Hexavalent Chromium	<0.100	<0.100	<0.100	<0.100	--	--
Total Chromium	41.5	35.6	52.8	257	393	203

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-035	SB-035	SB-035	SB-035	SB-036	SB-036
Sample Depth (feet bgs)	22	22	24	31	2	19
Sample Date	12/18/98	12/18/98	12/18/98	12/18/98	12/17/98	12/17/98
Hexavalent Chromium	--	<2	--	--	--	--
Total Chromium	54.6	--	90.9	79.9	102	63.1

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
 Former Remco Hydraulics Facility
 Willits, California
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Sample Location	SB-036	SB-036	SB-036	SB-036	SB-036	SB-036	SB-037
Sample Depth (feet bgs)	24	24	30	32	32	35	3
Sample Date	12/18/98	12/18/98	12/18/98	12/18/98	12/18/98	12/18/98	12/15/98
Hexavalent Chromium	<2	--	--	--	<2	--	--
Total Chromium	--	79.6	82.1	41.4	--	60.6	157

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-037	SB-037	SB-037	SB-037	SB-037	SB-037
Sample Depth (feet bgs)	3	14	14	16	27	35
Sample Date	12/15/98	12/15/98	12/15/98	12/15/98	12/15/98	12/15/98
Hexavalent Chromium	62	<2	--	--	--	--
Total Chromium	--	--	58.2	90.8	78.5	80.1

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-038	SB-038	SB-038	SB-038	SB-038	SB-038	SB-038
Sample Depth (feet bgs)	6.5	14.5	19.5	27.5	31	46	84
Sample Date	10/18/99	10/18/99	10/18/99	10/18/99	10/18/99	10/18/99	10/18/99
Hexavalent Chromium	0.932	0.142	<0.100	0.124	<0.100	<0.100	<0.100
Total Chromium	1270	47.2	91.7	53.4	48.5	48.5	51.3

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
 Former Remco Hydraulics Facility
 Willits, California
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Sample Location	SB-039	SB-039	SB-039	SB-039	SB-039	SB-039
Sample Depth (feet bgs)	1	14	21	29	29	45
Sample Date	12/16/98	12/16/98	12/17/98	12/17/98	12/17/98	12/17/98
Hexavalent Chromium	--	--	--	--	<2	--
Total Chromium	206	1490	72.6	46.9	--	56.2

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-039	SB-040	SB-040	SB-040	SB-040	SB-040
Sample Depth (feet bgs)	52	8	16	24	29	34
Sample Date	12/17/98	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Hexavalent Chromium	--	--	--	--	--	--
Total Chromium	61.2	204	476	97.4	1320	1760

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
 Former Remco Hydraulics Facility
 Willits, California
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Sample Location	SB-040	SB-041	SB-041	SB-041	SB-041	SB-041
Sample Depth (feet bgs)	52	5.5	19	19	24	30
Sample Date	12/16/98	12/14/98	12/14/98	12/14/98	12/14/98	12/14/98
Hexavalent Chromium	--	--	--	<2	--	--
Total Chromium	70.1	373	71	--	102	3650

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-041	SB-041	SB-041	SB-041	SB-042	SB-042	SB-043
Sample Depth (feet bgs)	33	46	62	62	10	21	8
Sample Date	12/14/98	12/14/98	12/15/98	12/15/98	10/21/99	10/21/99	10/21/99
Hexavalent Chromium	--	--	--	<2	85.1	9.05	1.77
Total Chromium	8710	74.9	80	--	437	233	155

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043
Sample Depth (feet bgs)	17.5	23.5	26.5	30.5	40.5	62.5	67
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99
Hexavalent Chromium	3.12	0.652	0.227	<0.100	<0.100	0.833	--
Total Chromium	54.5	47.7	48.9	35.0	50.8	71.0	52.8

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-044	SB-045	SB-046	SB-047	SB-047	SB-048	SB-048
Sample Depth (feet bgs)	67	10.5	11	8.5	12	21	10	20
Sample Date	10/21/99	10/19/99	10/18/99	10/18/99	10/21/99	10/21/99	10/15/99	10/15/99
Hexavalent Chromium	0.200	<0.100	<0.100	<0.100	2.13	0.281	0.417	<0.100
Total Chromium	--	38.5	65.8	47.4	127	55.6	120	64.4

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-048	SB-048	SB-048	SB-048	SB-048	SB-049	SB-049	SB-049
Sample Depth (feet bgs)	23	25	32	34	45	9	16	19
Sample Date	10/15/99	10/15/99	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99	10/19/99
Hexavalent Chromium	<0.100	<0.100	0.115	0.124	<0.100	21.6	<0.100	<0.100
Total Chromium	95.9	135	52.8	85.7	63.3	148	76.7	69.7

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	SB-049	SB-049	SB-049	SB-049	SB-049	SB-049	SB-050
Sample Depth (feet bgs)	27.5	27.5	31.5	42.5	62.5	62.5	71	13
Sample Date	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99
Hexavalent Chromium	<0.100	--	2.56	<0.100	--	<0.100	<0.100	<0.100
Total Chromium	--	94.7	44.5	55.4	48.6	--	40.2	40.5

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-051	SB-052	SB-053	SB-054	SB-055	SB-056	SB-056	SB-056
Sample Depth (feet bgs)	10.5	1.5	8	2.5	3	11	15	23
Sample Date	10/15/99	10/14/99	10/18/99	10/14/99	10/14/99	10/20/99	10/20/99	10/20/99
Hexavalent Chromium	0.250	<0.100	<0.100	<0.100	<0.100	158	<0.100	<0.100
Total Chromium	73.1	49.4	45.3	41.8	40.7	483	46.1	79.4

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-056	SB-057	SB-058	SB-059	SB-060	SB-061	SB-062	SB-065
Sample Depth (feet bgs)	27.5	2	2	2	2	2	2	3
Sample Date	10/20/99	12/6/99	12/10/99	12/9/99	12/6/99	12/2/99	12/6/99	12/9/99
Hexavalent Chromium	<0.100	49.0	69.8	<0.130	<0.130	<0.100	<0.130	<0.130
Total Chromium	57.4	204	279	72.7	65.6	70.5	332	55.1

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-066	SB-067	SB-068	SB-080	SB-080	SB-080	SB-081	SB-081
Sample Depth (feet bgs)	3	3	3	5	19	23.5	10	23
Sample Date	12/28/99	12/28/99	12/10/99	3/23/00	3/23/00	3/23/00	3/22/00	3/23/00
Hexavalent Chromium	<0.130	<0.130	0.627	<2.00	<0.520	<2.00	<5.00	<0.520
Total Chromium	101	81.8	35.7	49.5	85.8	41.5	48.5	71.5

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-081	SB-082	SB-082	SB-083	SB-083	SB-083	SB-084	SB-084
Sample Depth (feet bgs)	27	7	27	5	10	16	3	8
Sample Date	3/23/00	3/23/00	3/23/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Hexavalent Chromium	<2.00	<0.260	<0.130	<0.325	<0.163	<0.163	<0.163	<0.163 Jo
Total Chromium	44.9	66.7	79.5	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-084	SB-085	SB-085	SB-085	SB-086	SB-086	SB-086	SB-087
Sample Depth (feet bgs)	14	4	10	14	3	10	14	3
Sample Date	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/6/00
Hexavalent Chromium	<0.163	<0.163	<0.163	<0.163	<0.163	<0.163	<0.163	<0.163
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-087	SB-087	SB-087	SB-088	SB-088	SB-088	SB-089	SB-089
Sample Depth (feet bgs)	10	12	16	3	9	16	2	6
Sample Date	6/6/00	6/6/00	6/6/00	6/6/00	6/6/00	6/6/00	7/25/00	7/25/00
Hexavalent Chromium	<0.163	<0.163	<0.163	<0.163	<0.163	<0.163	<0.130	<0.130
Total Chromium	--	--	--	--	--	--	33.0	33.5

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-089	SB-090	SB-090	SB-090	SB-091	SB-091	SB-091	SB-092
Sample Depth (feet bgs)	10	2	6	10	3	6	10	7
Sample Date	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/26/00
Hexavalent Chromium	<0.130	<0.130	<0.130	<0.130	<0.100	<0.100	<0.100	<0.100
Total Chromium	45.3	23.3	43.4	45.7	41.9	39.7	159	27.2

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-093	SB-094	SB-095	SB-096	SB-097	SB-101	SB-101	SB-102
Sample Depth (feet bgs)	9	7	6	11	15	3	12.5	3
Sample Date	7/26/00	7/26/00	7/27/00	7/27/00	7/26/00	10/11/00	10/11/00	10/11/00
Hexavalent Chromium	<0.100	<0.100	<0.144	<0.144	<0.100	<0.130	<0.130	<0.130
Total Chromium	50.6	40.2	37.4	40.1	38.1	51.7	41.3	49.0

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-102	SB-103	SB-103	SB-104	SB-104	SB-105	SB-105	SB-106
Sample Depth (feet bgs)	13	2.5	13.5	3	7	3	7	3
Sample Date	10/11/00	10/12/00	10/12/00	11/15/00	11/15/00	11/15/00	11/15/00	11/15/00
Hexavalent Chromium	<0.130	<0.130	<0.130	<0.0130	<0.0130	<0.0130	<0.0130	<0.0130
Total Chromium	69.6	88.4	69.5	59.8	67.6	75.4	98.6	72.5

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-106	SB-107	SB-107	SB-109	SB-109	SB-110	SB-110	SB-112
Sample Depth (feet bgs)	7	2	6	3	7	6	15	12
Sample Date	11/15/00	2/23/01	2/23/01	11/15/00	11/15/00	12/6/00	12/6/00	12/6/00
Hexavalent Chromium	<0.0130	--	--	<0.0130	<0.0130	<0.0130	<0.0260	<0.0260
Total Chromium	63.4	44.0	88.2	52.7	58.1	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-113	SB-113	SB-114	SB-115	SB-116	SB-116	SB-117	SB-117
Sample Depth (feet bgs)	2	5	2	2	2	5	2	4
Sample Date	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00
Hexavalent Chromium	<0.0260 Jo	<0.0260	<0.0260	<0.0260	<0.0130 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-120	SB-121	SB-121	SB-122	SB-122	SB-123	SB-123
Sample Depth (feet bgs)	3	6	3	6	3	6	3	6
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00	12/6/00
Hexavalent Chromium	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260 Jo	<0.0260	<0.0260	<0.0260
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-124	SB-124	SB-125	SB-125	SB-126	SB-126	SB-126	SB-127
Sample Depth (feet bgs)	3	6	3	6	3	6	9	3
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00
Hexavalent Chromium	<0.0260 Jo	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-127	SB-129	SB-129	SB-130	SB-130	SB-131	SB-131	SB-132
Sample Depth (feet bgs)	6	2	6	2	6	2	6	2
Sample Date	12/7/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00
Hexavalent Chromium	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260	--	--	--
Total Chromium	--	--	--	--	--	58.0	137	75.4

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-132	SB-133	SB-133	SB-134	SB-134	SB-135
Sample Depth (feet bgs)	6	2	6	2	6	5
Sample Date	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	1/16/01
Hexavalent Chromium	--	--	--	--	--	<0.0260
Total Chromium	396	124	93.5	77.2	195	96.9

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-135	SB-136	SB-136	SB-137	SB-137	SB-138	SB-138
Sample Depth (feet bgs)	10	5	10	7	10	5	10
Sample Date	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01
Hexavalent Chromium	<0.0260	<0.0260	<0.0260	<0.0130	<0.0260	<0.0260	<0.0260
Total Chromium	71.5	55.3	28.0	60.3	77.0	60.6	58.3

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-139	SB-139	SB-140	SB-140	SB-141	SB-141	SB-141
Sample Depth (feet bgs)	5	10	2	6	2	10	13
Sample Date	1/16/01	1/16/01	2/23/01	2/23/01	1/10/01	1/10/01	1/10/01
Hexavalent Chromium	<0.0260	<0.0260	--	--	--	--	--
Total Chromium	68.6	69.9	41.1	75.6	32.3	56.6	64.8

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-142	SB-142	SB-143	SB-143	SB-144	SB-144	SB-145
Sample Depth (feet bgs)	2	3	2	3	2	3	2
Sample Date	12/15/00	12/15/00	12/15/00	12/15/00	12/15/00	12/15/00	12/15/00
Hexavalent Chromium	<0.0260	<0.0260	<0.0260	<0.0260	<0.0260 Jo	<0.0260	<0.0260
Total Chromium	115	331	110	95.4	62.0	85.4	71.3

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-145	SB-147	SB-147	SB-148	SB-149	SB-150	SB-151
Sample Depth (feet bgs)	3	2	11	1	1	1	1
Sample Date	12/15/00	1/8/01	1/8/01	1/10/01	1/8/01	1/8/01	1/8/01
Hexavalent Chromium	<0.0260	--	--	<0.0130 Jo	<0.0130	33.5	0.0442
Total Chromium	71.5	53.2	55.1	49.7	56.5	489	936

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-152	SB-153	SB-163	SB-163	SB-164	SB-164	SB-165
Sample Depth (feet bgs)	1	1	2	6	2	7	2
Sample Date	1/10/01	1/10/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Hexavalent Chromium	0.0235	0.0167	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-
Total Chromium	87.6	57.0	43.0	80.8	--	--	49.7

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-165	SB-166	SB-166	SB-167	SB-167	SB-169	SB-170
Sample Depth (feet bgs)	7	4	10	2	10	10	2
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Hexavalent Chromium	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-
Total Chromium	141	52.6	87.0	59.0	62.7	66.0	47.2

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-175	SB-176	SB-177	SB-178	SB-179	SB-180	SB-181
Sample Depth (feet bgs)	5	5	5	5	5	5	0.5
Sample Date	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01
Hexavalent Chromium	<0.0260 UJ-	<0.0260	<0.0260	<0.0260	<0.0260 UJ-	<0.0260 UJ-	0.148
Total Chromium	60.5	64.8 J-	63.3 J-	60.6 J-	61.4	74.6	132 J-

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-181	SB-182	SB-182	SB-183	SB-183	SB-184	SB-184
Sample Depth (feet bgs)	1	0.5	1	0.5	1	0.5	1
Sample Date	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01
Hexavalent Chromium	<0.0260	<0.0260	<0.0130	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-
Total Chromium	78.7 J-	40.6 J-	38.6 J-	41.1	40.4	35.1	62.0

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-185	SB-185	SB-186	TW11	W1	W1	W1
Sample Depth (feet bgs)	0.5	1	5	3	9	14	23.5
Sample Date	3/19/01	3/19/01	3/19/01	8/23/00	9/1/90	9/1/90	9/1/90
Hexavalent Chromium	<0.0260 UJ-	<0.0260	<0.0260 UJ-	<0.0130	<0.002	0.066	<0.002
Total Chromium	27.7	26.5	62.3	71.2	85	230	60

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W2	W2
Sample Depth (feet bgs)	28.5	36	35.5	45.5	60	70	4	13.5
Sample Date	9/1/90	9/1/90	9/18/90	9/18/90	9/18/90	9/18/90	9/1/90	9/1/90
Hexavalent Chromium	0.048	<0.002	<0.002	<0.1	<0.1	<0.1	<0.002	0.049
Total Chromium	950	44	68	45	54	160	67	170

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W2	W2	W2	W21A	W21A	W21A	W22A
Sample Depth (feet bgs)	19	26	32.5	10.5	14.5	19	12
Sample Date	9/1/90	9/1/90	9/1/90	10/20/99	10/20/99	10/20/99	10/14/99
Hexavalent Chromium	<0.002	<0.002	0.049	118	68.3	<0.100	13.0
Total Chromium	92	50	2400	589	328	72.9	60.8

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W22A	W22A	W22A	W24A	W24A	W24A	W3
Sample Depth (feet bgs)	17	20	23	6	17	22	9
Sample Date	10/14/99	10/14/99	10/14/99	10/14/99	10/14/99	10/14/99	9/8/90
Hexavalent Chromium	<0.100	<0.400	<0.100	<0.100	<0.100	<0.100	<0.002
Total Chromium	60.0	60.1	65.9	150	73.5	53.3	110

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W3	W3	W37A	W39A	W4	W4	W4
Sample Depth (feet bgs)	19.5	30	3	5	10	20	25
Sample Date	9/8/90	9/8/90	8/25/00	1/18/01	9/9/90	9/9/90	9/9/90
Hexavalent Chromium	<0.002	<0.002	<0.0130	<0.0260	0.6	<0.002	<0.002
Total Chromium	93	79	91.2	110	570	81	56

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W4	W40A	W5	W5	W5	W5	W5	W5
Sample Depth (feet bgs)	33	5	10	22	30.5	35.5	45	58
Sample Date	9/9/90	1/18/01	9/15/90	9/15/90	9/16/90	9/19/90	9/19/90	9/19/90
Hexavalent Chromium	<0.002	<0.0260	5	<0.1	<0.1	<0.1	<0.1	<0.1
Total Chromium	60	87.6	500	160	350	170	72	72

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W6	W6	W6	W6	W6	W6	W7
Sample Depth (feet bgs)	61.5	9.5	20	35.5	45	55	58.5	7
Sample Date	9/19/90	9/17/90	9/17/90	9/21/90	9/21/90	9/21/90	9/21/90	9/20/90
Hexavalent Chromium	<0.1	2	<0.002	<0.1	<0.1	<0.1	<0.1	2
Total Chromium	79	220	120	70	47	37	36	300

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3a
CHROMIUM DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7
Sample Depth (feet bgs)	11.5	16.5
Sample Date	9/20/90	9/20/90
Hexavalent Chromium	3	<0.1
Total Chromium	340	210

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 8

Sample Location	DD-5	SB-175	SB-176	SB-177	SB-178	SB-179	SB-180
Sample Date	12/16/97	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01
Sample Depth (feet bgs)	0	0.2	0.2	0.2	0.2	0.2	0.2
Hexavalent Chromium	<5.00	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260	<0.0260 UJ-	<0.0260 UJ-
Total Chromium	38	39.4	39.2	43.0	39.9 J-	24.1	46.1

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 8

Sample Location	SB-181	SB-182	SB-183	SB-184	SB-185	SB-186	SS-05
Sample Date	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	10/5/99
Sample Depth (feet bgs)	0.2	0.2	0.2	0.2	0.2	0.2	0
Hexavalent Chromium	<0.0260	<0.0260	<0.0260 UJ-	<0.0260 Jo UJ-	<0.0260 UJ-	<0.0130 UJ-	<0.100
Total Chromium	60.4 J-	29.4	44.3	13.9	36.8	53.1	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 3 of 8

Sample Location	SS-05	SS-06	SS-07	SS-08	SS-09	SS-09	SS-10
Sample Date	10/5/99	11/9/99	11/9/99	11/9/99	10/5/99	10/5/99	10/5/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Hexavalent Chromium	--	<0.100	<0.100	<0.100	<0.100	--	<0.100
Total Chromium	50.0	26.1	34.3	44.2	--	220	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 4 of 8

Sample Location	SS-10	SS-11	SS-11	SS-12	SS-12	SS-13	SS-13
Sample Date	10/5/99	10/5/99	10/5/99	10/5/99	10/5/99	10/5/99	10/5/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Hexavalent Chromium	--	<0.100	--	<0.100	--	--	<0.100
Total Chromium	28.0	--	46.0	--	51.0	54.0	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SS-14	SS-14	SS-15	SS-15	SS-16	SS-17	SS-17
Sample Date	10/5/99	10/5/99	10/5/99	10/5/99	11/9/99	10/5/99	10/5/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Hexavalent Chromium	<0.100	--	<0.100	--	<0.100	<0.100	--
Total Chromium	--	59.0	--	69.0	30.6	--	54.0

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SS-19	SS-20	SS-21	SS-23	SS-23	SS-25	SS-25
Sample Date	11/9/99	11/9/99	11/9/99	10/5/99	10/5/99	10/5/99	10/5/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Hexavalent Chromium	<0.100	<0.100	<0.100	--	<0.100	<0.100	--
Total Chromium	32.9	32.2	38.2	49.0	--	--	57.0

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SS-26	SS-26	SS-27	SS-28	SS-29	SS-30	SS-31	SS-32
Sample Date	10/5/99	10/5/99	2/23/00	2/23/00	2/23/00	2/23/00	7/27/00	7/27/00
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0
Hexavalent Chromium	<0.100	--	<0.130	<0.130	<0.130	<0.130	0.828	<0.260
Total Chromium	--	52.0	31.8	34.3	33.3	36.6	123 J-	349 J-

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-3b
CHROMIUM DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SS-33	SS-34	SS-35	SS-36
Sample Date	7/27/00	7/27/00	7/27/00	7/27/00
Sample Depth (feet bgs)	0	0	0	0
Hexavalent Chromium	<0.260	<0.260	<0.260	<0.163
Total Chromium	143 J-	105 J-	179 J-	54.2 J-

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-001	SB-003	SB-007	SB-007	SB-008	SB-009	SB-009
Sample Date	10/13/99	10/13/99	10/13/99	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99
Sample Depth (feet bgs)	2	9	1	1	10.5	13	2	11
Total Antimony	<12.0	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
Total Arsenic	4.59	3.72	3.62	4.24	5.54	6.19	4.59	4.32
Total Beryllium	0.693	0.651	0.652	0.589	0.613	0.708	0.476	0.589
Total Cadmium	<0.0500	<0.0500	<0.0500	0.248	<0.0500	<0.0500	0.0737	<0.0500
Total Copper	20.1	20.9	13.9	26.6	19.7	24.0	16.1	20.3
Total Lead	6.33	6.06	5.13	53.9	6.00	5.63	6.93	6.87
Total Mercury	<0.0500	0.0635	<0.0500	<0.0500	<0.0500	0.0676	0.0634	0.123
Total Nickel	54.4	58.4	39.2	43.9	80.6	76.3	48.4	71.1
Total Selenium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.805	0.621
Total Silver	<1.40	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
Total Thallium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	41.5	44.1	33.8	45.3	42.7	44.6	30.6	41.6

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-010	SB-010	SB-012	SB-013	SB-013	SB-014	SB-015	SB-017
Sample Date	10/15/99	10/15/99	10/18/99	10/14/99	10/14/99	10/18/99	10/14/99	10/18/99
Sample Depth (feet bgs)	2.5	12	10	2.5	10.5	12.5	10.5	1.5
Total Antimony	<6.00	<12.0	<6.00	<6.00	<6.00	<6.00	<12.0	<6.00
Total Arsenic	7.64	11.1	10.1	6.63	5.03	6.00	8.92	6.50
Total Beryllium	0.612	0.927	0.655	0.570	0.616	0.501	0.747	0.512
Total Cadmium	<0.0500	0.0754	0.0801	0.0518	0.113	<0.0500	<0.0500	0.0813
Total Copper	16.5	29.1	24.0	17.4	20.9	19.3	25.8	19.8
Total Lead	6.28	9.16	10.1	8.11	4.83	5.63	6.25	12.2
Total Mercury	<0.0500	0.0584	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Total Nickel	56.4	105	170	53.7	91.4	81.3	125	44.0
Total Selenium	<0.500	0.609	0.767	0.552	<0.500	<0.500	<0.500	<0.500
Total Silver	<0.700	<1.40	<0.700	<0.700	<0.700	<0.700	<1.40	<0.700
Total Thallium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	36.5	62.7	50.1	38.8	42.1	40.6	51.9	53.2

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-019	SB-019	SB-020	SB-024	SB-025	SB-026	SB-027
Sample Date	10/18/99	10/18/99	10/18/99	10/20/99	10/19/99	10/13/99	10/14/99	10/14/99
Sample Depth (feet bgs)	10.5	2	13	2	12.5	2	2.5	2
Total Antimony	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<12.0
Total Arsenic	7.42	4.18	29.0	4.27	5.14	3.74	5.15	5.79
Total Beryllium	0.415	0.518	0.644	0.623	0.594	0.528	0.647	0.939
Total Cadmium	0.0893	0.0916	<0.0500	6.91	0.0556	<0.0500	0.0764	<0.0500
Total Copper	17.0	273	23.7	34.9	25.0	11.0	22.9	31.2
Total Lead	6.50	61.5	6.74	16.2	7.41	4.81	6.13	6.20
Total Mercury	<0.0500	0.640	0.104	<0.0500	0.0557	<0.0500	<0.0500	<0.0500
Total Nickel	63.4	57.6	87.7	59.3	81.6	33.1	61.0	135
Total Selenium	<0.500	0.617	0.649	0.723	0.898	<0.500	<0.500	0.530
Total Silver	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<1.40
Total Thallium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	32.3	53.0	51.4	112	55.3	26.6	41.6	58.9

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-028	SB-032	SB-032	SB-033	SB-044	SB-045	SB-046	SB-050
Sample Date	10/14/99	10/13/99	10/13/99	10/19/99	10/19/99	10/18/99	10/18/99	10/19/99
Sample Depth (feet bgs)	4	2	8	10.5	10.5	11	8.5	13
Total Antimony	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
Total Arsenic	2.46	4.75	3.58	3.58	3.32	5.59	4.10	4.67
Total Beryllium	0.437	0.557	0.506	0.525	0.504	0.503	0.643	0.562
Total Cadmium	0.0606	0.0604	<0.0500	<0.0500	0.0789	0.0774	0.129	<0.0500
Total Copper	13.1	17.2	19.7	18.3	30.1	19.9	23.2	18.6
Total Lead	3.67	10.4	4.40	5.67	5.73	6.76	9.18	6.28
Total Mercury	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	0.0536	<0.0500
Total Nickel	43.9	56.7	56.5	77.3	48.2	73.5	75.8	73.4
Total Selenium	<0.500	<0.500	<0.500	0.599	0.553	<0.500	0.633	<0.500
Total Silver	<0.700	<0.700	<0.700	<0.700	3.70	<0.700	<0.700	<0.700
Total Thallium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	29.8	48.0	38.4	36.1	41.7	41.8	46.0	38.1

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-051	SB-054	SB-055	SB-080	SB-080	SB-080	SB-081	SB-081
Sample Date	10/15/99	10/14/99	10/14/99	3/23/00	3/23/00	3/23/00	3/22/00	3/23/00
Sample Depth (feet bgs)	10.5	2.5	3	5	19	23.5	10	23
Total Antimony	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
Total Arsenic	5.58	3.77	4.45	5.39	5.62	6.24	5.50	4.17
Total Beryllium	0.606	0.496	0.536	0.424	0.432	0.469	0.432	0.416
Total Cadmium	<0.0500	<0.0500	0.0775	0.0552	0.0625	0.0654	0.0757	0.0854
Total Copper	21.1	10.9	32.4	22.9	28.9	25.0	18.7	25.4
Total Lead	5.73	5.98	11.6	4.24	4.91	10.8	4.50	4.32
Total Mercury	<0.0500	<0.0500	0.0503	0.137	0.168	0.0263	0.0335	0.0518
Total Nickel	80.4	28.6	52.3	64.6	125	38.6	65.7	99.1
Total Selenium	<0.500	<0.500	<0.500	<0.500	0.527	<0.500	<0.500	<0.500
Total Silver	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
Total Thallium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	42.8	26.8	50.3	50.1	53.4	50.6	38.9	48.2

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-081	SB-082	SB-082	SB-101	SB-101	SB-102	SB-102
Sample Date	3/23/00	3/23/00	3/23/00	10/11/00	10/11/00	10/11/00	10/11/00
Sample Depth (feet bgs)	27	7	27	3	12.5	3	13
Total Antimony	<6.00	<6.00	<6.00	<6.00	<3.95	<4.92	<5.26
Total Arsenic	4.32	6.41	7.53	5.99	5.39	3.28	5.80
Total Beryllium	0.438	0.421	0.614	0.481	0.443	0.360	0.809
Total Cadmium	0.0975	0.103	0.107	<0.0500 Jo	<0.0431 Jo	<0.0500 Jo	<0.0500 Jo
Total Copper	16.6	15.1	35.6	19.3	18.5	13.7	33.5
Total Lead	3.79	4.57	2.97	6.37	6.41	4.61	6.65
Total Mercury	0.0789	0.0201	0.0927	0.0264	0.0318	0.0191	0.0134
Total Nickel	43.1	53.8	108	58.5	53.5	40.3	87.1
Total Selenium	<0.500	<0.500	<0.500	<0.500 UJ-	<0.431 UJ-	<0.500 UJ-	<0.500 UJ-
Total Silver	<0.700	<0.700	<0.700	<0.700	<0.461 Jo	<0.574 Jo	<0.614
Total Thallium	<0.500	<0.500	<0.500	<0.500 Jo UJ-	<0.431 Jo UJ-	<0.500 Jo UJ-	<0.500 Jo UJ-
Total Zinc	40.9	38.1	69.4	40.7	39.3	30.8	42.0

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-103	SB-103	SB-107	SB-107	SB-131	SB-131	SB-132
Sample Date	10/12/00	10/12/00	2/23/01	2/23/01	12/8/00	12/8/00	12/8/00
Sample Depth (feet bgs)	2.5	13.5	2	6	2	6	2
Total Antimony	<6.00	<5.45	<5.77	<5.00	<5.45	<6.00	<4.84
Total Arsenic	6.67	4.18	3.31	6.84	1.96	3.55	1.34
Total Beryllium	0.547	0.519	0.333	0.571	0.411	0.550	0.538
Total Cadmium	0.0611	0.102	<0.0424 Jo	0.0487	<0.0446 Jo	0.0846 J+	0.0511 J+
Total Copper	25.8	29.3	15.1 J+	33.6 J+	16.6	28.2	23.6
Total Lead	9.14	6.98	1.19 J+	4.29 J+	4.75 J-	6.28 J-	5.41 J-
Total Mercury	0.0540	0.0567	<0.0362 Jo	0.0505	0.0177	0.0546	0.0248
Total Nickel	119	92.9	46.6	131	54.9	135	78.4
Total Selenium	<0.500	<0.439	<0.424 Jo UJ-	<0.463 Jo UJ-	<0.446 Jo	<0.500	<0.500 UJ-
Total Silver	<0.700	<0.636	<0.673	<0.583 Jo	<0.636	<0.700	<0.565
Total Thallium	<0.500 Jo	<0.439 Jo	<0.424	<0.463 Jo	<0.446 Jo	<0.500 Jo	<0.500 Jo
Total Zinc	57.6	55.9	30.4 J+	55.8 J+	36.4 J-	51.8	43.1 J-

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-132	SB-133	SB-133	SB-134	SB-134	SB-140	SB-140
Sample Date	12/8/00	12/8/00	12/8/00	12/8/00	12/8/00	2/23/01	2/23/01
Sample Depth (feet bgs)	6	2	6	2	6	2	6
Total Antimony	<5.08 Jo	<4.55	<5.45	<4.84	<4.84	<5.56	<5.00
Total Arsenic	2.33	2.24	5.48	2.25	4.20	3.13	5.91
Total Beryllium	0.541	0.443	0.542	0.369	0.564	0.300	0.461
Total Cadmium	0.0590 J+	0.452 J+	0.0615 J+	33.8 J+	0.0599 J+	<0.0481 Jo	0.0526
Total Copper	28.1	52.7	29.6	767	28.3	11.8 J+	25.0 J+
Total Lead	6.00 J-	5.84 J-	6.38 J+	51.1 J+	7.72 J+	1.55 J+	3.90 J+
Total Mercury	0.0470	0.0519	0.0405	0.0257	0.0485	<0.0196 Jo	0.0273
Total Nickel	127	60.9	129	86.6	103	38.9	92.6
Total Selenium	<0.500 UJ-	<0.439 UJ-	<0.481 UJ-	<0.357 UJ-	<0.373 UJ-	<0.481 Jo UJ-	<0.417 Jo UJ-
Total Silver	<0.593	<0.530	<0.636	<0.565 Jo	<0.565	<0.648	<0.583 Jo
Total Thallium	<0.500 Jo UJ-	<0.439 Jo	<0.481 Jo	<0.357 Jo	<0.373 Jo	<0.481	<0.417 Jo
Total Zinc	55.6 J-	107 J-	53.9 J-	194 J-	53.9 J-	25.4 J+	54.9 J+

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-141	SB-141	SB-142	SB-142	SB-143	SB-143
Sample Date	1/10/01	1/10/01	1/10/01	12/15/00	12/15/00	12/15/00	12/15/00
Sample Depth (feet bgs)	2	10	13	2	3	2	3
Total Antimony	<5.56	<5.77	<5.88 Jo	<5.00 Jo	4.48	<5.56	<4.48
Total Arsenic	2.94	3.42	3.36	5.43	4.20	6.61	8.73
Total Beryllium	0.354	0.399	0.482	0.335	0.340	0.554	0.626
Total Cadmium	0.184	0.0467	0.0601	3.46 J+	2.49 J+	0.0589 J+	0.0554 J+
Total Copper	34.8	21.3	24.3	30.5	30.1	32.0	30.5
Total Lead	12.8 J+	5.58 J+	6.38 J+	14.7	16.6	9.22	9.72
Total Mercury	0.0447	0.0411	0.0331	0.0598	0.116	0.0332	0.0384
Total Nickel	46.2	75.9	89.4	67.1	67.4	104	131
Total Selenium	<0.373 UJ-	<0.410 UJ-	<0.472 UJ-	<0.325 Jo UJ-	<0.439 Jo	<0.439 UJ-	<0.379 UJ-
Total Silver	1.45	1.50	1.79	<0.583	<0.479	<0.648	<0.522
Total Thallium	<0.373 UJ-	<0.410 Jo UJ-	<0.472 UJ-	<0.325 Jo	<0.439	<0.439	<0.379 Jo
Total Zinc	67.3	46.2	52.9	72.3	88.9	71.4	58.6

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-144	SB-144	SB-145	SB-145	SB-147	SB-147	SB-148
Sample Date	12/15/00	12/15/00	12/15/00	12/15/00	1/8/01	1/8/01	1/10/01
Sample Depth (feet bgs)	2	3	2	3	2	11	1
Total Antimony	<5.66 Jo	<5.26	<5.36 Jo	<4.92	<5.88 UJ-	<5.88 UJ-	<5.88
Total Arsenic	6.51	5.95	3.49	5.36	5.93	3.52	2.55
Total Beryllium	0.444	0.596	0.422	0.441	0.369 J	0.294 J	0.289
Total Cadmium	<0.0455 Jo	0.0528 J+	0.0358	0.0917	0.0843 J	0.0812 J	0.143
Total Copper	20.7	44.9	14.0	16.1	31.3 J	21.2 J	13.0
Total Lead	8.13	10.3	1.22 J+	10.7	3.95 J-	2.42 J-	6.93 J+
Total Mercury	0.0337	0.0403	0.0199	0.0204	0.0684	0.0527	0.0709
Total Nickel	73.6	126	45.5	47.8	60.2 J-	80.4 J-	43.8
Total Selenium	<0.455 UJ-	<0.397 Jo UJ-	<0.329 Jo UJ-	<0.455 UJ-	<0.490 Jo UJ-	<0.500 Jo UJ-	<0.385 UJ-
Total Silver	<0.700	<0.614	<0.625	<0.574	2.02 J	1.66 J	1.19
Total Thallium	<0.455 Jo	<0.397 Jo	<0.329 Jo	<0.455 Jo	<0.490 Jo UJ	<0.500 UJ	<0.385 Jo UJ-
Total Zinc	42.0	62.0	30.7	86.7	55.4 J	45.5 J	31.7

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-149	SB-150	SB-151	SB-152	SB-153	SB-163	SB-163
Sample Date	1/8/01	1/8/01	1/8/01	1/10/01	1/10/01	2/22/01	2/22/01
Sample Depth (feet bgs)	1	1	1	1	1	2	6
Total Antimony	<3.85 Jo UJ-	57.6 J-	10.2 J-	<5.88	<5.66	<5.26 Jo	<4.92
Total Arsenic	3.49	<0.481 Jo	3.10	2.55	2.55	4.53	5.90
Total Beryllium	0.329 J	<0.0926 Jo UJ	0.429 J	0.362	0.394	0.401	0.493
Total Cadmium	0.178 J	<0.0481 Jo UJ	0.704 J	0.0488	0.0470	0.0555	0.0733
Total Copper	14.4 J	14.1 J	14.4 J	20.2	15.6	17.3 J+	28.4 J+
Total Lead	1.91 J-	570 J-	4.72 J-	4.86 J+	6.43 J+	1.62	3.90
Total Mercury	0.0170	<0.00630 Jo	0.0168	0.0284	0.0195	0.0333	0.0899
Total Nickel	52.2 J-	<2.78 UJ-	62.8 J-	82.6	60.0	59.8	117
Total Selenium	<0.357 Jo UJ-	<0.481 Jo UJ-	<0.490 UJ-	<0.446 UJ-	<0.410 UJ-	<0.352 Jo	<0.410 Jo
Total Silver	1.33 J	<0.648 UJ	1.57 J	1.42	1.43	<0.614	<0.574 Jo
Total Thallium	<0.357 Jo UJ-	<0.481 Jo UJ	<0.490 Jo UJ	<0.446 UJ-	<0.410 UJ-	<0.352 Jo	<0.410 Jo
Total Zinc	34.9 J	2.42 J	38.6 J	43.6	79.0	41.5 J+	57.3 J+

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-165	SB-165	SB-166	SB-166	SB-167	SB-167	SB-169	SB-170
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	2	7	4	11	2	10	10	2
Total Antimony	<4.48 Jo	<4.84 Jo	<4.92	<5.00	<4.55	<4.92	<5.88 Jo	<4.35 Jo
Total Arsenic	3.81	5.37	4.27	6.17	3.78	1.96	5.71	3.76
Total Beryllium	0.396	0.446	0.372	0.480	0.402	0.395	0.444	0.351
Total Cadmium	<0.0373 Jo	0.0610	<0.0500 Jo	0.0492	0.0353	0.0562	0.0540	0.0448
Total Copper	16.8 J+	27.4 J+	19.0 J+	28.4 J+	18.6 J+	23.7 J+	23.5 J+	16.6 J+
Total Lead	1.57	3.96	2.47	4.07	3.30	3.61	2.35	2.34
Total Mercury	0.0153	0.0467	0.0253	0.0442	0.0278	0.0553	0.0869	0.0260
Total Nickel	53.7	72.3	54.4	135	59.1	85.7	83.6	54.1
Total Selenium	<0.373 Jo	<0.397 Jo	<0.500 Jo	<0.379 Jo	<0.352 Jo	<0.455 Jo	<0.463 Jo	<0.397 Jo
Total Silver	<0.522 Jo	<0.565	<0.574	<0.583 Jo	<0.530 Jo	<0.574 Jo	<0.686 Jo	<0.507
Total Thallium	<0.373	<0.397 Jo	<0.500	<0.379	<0.352	<0.455 Jo	<0.463 Jo	<0.397 Jo
Total Zinc	38.3 J+	53.9 J+	35.4 J+	54.9 J+	36.5 J+	49.7 J+	47.1 J+	32.8 J+

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4a
TOTAL METALS DETECTED IN SUBSURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-181	SB-182	SB-183	SB-184	SB-185	W39A	W40A
Sample Date	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	1/18/01	1/18/01
Sample Depth (feet bgs)	1	1	1	1	1	5	5
Total Antimony	<0.397 Jo	<0.385 Jo	<0.490 Jo UJ-	<0.410 Jo UJ-	<0.481 Jo UJ-	<5.66	<5.77
Total Arsenic	4.38	3.59	4.57	3.00	2.95	6.42	5.58
Total Beryllium	0.437	0.365	0.398	0.324	0.395	0.597	0.707
Total Cadmium	0.123	<0.0769 Jo	0.139	0.120	0.173	0.0750	0.0603
Total Copper	26.0 J-	21.6 J-	19.8	18.2	21.9	32.9	31.4
Total Lead	28.4	10.3	18.6	93.2	16.5	10.0	8.87
Total Mercury	0.0257	<0.0186 Jo	0.0232	0.0194	0.0684	0.0377	0.0766
Total Nickel	57.4 J-	35.7 J-	50.4	38.0	26.5	136	101
Total Selenium	<3.97	<3.85	<4.90	<4.10	<4.81	<0.391 Jo UJ-	<0.352 Jo UJ-
Total Silver	<0.0794 Jo	<0.0769 Jo	<0.0980	<0.0820 Jo	<0.0962 Jo	1.45	1.19
Total Thallium	<0.159 Jo	<0.154 Jo	<0.196 Jo	<0.164 Jo	<0.192 Jo	<0.391 Jo	<0.352 Jo
Total Zinc	94.7 J-	58.5 J-	72.0	69.9 J-	77.6 J-	64.1	62.0

Notes:

bgs = below ground surface

mg/kg = milligrams per kilograms

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4b
TOTAL METALS DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-181	SB-181	SB-182	SB-182	SB-183	SB-183	SB-184	SB-184
Sample Date	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01	3/19/01
Sample Depth (feet bgs)	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5
Total Antimony	0.716	1.27	0.725	0.510	<0.472 Jo UJ-	<0.500 Jo UJ-	<0.463 Jo UJ-	<0.446 Jo UJ-
Total Arsenic	3.51	5.55	2.62	4.43	3.45	3.64	0.995	2.90
Total Beryllium	0.478	0.436	0.349	0.356	0.435	0.430	0.261	0.322
Total Cadmium	0.779	1.92	0.264	0.261	0.543	0.387	0.266	<0.0893 Jo
Total Copper	56.8	106 J-	19.9	25.5 J-	28.4	21.1	18.9	18.5
Total Lead	168 J-	857	42.4	38.0	54.4	38.8	19.9	9.67
Total Mercury	0.0950	0.0996	0.177	0.110	0.0648	0.0256	0.0207	0.0427
Total Nickel	34.7 J-	46.1 J-	26.2	38.8 J-	47.3	49.2	12.9	35.5
Total Selenium	<4.46	<4.72	<4.03	<4.10	<4.72	<5.00	<4.63	<4.46
Total Silver	0.515	0.641	0.562	0.271	<0.0943 Jo	<0.100 Jo	<0.0926 Jo	<0.0893 Jo
Total Thallium	0.344	1.06	<0.161 Jo	<0.164 Jo	<0.189 Jo	<0.200 Jo	<0.185 Jo	<0.179 Jo
Total Zinc	266 J-	810 J-	103	116 J-	134 J-	127 J-	102 J-	61.9 J-

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-4b
TOTAL METALS DETECTED IN SURFACE SOIL SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-185	SB-185	SS-31	SS-32	SS-33	SS-34	SS-35	SS-36
Sample Date	3/19/01	3/19/01	7/27/00	7/27/00	7/27/00	7/27/00	7/27/00	7/27/00
Sample Depth (feet bgs)	0.2	0.5	0	0	0	0	0	0
Total Antimony	<0.472 Jo UJ-	<0.500 Jo UJ-	<6.00 UJ-	4.49 UJ-	<6.00 UJ-	<6.00 UJ-	<6.00 UJ-	<6.00 UJ-
Total Arsenic	3.18	3.00	2.01	1.87	2.61	1.56	1.55	1.18
Total Beryllium	0.439	0.405	0.288	0.274	0.414	0.408	0.279	0.284
Total Cadmium	<0.0943 Jo	<0.100 Jo	0.448	3.40	3.17	0.510	0.670	0.233
Total Copper	26.6	37.4	47.6 J+	294 J+	76.3 J+	38.5 J+	50.6 J+	23.6 J+
Total Lead	34.9	39.8	69.1 J+	542 J+	495 J+	127 J+	47.7 J+	43.9 J+
Total Mercury	0.178	0.390	0.0256 J+	0.0514 J+	0.762 J+	0.843 J+	0.0888 J+	0.0331 J+
Total Nickel	36.7	32.2	52.8	134	59.3	42.8	61.1	47.8
Total Selenium	<4.72	<5.00	0.170	0.192	0.243	0.250	0.288	0.187
Total Silver	<0.0943	<0.100 Jo	<1.00 UJ-	<1.00 UJ-	<1.00 UJ-	<0.700 UJ-	<1.00 UJ-	<0.700 UJ-
Total Thallium	<0.189 Jo	<0.200 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Zinc	102 J-	620 J-	324 J+	1960 J+	1370 J+	424 J+	483 J+	297 J+

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-001	SB-002	SB-003	SB-006	SB-007	SB-008
Sample Date	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99	10/15/99	10/15/99
Sample Depth (feet bgs)	2	9	2	1	2	1	2
Benzo(a)anthracene	<17.0	<17.0	<17.0	<17.0	<17.0	<68.0	<17.0
Indeno(1,2,3-cd)pyrene	<17.0	<17.0	<17.0	<17.0	<17.0	<68.0	<17.0
Naphthalene	<170	<170	<170	<170	<170	<680	<170

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-008	SB-009	SB-009	SB-010	SB-010	SB-012	SB-013
Sample Date	10/15/99	10/19/99	10/19/99	10/15/99	10/15/99	10/18/99	10/14/99
Sample Depth (feet bgs)	13	2	11	2.5	12	10	2.5
Benzo(a)anthracene	<17.0	<34.0	<17.0	<17.0	<17.0	<17.0	<17.0
Indeno(1,2,3-cd)pyrene	<17.0	<34.0	<17.0	<17.0	<17.0	<17.0	<17.0
Naphthalene	<170	<340	<170	<170	<170	<170	<170

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-014	SB-015	SB-017	SB-017	SB-018	SB-019	SB-019
Sample Date	10/18/99	10/14/99	10/18/99	10/18/99	10/20/99	10/18/99	10/18/99
Sample Depth (feet bgs)	12.5	3.5	1.5	10.5	9.5	2	13
Benzo(a)anthracene	<17.0	<17.0	<34.0	<17.0	<17.0	<170	<17.0
Indeno(1,2,3-cd)pyrene	<17.0	<17.0	<34.0	<17.0	<17.0	<170	<17.0
Naphthalene	<170	<170	<340	<170	<170	<1700	<170

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-020	SB-020	SB-024	SB-025	SB-026	SB-027	SB-028
Sample Date	10/20/99	10/20/99	10/19/99	10/13/99	10/14/99	10/14/99	10/14/99
Sample Depth (feet bgs)	2	10	12.5	2	2.5	2	4
Benzo(a)anthracene	<85.0	125	<17.0	<17.0	<17.0	<17.0	<34.0
Indeno(1,2,3-cd)pyrene	<85.0	<85.0	<17.0	<17.0	<17.0	<17.0	<34.0
Naphthalene	<850	<850	<170	<170	<170	<170	<340

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-032	SB-032	SB-033	SB-033	SB-039	SB-044	SB-045
Sample Date	10/13/99	10/13/99	10/19/99	10/19/99	12/16/98	10/19/99	10/18/99
Sample Depth (feet bgs)	2	8	1.5	10.5	1	10.5	11
Benzo(a)anthracene	<17.0	<17.0	<17.0	<17.0	<16	<85.0	<17.0
Indeno(1,2,3-cd)pyrene	<17.0	<17.0	<17.0	<17.0	<20	114	<17.0
Naphthalene	<170	<170	<170	<170	<200	<850	<170

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-5
PAHs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-046	SB-050	SB-051	SB-054	SB-055	SB-062	SB-066
Sample Date	10/18/99	10/19/99	10/15/99	10/14/99	10/14/99	12/6/99	12/28/99
Sample Depth (feet bgs)	8.5	13	10.5	2.5	3	2	3
Benzo(a)anthracene	<17.0	<17.0	<17.0	<17.0	<34.0	<17.0	<17.0
Indeno(1,2,3-cd)pyrene	<17.0	<17.0	<17.0	<17.0	<34.0	<17.0	<17.0
Naphthalene	<170	<170	<170	<170	<340	<170	<170

Notes:

bgs = below ground surface

µg/kg= micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-2-6
PCBs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-001	SB-009	SB-020	SB-025	SB-039	SB-163	SB-163	SB-166	SB-166	SB-187
Sample Date	10/13/99	10/13/99	10/19/99	10/20/99	10/13/99	12/16/98	2/22/01	2/22/01	2/22/01	2/22/01	3/29/01
Sample Depth (feet bgs)	2	9	2	2	2	1	2	6	4	11	2
Aroclor 1242	<33.0	<33.0	<33.0	<33.0	<33.0	<50	89.3	52.9	<33.0	<33.0	101

Notes:

µg/kg= micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-2-6
PCBs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-187	SB-188	SB-188	SB-189	SB-189	SB-190	SB-190	SB-191	SB-192	SB-192	SB-193
Sample Date	3/29/01	3/29/01	3/29/01	3/29/01	3/29/01	3/30/01	3/30/01	4/20/01	4/20/01	4/20/01	4/20/01
Sample Depth (feet bgs)	6	2	6	2	6	2	6	2.5	2	6	2
Aroclor 1242	36.9	<33.0	<33.0	92.5	<33.0	81.1	44.9	<33.0	<33.0	<33.0	<33.0

Notes:

µg/kg= micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-2-6
PCBs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-193	SB-194	SB-195	SB-195	SB-196	SB-196	SB-197	SB-198	SB-198	SB-199	W1
Sample Date	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	4/20/01	9/1/90
Sample Depth (feet bgs)	6	2	1	6	2	6	2	2	6	2	4
Aroclor 1242	<33.0	<33.0	<8250	<33.0	<33.0	<33.0	<33.0	<33.0	<33.0	<33.0	<70

Notes:

µg/kg= micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-2-6
PCBs DETECTED IN SUBSURFACE SOIL SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W2	W3	W4	W5	W6	W7
Sample Date	9/1/90	9/8/90	9/9/90	9/15/90	9/17/90	9/20/90
Sample Depth (feet bgs)	3	5	4	6.5	5.5	6
Aroclor 1242	<70	<70	<70	<70	<70	<70

Notes:

µg/kg= micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-038	SB-038	SB-038	SB-038	SB-042	SB-043	SB-043	SB-043	SB-043
Sample Date	10/18/99	10/18/99	10/18/99	10/18/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99
Sample Depth (feet bgs)	6.5	19.5	27.5	46	10	8	13	13	23.5
Cation Exchange Capacity (meq/kg)	--	--	--	--	--	--	--	517	--
Cyanide (mg/kg)	--	--	--	--	--	--	--	--	--
Hydrous Iron Oxides (percent)	--	--	--	--	--	--	2.275	--	--
Hydrous Manganese Oxides (percent)	--	--	--	--	--	--	0.09	--	--
Iron (Ferrous) (mg/kg)	<1.00	1.39	<1.00	<1.00	<1.00	<1.00	--	--	<1.00
Orthophosphate as P (mg/kg)	--	--	--	--	--	--	--	--	--
pH (pH units)	7.12	7.56	7.35	7.41	6.65	7.36	--	--	7.53
Phosphorus (mg/kg)	--	--	--	--	--	--	--	--	--
Specific Gravity (g/mL)	2.05	1.81	1.89	1.73	1.93	2.01	--	--	1.67
Sulfate Reducing Bacteria (/100 gm)	--	--	--	--	--	--	26	--	--
Total Calcium (mg/kg)	--	--	--	--	--	--	2870	--	--
Total Magnesium (mg/kg)	--	--	--	--	--	--	10200	--	--
Total Organic Carbon (mg/kg)	1670	3490	2680	3630	1060	867	--	--	3280
Total Potassium (mg/kg)	--	--	--	--	--	--	1280	--	--
Total Sodium (mg/kg)	--	--	--	--	--	--	113	--	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99
Sample Depth (feet bgs)	26	26	26.5	30.5	30.5	40.5	42.5	42.5
Cation Exchange Capacity (meq/kg)	--	425	--	217	--	--	--	671
Cyanide (mg/kg)	--	--	--	--	--	--	--	--
Hydrous Iron Oxides (percent)	2.756	--	--	1.662	--	--	2.709	--
Hydrous Manganese Oxides (percent)	0.857	--	--	0.048	--	--	0.045	--
Iron (Ferrous) (mg/kg)	--	--	<1.00	--	--	<1.00	--	--
Orthophosphate as P (mg/kg)	--	--	--	--	--	--	--	--
pH (pH units)	--	--	7.53	--	--	7.26	--	--
Phosphorus (mg/kg)	--	--	--	--	--	--	--	--
Specific Gravity (g/mL)	--	--	1.83	--	--	1.60	--	--
Sulfate Reducing Bacteria (/100 gm)	24	--	--	<22	--	--	<25	--
Total Calcium (mg/kg)	3380	--	--	--	3100	--	2820	--
Total Magnesium (mg/kg)	12900	--	--	--	6160	--	10200	--
Total Organic Carbon (mg/kg)	--	--	2120	--	--	7320	--	--
Total Potassium (mg/kg)	1540	--	--	--	1100	--	1270	--
Total Sodium (mg/kg)	110	--	--	--	99.7	--	127	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
Page 3 of 6

Sample Location	SB-043	SB-043	SB-047	SB-048	SB-048	SB-048	SB-048	SB-049	SB-049
Sample Date	10/21/99	10/21/99	10/21/99	10/15/99	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99
Sample Depth (feet bgs)	62.5	67	12	10	23	32	45	9	16
Cation Exchange Capacity (meq/kg)	--	399	--	--	--	--	--	--	191
Cyanide (mg/kg)	--	--	--	--	--	--	--	--	--
Hydrous Iron Oxides (percent)	--	2.746	--	--	--	--	--	--	2.98
Hydrous Manganese Oxides (percent)	--	0.101	--	--	--	--	--	--	0.068
Iron (Ferrous) (mg/kg)	<1.00	--	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
Orthophosphate as P (mg/kg)	--	--	--	--	--	--	--	--	--
pH (pH units)	7.41	--	7.72	6.71	6.64	7.48	7.03	7.04	--
Phosphorus (mg/kg)	--	--	--	--	--	--	--	--	--
Specific Gravity (g/mL)	1.70	--	1.88	1.95	1.71	2.20	2.06	1.73	--
Sulfate Reducing Bacteria (/100 gm)	--	<27	--	--	--	--	--	--	<26
Total Calcium (mg/kg)	--	2880	--	--	--	--	--	--	--
Total Magnesium (mg/kg)	--	10500	--	--	--	--	--	--	--
Total Organic Carbon (mg/kg)	4340	--	771	690	3630	1690	5500	1990	--
Total Potassium (mg/kg)	--	1300	--	--	--	--	--	--	--
Total Sodium (mg/kg)	--	160	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	SB-049	SB-049	SB-049	SB-049	SB-049	SB-049	SB-049
Sample Date	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99
Sample Depth (feet bgs)	16	19	19	27.5	27.5	27.5	42.5	42.5
Cation Exchange Capacity (meq/kg)	--	--	27.4	--	--	24.1	--	175
Cyanide (mg/kg)	--	--	--	--	--	--	--	--
Hydrous Iron Oxides (percent)	--	2.904	--	2.178	--	--	3.191	--
Hydrous Manganese Oxides (percent)	--	0.106	--	0.072	--	--	0.114	--
Iron (Ferrous) (mg/kg)	--	<1.00	--	<1.00	--	--	<1.00	--
Orthophosphate as P (mg/kg)	--	--	--	--	--	--	--	--
pH (pH units)	--	8.09	--	7.61	--	--	7.24	--
Phosphorus (mg/kg)	--	--	--	--	--	--	--	--
Specific Gravity (g/mL)	--	1.82	--	1.78	--	--	1.49	--
Sulfate Reducing Bacteria (/100 gm)	--	<26	--	<25	--	--	<29	--
Total Calcium (mg/kg)	2680	3230	--	--	3580	--	2260	--
Total Magnesium (mg/kg)	10900	13400	--	--	9410	--	6910	--
Total Organic Carbon (mg/kg)	--	2740	--	3840	--	--	2290	--
Total Potassium (mg/kg)	1240	1160	--	--	1010	--	1140	--
Total Sodium (mg/kg)	107	115	--	--	111	--	141	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
Page 5 of 6

Sample Location	SB-049	SB-049	SB-049	SB-147	SB-147	SB-148	SB-149	SB-150	SB-151
Sample Date	10/19/99	10/19/99	10/19/99	1/8/01	1/8/01	1/10/01	1/8/01	1/8/01	1/8/01
Sample Depth (feet bgs)	62.5	62.5	62.5	2	11	1	1	1	1
Cation Exchange Capacity (meq/kg)	--	38.5	--	--	--	--	--	--	--
Cyanide (mg/kg)	--	--	--	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500
Hydrous Iron Oxides (percent)	1.985	--	--	--	--	--	--	--	--
Hydrous Manganese Oxides (percent)	0.044	--	--	--	--	--	--	--	--
Iron (Ferrous) (mg/kg)	--	--	<1.00	--	--	--	--	--	--
Orthophosphate as P (mg/kg)	--	--	--	5.80	<0.500	2.27	11.7	<0.500	<0.500
pH (pH units)	--	--	7.31	7.81	7.86	6.76	6.78	4.61	7.74
Phosphorus (mg/kg)	--	--	--	306 J+	312 J+	229	341 J+	24.6 J+	216 J+
Specific Gravity (g/mL)	--	--	1.78	--	--	--	--	--	--
Sulfate Reducing Bacteria (/100 gm)	<24	--	--	--	--	--	--	--	--
Total Calcium (mg/kg)	1960	--	--	--	--	--	--	--	--
Total Magnesium (mg/kg)	7420	--	--	10800 J	11200 J	4690	5490 J	102 J	5910 J
Total Organic Carbon (mg/kg)	--	--	3050	--	--	--	--	--	--
Total Potassium (mg/kg)	695	--	--	--	--	--	--	--	--
Total Sodium (mg/kg)	92.7	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-2-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN SUBSURFACE SOIL SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-152	SB-153	W21A	W21A	W22A	W22A	W24A	W24A
Sample Date	1/10/01	1/10/01	10/20/99	10/20/99	10/14/99	10/14/99	10/14/99	10/14/99
Sample Depth (feet bgs)	1	1	10.5	19	12	23	6	22
Cation Exchange Capacity (meq/kg)	--	--	--	--	--	--	--	--
Cyanide (mg/kg)	<0.500	<0.500	--	--	--	--	--	--
Hydrous Iron Oxides (percent)	--	--	--	--	--	--	--	--
Hydrous Manganese Oxides (percent)	--	--	--	--	--	--	--	--
Iron (Ferrous) (mg/kg)	--	--	2.22	<1.00	<1.00	<1.00	<1.00	<1.00
Orthophosphate as P (mg/kg)	1.63	1.63	--	--	--	--	--	--
pH (pH units)	6.69	5.75	6.88	7.75	7.05	7.30	6.79	7.18
Phosphorus (mg/kg)	115	296	--	--	--	--	--	--
Specific Gravity (g/mL)	--	--	1.76	1.94	1.50	2.11	2.02	1.90
Sulfate Reducing Bacteria (/100 gm)	--	--	--	--	--	--	--	--
Total Calcium (mg/kg)	--	--	--	--	--	--	--	--
Total Magnesium (mg/kg)	9510	6000	--	--	--	--	--	--
Total Organic Carbon (mg/kg)	--	--	1440	2640	3530	2660	1950	3070
Total Potassium (mg/kg)	--	--	--	--	--	--	--	--
Total Sodium (mg/kg)	--	--	--	--	--	--	--	--

Notes:

bgs = below ground surface

meq/kg = milliequivalents per kilogram

mg/kg = milligrams per kilogram

g/mL = grams per milliliter

gm = gram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	CPT-019	CPT-019	CPT-019	CPT-021	CPT-021	CPT-021	CPT-024	CPT-026	CPT-027
Sample Date	1/24/01	1/24/01	1/24/01	1/24/01	1/24/01	1/24/01	2/23/01	3/30/01	3/27/01
Sample Depth (feet bgs)	28	42	50	34	41	50	41	33	23
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	2.52	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500	4.63	<0.500 Jo	<0.500 Jo	<0.500	<0.500 Jo	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	3.01	<0.500 Jo	0.518	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone (MEK)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 Jo	<5.00	<5.00
4-Methyl-2-pentanone	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<10.0	<10.0 Jo	<10.0	<10.0 Jo	<10.0	<10.0	<10.0 Jo	<10.0 Jo	<10.0
Benzene	<0.500	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500	<0.500 Jo UJ-	<0.500	<0.500
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	0.850	<0.500
Dibromochloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 48

Sample Location	CPT-019	CPT-019	CPT-019	CPT-021	CPT-021	CPT-021	CPT-024	CPT-026	CPT-027
Sample Date	1/24/01	1/24/01	1/24/01	1/24/01	1/24/01	1/24/01	2/23/01	3/30/01	3/27/01
Sample Depth (feet bgs)	28	42	50	34	41	50	41	33	23
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<1.31 U	<0.500	<0.500
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	3.42	<0.500
Toluene	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.980	<0.500
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 3 of 48

Sample Location	CPT-027	CPT-027	CPT-028	CPT-029	CPT-029	CPT-030	CPT-030	CPT-031	CPT-031
Sample Date	3/27/01	3/27/01	3/27/01	3/28/01	3/28/01	3/28/01	3/28/01	3/28/01	3/28/01
Sample Depth (feet bgs)	28	38	47	28	40	34	44	28	34
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone (MEK)	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
4-Methyl-2-pentanone	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<10.0	<10.0	<10.0 Jo	<10.0	<10.0 Jo	<10.0	<10.0	<10.0	<10.0
Benzene	<0.500	<0.500	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500 Jo
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	CPT-027	CPT-027	CPT-028	CPT-029	CPT-029	CPT-030	CPT-030	CPT-031	CPT-031
Sample Date	3/27/01	3/27/01	3/27/01	3/28/01	3/28/01	3/28/01	3/28/01	3/28/01	3/28/01
Sample Depth (feet bgs)	28	38	47	28	40	34	44	28	34
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	CPT-032	CPT-032	GB-1	GB-2	GB-3	GB-4	GB-5	GB-7	GB-8	Rem-01	Rem-01	Rem-02	Rem-02
Sample Date	3/29/01	3/29/01	8/19/94	8/19/94	8/19/94	8/19/94	8/18/94	8/19/94	8/19/94	10/5/95	10/5/95	10/5/95	10/5/95
Sample Depth (feet bgs)	30	35	9	9	9	9	9	9	9	22	40	23	35
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	2300	7.8	63	280	150	24	320	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	<0.500	<0.500	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	590	90	70	74	34	98	70	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	110	1.8	29	130	63	25	240	<0.4	<0.4	<0.4	<0.4
1,2,3-Trichlorobenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,2-Dichloroethane	<0.500	<0.500	5.4	<0.4	<0.4	2.3	<0.4	<0.4	4.2	<0.4	<0.4	<0.4	<0.4
1,3,5-Trimethylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	<100	<100	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--
Acetone	<10.0	<10.0	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500 Jo	<0.500	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromoform	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromomethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroethane	0.951	<0.500 Jo	26	2.7	<0.4	<0.4	<0.4	0.6	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	<0.500	<0.500	7.2	<0.4	<0.4	6.8	<0.4	<0.4	1.5	<0.4	<0.4	<0.4	<0.4
Chloromethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	--	--	--	--	--	--	--	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dichlorodifluoromethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Ethylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	CPT-032	CPT-032	GB-1	GB-2	GB-3	GB-4	GB-5	GB-7	GB-8	Rem-01	Rem-01	Rem-02	Rem-02
Sample Date	3/29/01	3/29/01	8/19/94	8/19/94	8/19/94	8/19/94	8/18/94	8/19/94	8/19/94	10/5/95	10/5/95	10/5/95	10/5/95
Sample Depth (feet bgs)	30	35	9	9	9	9	9	9	9	22	40	23	35
m,p-Xylene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<0.500 Jo	<0.500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.500	<0.500	3.1	<0.4	<0.4	130	1900	40	3.7	<0.4	<0.4	<0.4	<0.4
Toluene	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichloroethene (TCE)	<0.500	<0.500	11	<0.4	12	180	76	3000	220	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<0.500	<0.500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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bgs = below ground surface

< = less than

-- = not analyzed

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	Rem-03	Rem-04	Rem-05	Rem-05	Rem-06	Rem-07	Rem-07	Rem-08	Rem-08	Rem-09	Rem-10	Rem-10	Rem-11
Sample Date	10/5/95	10/5/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/6/95	10/6/95	10/6/95
Sample Depth (feet bgs)	35	37	11	33	36	18	37	21	40	48.6	22	33	20
1,1,1-Trichloroethane (1,1,1-TCA)	<0.4	<0.4	39	<0.4	<0.4	0.91	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane (1,1-DCA)	<0.4	<0.4	2.2	<0.4	<0.4	<0.4	<0.4	1.1	<0.4	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethene (1,1-DCE)	<0.4	<0.4	10	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,2-Dichloroethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromoform	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromomethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	<0.4	<0.4	0.81	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	8.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dichlorodifluoromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.47	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	Rem-03	Rem-04	Rem-05	Rem-05	Rem-06	Rem-07	Rem-07	Rem-08	Rem-08	Rem-09	Rem-10	Rem-10	Rem-11
Sample Date	10/5/95	10/5/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/6/95	10/6/95	10/6/95
Sample Depth (feet bgs)	35	37	11	33	36	18	37	21	40	48.6	22	33	20
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.4	<0.4	1.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Toluene	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichloroethene (TCE)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	<0.4	<0.4	<0.4	<0.4	<0.4	3.9	<0.4	25	<0.4	<0.4	<0.4	<0.4	<0.4
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	Rem-11	Rem-12	Rem-12	Rem-13	Rem-13	Rem-13	Rem-14	Rem-14	Rem-14	Rem-15	Rem-15	SB-001	SB-005
Sample Date	10/6/95	10/6/95	10/6/95	10/5/95	10/5/95	10/6/95	10/6/95	10/6/95	10/6/95	10/6/95	10/6/95	10/14/99	10/15/99
Sample Depth (feet bgs)	33	19	31	24	40	66	20	36	65	22	41.5	14	13
1,1,1-Trichloroethane (1,1,1-TCA)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	7.35	25.6
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<2.00
1,1-Dichloroethane (1,1-DCA)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	9.93	27.0
1,1-Dichloroethene (1,1-DCE)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	8.79	91.3
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
1,2-Dichlorobenzene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
1,2-Dichloroethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	<5.00	<20.0
4-Methyl-2-pentanone	--	--	--	--	--	--	--	--	--	--	--	<5.00	<20.0
Acetone	--	--	--	--	--	--	--	--	--	--	--	<10.0	<40.0
Benzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Bromodichloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Bromoform	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Bromomethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Chloroethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Chloroform	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Chloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.49	2.38
Dibromochloromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Dichlorodifluormethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	Rem-11	Rem-12	Rem-12	Rem-13	Rem-13	Rem-13	Rem-14	Rem-14	Rem-14	Rem-15	Rem-15	SB-001	SB-005
Sample Date	10/6/95	10/6/95	10/6/95	10/5/95	10/5/95	10/6/95	10/6/95	10/6/95	10/6/95	10/6/95	10/6/95	10/14/99	10/15/99
Sample Depth (feet bgs)	33	19	31	24	40	66	20	36	65	22	41.5	14	13
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Methylene chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.500	<2.00
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Tetrachloroethene (PCE)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Toluene	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
trans-1,2-Dichloroethene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Trichloroethene (TCE)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	3.27
Trichlorofluoromethane	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	--	--	--	--	<0.500	<2.00
Vinyl chloride (VC)	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.500	<2.00
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

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< = less than

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-006	SB-008	SB-009	SB-011	SB-012	SB-014	SB-016	SB-017	SB-019
Sample Date	10/15/99	10/20/99	10/21/99	10/20/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99
Sample Depth (feet bgs)	13	16	12	15.5	12	16	16	12	16
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	1240	3.81	5.81	1.05	11.4	8.58	16.6	219
1,1,2-Trichloroethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	3.08
1,1-Dichloroethane (1,1-DCA)	6.70	575	4.16	193	4.73	53.0	44.5	1.92	582
1,1-Dichloroethene (1,1-DCE)	<0.500	1830	1.18	104	0.512	31.9	13.2	8.51	505
1,2,3-Trichlorobenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<25.0	<0.500	5.01	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	8.64
1,3,5-Trimethylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	80.4	--	<50.0	<50.0	169	<50.0	363
2-Butanone (MEK)	<5.00	<250	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00
4-Methyl-2-pentanone	<5.00	<250	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<10.0	<500	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	<0.500	<25.0	<0.500	3.58	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.500	<25.0	0.593	12.2	<0.500	<0.500	3.25	<0.500	3.34
Chloroform	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	209	<0.500	26.7	3.28	73.9	14.0	<0.500	3.67
Dibromochloromethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-006	SB-008	SB-009	SB-011	SB-012	SB-014	SB-016	SB-017	SB-019
Sample Date	10/15/99	10/20/99	10/21/99	10/20/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99
Sample Depth (feet bgs)	13	16	12	15.5	12	16	16	12	16
m,p-Xylene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<25.0	<0.500	<2.50	<0.500	2.40	5.53	<0.500	<0.500
Methylene chloride	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	41.6	<0.500	<2.50	<0.500	0.601	<0.500	<0.500	<0.500
Toluene	<0.500	<25.0	<0.500	38.1	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.500	<25.0	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	156	<0.500	3.31	<0.500	33.7	0.771	<0.500	<0.500
Trichlorofluoromethane	<0.500	<25.0	5.23	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<25.0	<0.500	<2.50	12.8	<0.500	<0.500	<0.500	1.30
Vinyl chloride (VC)	<0.500	<25.0	<0.500	6.95	<0.500	<0.500	<0.500	<0.500	0.600
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-020	SB-021	SB-021	SB-022	SB-023	SB-024	SB-026	SB-027	SB-028
Sample Date	10/22/99	12/17/98	12/17/98	10/22/99	10/22/99	10/22/99	10/18/99	10/18/99	10/18/99
Sample Depth (feet bgs)	12	16	28	8	20	16	16	12	8
1,1,1-Trichloroethane (1,1,1-TCA)	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	347	<1	<1	12.0	0.708	<0.500	<0.500	3.46	<0.500
1,1-Dichloroethene (1,1-DCE)	53.3	1.7	<1	0.621	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<2500	--	--	<50.0	<50.0	60.2	--	--	--
2-Butanone (MEK)	<250	<20	<20	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
4-Methyl-2-pentanone	<250	<20	<20	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	728	<20	<20	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	59.5	1.2	<1	0.576	<0.500	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluormethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-020	SB-021	SB-021	SB-022	SB-023	SB-024	SB-026	SB-027	SB-028
Sample Date	10/22/99	12/17/98	12/17/98	10/22/99	10/22/99	10/22/99	10/18/99	10/18/99	10/18/99
Sample Depth (feet bgs)	12	16	28	8	20	16	16	12	8
m,p-Xylene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<25.0	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<25.0	<1	<1	28.9	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	27.9	<1	<1	3.76	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	1.07	<0.500
Vinyl chloride (VC)	<25.0	<1	<1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	<1	<1	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-029	SB-030	SB-031	SB-032	SB-033	SB-034	SB-035	SB-035
Sample Date	3/22/00	3/22/00	3/22/00	10/18/99	10/22/99	10/22/99	12/18/98	12/18/98
Sample Depth (feet bgs)	17	16	17	14	12	14	16	31
1,1,1-Trichloroethane (1,1,1-TCA)	46.5	<0.500	<0.500	46.8	<50.0	<10.0	25	<1
1,1,2-Trichloroethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
1,1-Dichloroethane (1,1-DCA)	34.8	<0.500	<0.500	22.3	<50.0	<10.0	38	<1
1,1-Dichloroethene (1,1-DCE)	65.8	<0.500	<0.500	47.7	<50.0	<10.0	8.9	<1
1,2,3-Trichlorobenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
1,2,4-Trichlorobenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
1,2,4-Trimethylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
1,2-Dichlorobenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
1,2-Dichloroethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
1,3,5-Trimethylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
1,4-Dioxane	<125	<50.0	<50.0	--	<5000	<1000	--	--
2-Butanone (MEK)	<12.5	<5.00	<5.00	<50.0	<500	<100	<20	<20
4-Methyl-2-pentanone	<12.5	<5.00	<5.00	<50.0	<500	<100	<20	<20
Acetone	<25.0	<10.0	<10.0	<100	<1000	<200	<20	<20
Benzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Bromodichloromethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Bromoform	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Bromomethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Chloroethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Chloroform	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Chloromethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
cis-1,2-Dichloroethene (cis-1,2-DCE)	7.95	<0.500	<0.500	206	<50.0	<10.0	3.6	<1
Dibromochloromethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Dichlorodifluoromethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Ethylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Hexachlorobutadiene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
Isopropylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-029	SB-030	SB-031	SB-032	SB-033	SB-034	SB-035	SB-035
Sample Date	3/22/00	3/22/00	3/22/00	10/18/99	10/22/99	10/22/99	12/18/98	12/18/98
Sample Depth (feet bgs)	17	16	17	14	12	14	16	31
m,p-Xylene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
Methyl tert-butyl ether (MTBE)	3.88	<0.500	<0.500	<5.00	<50.0	<10.0	4.9	<1
Methylene chloride	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
n-Butylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
n-Propylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
Naphthalene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
o-Xylene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
p-Isopropyltoluene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
sec-Butylbenzene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	--	--
Tetrachloroethene (PCE)	1.51	<0.500	<0.500	22.0	<50.0	<10.0	<1	<1
Toluene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
trans-1,2-Dichloroethene	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Trichloroethene (TCE)	70.9	<0.500	<0.500	15.2	<50.0	<10.0	1.3	<1
Trichlorofluoromethane	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Trichlorotrifluoroethane (Freon 113)	59.8	<0.500	<0.500	<5.00	3860	1030	2.8	<1
Vinyl chloride (VC)	<1.25	<0.500	<0.500	<5.00	<50.0	<10.0	<1	<1
Xylenes (total)	--	--	--	--	--	--	<1	<1

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-036	SB-036	SB-037	SB-037	SB-038	SB-038	SB-039	SB-039
Sample Date	12/17/98	12/18/98	12/15/98	12/15/98	10/18/99	10/18/99	12/16/98	12/17/98
Sample Depth (feet bgs)	19	34	16	35	15	30	14	29
1,1,1-Trichloroethane (1,1,1-TCA)	<1	<1	1.4	<1	<0.500	<0.500	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
1,1-Dichloroethane (1,1-DCA)	<1	<1	9.9	<1	17.2	<0.500	37	4.5
1,1-Dichloroethene (1,1-DCE)	<1	<1	0.92	<1	0.719	<0.500	9.2	1.5
1,2,3-Trichlorobenzene	--	--	--	--	<0.500	<0.500	--	--
1,2,4-Trichlorobenzene	--	--	--	--	<0.500	<0.500	--	--
1,2,4-Trimethylbenzene	--	--	--	--	<0.500	<0.500	--	--
1,2-Dichlorobenzene	--	--	--	--	<0.500	<0.500	--	--
1,2-Dichloroethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
1,3,5-Trimethylbenzene	--	--	--	--	<0.500	<0.500	--	--
1,4-Dioxane	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<20	<20	--	--	<5.00	<5.00	<20	<20
4-Methyl-2-pentanone	<20	<20	--	--	<5.00	<5.00	<20	<20
Acetone	<20	<20	<20	<20	<10.0	<10.0	<20	<20
Benzene	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Bromoform	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Bromomethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Chloroethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Chloroform	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Chloromethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
cis-1,2-Dichloroethene (cis-1,2-DCE)	<1	2.1	<1	<1	6.96	<0.500	<1	<1
Dibromochloromethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Dichlorodifluormethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Ethylbenzene	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Hexachlorobutadiene	--	--	--	--	<0.500	<0.500	--	--
Isopropylbenzene	--	--	--	--	<0.500	<0.500	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-036	SB-036	SB-037	SB-037	SB-038	SB-038	SB-039	SB-039
Sample Date	12/17/98	12/18/98	12/15/98	12/15/98	10/18/99	10/18/99	12/16/98	12/17/98
Sample Depth (feet bgs)	19	34	16	35	15	30	14	29
m,p-Xylene	--	--	--	--	<0.500	<0.500	--	--
Methyl tert-butyl ether (MTBE)	<1	<1	<1	<1	2.84	<0.500	4.6	<1
Methylene chloride	<1	<1	<1	<1	<0.500	<0.500	<1	<1
n-Butylbenzene	--	--	--	--	<0.500	<0.500	--	--
n-Propylbenzene	--	--	--	--	<0.500	<0.500	--	--
Naphthalene	--	--	--	--	<0.500	<0.500	--	--
o-Xylene	--	--	--	--	<0.500	<0.500	--	--
p-Isopropyltoluene	--	--	--	--	<0.500	<0.500	--	--
sec-Butylbenzene	--	--	--	--	<0.500	<0.500	--	--
Tetrachloroethene (PCE)	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Toluene	<1	<1	<1	<1	<0.500	<0.500	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	0.531	<0.500	<1	<1
Trichloroethene (TCE)	<1	<1	<1	<1	4.80	<0.500	0.77	2.4
Trichlorofluoromethane	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Trichlorotrifluoroethane (Freon 113)	<1	<1	3.1	<1	<0.500	<0.500	<1	<1
Vinyl chloride (VC)	<1	<1	<1	<1	<0.500	<0.500	<1	<1
Xylenes (total)	<1	<1	<1	<1	--	--	<1	<1

Notes:

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-040	SB-040	SB-040	SB-040	SB-041	SB-041	SB-041
Sample Date	12/16/98	12/16/98	12/16/98	12/16/98	12/14/98	12/14/98	12/15/98
Sample Depth (feet bgs)	16	25	34	52	19	34	46
1,1,1-Trichloroethane (1,1,1-TCA)	<1	<1	1.5	<1	<1	25	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane (1,1-DCA)	<1	<1	5.1	<1	4.6	31	3.7
1,1-Dichloroethene (1,1-DCE)	<1	<1	<1	<1	<1	6.1	<1
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--	--	--	--
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--
1,4-Dioxane	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	<20	--	--	--
4-Methyl-2-pentanone	--	--	--	<20	--	--	--
Acetone	<20	<20	<20	<20	<20	<20	53
Benzene	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene (cis-1,2-DCE)	<1	<1	2	<1	<1	3.8	<1
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluormethane	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-040	SB-040	SB-040	SB-040	SB-041	SB-041	SB-041
Sample Date	12/16/98	12/16/98	12/16/98	12/16/98	12/14/98	12/14/98	12/15/98
Sample Depth (feet bgs)	16	25	34	52	19	34	46
m,p-Xylene	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<1	<1	<1	<1	<1	3.4	<1
Methylene chloride	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<1	<1	<1	<1	<1	0.96	<1
Toluene	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1
Trichloroethene (TCE)	<1	<1	<1	<1	<1	1.8	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Trichlorotrifluoroethane (Freon 113)	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride (VC)	<1	<1	<1	<1	<1	<1	<1
Xylenes (total)	<1	<1	<1	<1	<1	<1	<1

Notes:

µg/L = micrograms per liter

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-042	SB-043	SB-043	SB-043	SB-047	SB-047	SB-048	SB-048	SB-049
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/22/99	10/15/99	10/15/99	10/19/99
Sample Depth (feet bgs)	15	15	30	74	15	26	15	34	15
1,1,1-Trichloroethane (1,1,1-TCA)	1.54	106	0.526	<0.500	12.4	1.72	8.03	<0.500	29.6
1,1,2-Trichloroethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.41
1,1-Dichloroethane (1,1-DCA)	17.0	87.8	8.11	6.74	35.4	11.9	26.1	1.66	70.4
1,1-Dichloroethene (1,1-DCE)	10.7	71.3	1.12	<0.500	6.31	1.10	5.80	<0.500	35.9
1,2,3-Trichlorobenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
1,2,4-Trichlorobenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
1,2,4-Trimethylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
1,2-Dichlorobenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
1,2-Dichloroethane	0.536	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.14
1,3,5-Trimethylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
1,4-Dioxane	148	111	<50.0	<50.0	65.2	56.9	--	--	--
2-Butanone (MEK)	20.4	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0
4-Methyl-2-pentanone	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0
Acetone	102	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
Benzene	0.507	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Bromodichloromethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Bromoform	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Bromomethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Chloroethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Chloroform	2.18	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	2.19
Chloromethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.48	14.7	4.69	3.40	5.16	1.64	3.81	0.979	8.48
Dibromochloromethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Dichlorodifluormethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Ethylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Hexachlorobutadiene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Isopropylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00

Notes:

µg/L = micrograms per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-042	SB-043	SB-043	SB-043	SB-047	SB-047	SB-048	SB-048	SB-049
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/22/99	10/15/99	10/15/99	10/19/99
Sample Depth (feet bgs)	15	15	30	74	15	26	15	34	15
m,p-Xylene	<0.500	<1.00	<0.500	<0.500	1.27	0.804	<0.500	<0.500	<1.00
Methyl tert-butyl ether (MTBE)	0.784	5.67	<0.500	<0.500	4.58	1.84	4.32	<0.500	<1.00
Methylene chloride	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
n-Butylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
n-Propylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Naphthalene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.23
o-Xylene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
p-Isopropyltoluene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
sec-Butylbenzene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Tetrachloroethene (PCE)	<0.500	117	1.47	<0.500	<0.500	<0.500	<0.500	<0.500	1.15
Toluene	0.515	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
trans-1,2-Dichloroethene	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Trichloroethene (TCE)	1.17	45.0	<0.500	<0.500	0.581	<0.500	1.29	<0.500	12.0
Trichlorofluoromethane	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Trichlorotrifluoroethane (Freon 113)	0.769	101	<0.500	<0.500	<0.500	<0.500	0.924	<0.500	2.17
Vinyl chloride (VC)	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	SB-049	SB-057	SB-058	SB-059	SB-059	SB-060	SB-060	SB-061
Sample Date	10/19/99	10/19/99	12/6/99	12/10/99	12/9/99	12/9/99	12/7/99	12/7/99	12/2/99
Sample Depth (feet bgs)	30	68	20	25	30	70	20	32	16
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	3.13	7.39	93.6	<0.500	<0.500	28.1	23.0	10.6
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,1-Dichloroethane (1,1-DCA)	3.45	13.9	40.2	86.4	8.06	2.72	11.5	3.93	144
1,1-Dichloroethene (1,1-DCE)	1.33	1.96	8.50	49.4	<0.500	<0.500	2.68	<1.00	29.6
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,2-Dichloroethane	<0.500	0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
1,4-Dioxane	--	--	<50.0	<500	96.3	57.5	<50.0	<100	<250
2-Butanone (MEK)	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	<10.0	<25.0
4-Methyl-2-pentanone	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	<10.0	<25.0
Acetone	<10.0	11.7	<10.0	<100	<10.0	<10.0	<10.0	<20.0	<50.0
Benzene	0.826	<0.500	<0.500	<5.00	2.58	0.926	0.531	<1.00	2.74
Bromodichloromethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Bromoform	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Bromomethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Chloroethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Chloroform	<0.500	0.651	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Chloromethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
cis-1,2-Dichloroethene (cis-1,2-DCE)	10.1	2.30	9.57	13.5	0.951	0.677	<0.500	<1.00	2.97
Dibromochloromethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Ethylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Hexachlorobutadiene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Isopropylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	SB-049	SB-057	SB-058	SB-059	SB-059	SB-060	SB-060	SB-061
Sample Date	10/19/99	10/19/99	12/6/99	12/10/99	12/9/99	12/9/99	12/7/99	12/7/99	12/2/99
Sample Depth (feet bgs)	30	68	20	25	30	70	20	32	16
m,p-Xylene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	0.745	<1.00	<2.50
Methyl tert-butyl ether (MTBE)	<0.500	1.59	5.08	5.05	<0.500	<0.500	<0.500	<1.00	<2.50
Methylene chloride	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
n-Butylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
n-Propylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Naphthalene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
o-Xylene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
p-Isopropyltoluene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
sec-Butylbenzene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	32.8	<0.500	<0.500	<0.500	<1.00	45.3
Toluene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Trichloroethene (TCE)	<0.500	1.68	1.15	22.3	<0.500	<0.500	<0.500	<1.00	<2.50
Trichlorofluoromethane	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	383	<0.500	<0.500	<0.500	<1.00	286
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<2.50
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-061	SB-062	SB-062	SB-063	SB-063	SB-065	SB-065	SB-066	SB-066
Sample Date	12/7/99	12/6/99	12/6/99	12/7/99	12/8/99	12/9/99	12/10/99	12/28/99	12/28/99
Sample Depth (feet bgs)	32	20	32	22	33	32	15	17	36
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	6.49	<0.500	<0.500	<2.50	<0.500	316	56.8	6.31
1,1,2-Trichloroethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	67.4	0.774	<0.500	<2.50	<0.500	117	50.2	8.51
1,1-Dichloroethene (1,1-DCE)	<0.500	10.6	<0.500	<0.500	<2.50	<0.500	100	18.3	4.67
1,2,3-Trichlorobenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,2,4-Trichlorobenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,2,4-Trimethylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,2-Dichlorobenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,2-Dichloroethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,3,5-Trimethylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
1,4-Dioxane	<50.0	<500	<50.0	<50.0	<250	<50.0	<1000	<100	<50.0
2-Butanone (MEK)	<5.00	<50.0	<5.00	<5.00	<25.0	<5.00	<100	<10.0	<5.00
4-Methyl-2-pentanone	<5.00	<50.0	<5.00	<5.00	<25.0	<5.00	<100	<10.0	<5.00
Acetone	<10.0	<100	<10.0	<10.0	<50.0	<10.0	<200	<20.0	<10.0
Benzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	0.648
Bromodichloromethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Bromoform	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Bromomethane	<0.500	<5.00	<0.500	<0.500	3.49	<0.500	<10.0	<1.00	<0.500
Chloroethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	2.93
Chloroform	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Chloromethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	19.4	<0.500	<0.500	<2.50	<0.500	10.6	7.34	4.48
Dibromochloromethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Dichlorodifluormethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Ethylbenzene	1.83	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Hexachlorobutadiene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Isopropylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500

Notes:

µg/L = micrograms per liter

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-061	SB-062	SB-062	SB-063	SB-063	SB-065	SB-065	SB-066	SB-066
Sample Date	12/7/99	12/6/99	12/6/99	12/7/99	12/8/99	12/9/99	12/10/99	12/28/99	12/28/99
Sample Depth (feet bgs)	32	20	32	22	33	32	15	17	36
m,p-Xylene	8.23	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	4.03	1.18
Methylene chloride	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
n-Butylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
n-Propylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Naphthalene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
o-Xylene	3.00	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
p-Isopropyltoluene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
sec-Butylbenzene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Tetrachloroethene (PCE)	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	42.8	37.7	4.63
Toluene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
trans-1,2-Dichloroethene	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Trichloroethene (TCE)	<0.500	5.32	<0.500	<0.500	<2.50	<0.500	175	36.7	10.3
Trichlorofluoromethane	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	1460	219	12.6
Vinyl chloride (VC)	<0.500	<5.00	<0.500	<0.500	<2.50	<0.500	<10.0	<1.00	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-067	SB-068	SB-069	SB-070	SB-071	SB-072	SB-072	SB-073	SB-073
Sample Date	12/28/99	12/10/99	12/1/99	12/2/99	12/1/99	12/1/99	12/1/99	11/29/99	11/30/99
Sample Depth (feet bgs)	15	10	10	17	15	17	34	16	33.5
1,1,1-Trichloroethane (1,1,1-TCA)	72.4	<0.500	6.92	<0.500	2.27	1.18	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	52.3	<0.500	1.48	0.999	5.30	1.00	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	76.9	<0.500	3.10	<0.500	0.600	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<25.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
2-Butanone (MEK)	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
4-Methyl-2-pentanone	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<50.0	<10.0	<10.0	17.2	<10.0	13.8	<10.0	<10.0	12.4
Benzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	11.7	<0.500	7.59	0.525	4.54	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-067	SB-068	SB-069	SB-070	SB-071	SB-072	SB-072	SB-073	SB-073
Sample Date	12/28/99	12/10/99	12/1/99	12/2/99	12/1/99	12/1/99	12/1/99	11/29/99	11/30/99
Sample Depth (feet bgs)	15	10	10	17	15	17	34	16	33.5
m,p-Xylene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	3.28	0.866	<0.500	<0.500	3.46	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	39.1	<0.500	2.11	<0.500	3.37	<0.500	<0.500	<0.500	<0.500
Toluene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	142	<0.500	0.992	<0.500	2.86	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	174	<0.500	<0.500	<0.500	<0.500	0.963	<0.500	<0.500	0.957
Vinyl chloride (VC)	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-074	SB-075	SB-076	SB-083	SB-083	SB-084	SB-084	SB-085	SB-085
Sample Date	12/10/99	12/9/99	12/28/99	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Sample Depth (feet bgs)	16	12	15	5	15	10	15	6	10
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<5.00	147	24.0	196	133	46.3	159
1,1,2-Trichloroethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00 Jo
1,1-Dichloroethane (1,1-DCA)	9.63	2.33	10.4	23.1	95.8	223	147	44.7	128
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<5.00	10.5	43.0	64.5	77.8	8.97	76.9
1,2,3-Trichlorobenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
1,2,4-Trichlorobenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
1,2,4-Trimethylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
1,2-Dichlorobenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
1,2-Dichloroethane	<0.500	<0.500	<5.00	<2.50	<2.00 Jo	<5.00 Jo	<5.00 Jo	<1.00 Jo	<2.00 Jo
1,3,5-Trimethylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
1,4-Dioxane	<50.0	<50.0	<500	<250 UJ-	<200 UJ-	<500 UJ-	<500 UJ-	<100 Jo UJ-	<200 Jo UJ-
2-Butanone (MEK)	<5.00	<5.00	<50.0	<25.0	<20.0	<50.0	<50.0	<10.0	<20.0
4-Methyl-2-pentanone	<5.00	<5.00	<50.0	<25.0	<20.0	<50.0	<50.0	<10.0	<20.0
Acetone	<10.0	<10.0	<100	<50.0 Jo	<40.0	<100	<100	<20.0 Jo	<40.0
Benzene	<0.500	<0.500	<5.00	<2.50 UJ-	<2.00 Jo	<5.00	<5.00 UJ-	<1.00 Jo	<2.00 Jo
Bromodichloromethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Bromoform	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Bromomethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Chloroethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00 Jo	<5.00	<1.00 Jo	<2.00 Jo
Chloroform	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00 Jo	<2.00 Jo
Chloromethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.24	<0.500	<5.00	11.0	53.8	112	71.2	44.0	56.6
Dibromochloromethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Dichlorodifluormethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Ethylbenzene	<0.500	<0.500	<5.00	<2.50 UJ-	<2.00	<5.00	<5.00 UJ-	<1.00	<2.00
Hexachlorobutadiene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Isopropylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-074	SB-075	SB-076	SB-083	SB-083	SB-084	SB-084	SB-085	SB-085
Sample Date	12/10/99	12/9/99	12/28/99	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Sample Depth (feet bgs)	16	12	15	5	15	10	15	6	10
m,p-Xylene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<5.00	<2.50	4.88	<5.00 Jo	5.75	<1.00 Jo	5.18
Methylene chloride	<0.500	<0.500	<5.00	<2.50	<2.00 Jo	<5.00	<5.00 Jo	<1.00	<2.00
n-Butylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
n-Propylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Naphthalene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00 Jo	<5.00	<1.00	<2.00
o-Xylene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
p-Isopropyltoluene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
sec-Butylbenzene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Tetrachloroethene (PCE)	<0.500	<0.500	161	97.6	<2.00 Jo	280	113	25.0	59.3
Toluene	<0.500	<0.500	<5.00	<2.50 UJ-	<2.00	<5.00	<5.00 UJ-	<1.00 Jo	<2.00
trans-1,2-Dichloroethene	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00 Jo	<2.00
Trichloroethene (TCE)	<0.500	<0.500	<5.00	47.1	13.3	148	163	26.8	145
Trichlorofluoromethane	<0.500	<0.500	<5.00	<2.50	<2.00	<5.00	<5.00	<1.00	<2.00
Trichlorotrifluoroethane (Freon 113)	26.2	<0.500	459	4.26	<2.00 Jo	16.1	17.1	<1.00 Jo	14.8
Vinyl chloride (VC)	<0.500	<0.500	<5.00	<2.50	<2.00 Jo	<5.00 Jo	<5.00 Jo	<1.00 Jo	<2.00 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-085	SB-086	SB-086	SB-087	SB-087	SB-088	SB-088	SB-089	SB-089
Sample Date	6/5/00	6/5/00	6/6/00	6/6/00	6/6/00	6/6/00	6/6/00	7/25/00	7/25/00
Sample Depth (feet bgs)	16	10	16	12	17	10	16	10	15
1,1,1-Trichloroethane (1,1,1-TCA)	155	172	130	28.7	668	<250 Jo	114	130	94.0
1,1,2-Trichloroethane	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,1-Dichloroethane (1,1-DCA)	129	89.8	76.3	14.5	174	<250	<100 Jo	110	84.0
1,1-Dichloroethene (1,1-DCE)	70.2	80.1	41.2	8.32	149	<250	<100 Jo	110	110
1,2,3-Trichlorobenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,2,4-Trichlorobenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,2,4-Trimethylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,2-Dichlorobenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,2-Dichloroethane	<2.50 Jo	<2.50 Jo	<2.50 Jo	<0.500 Jo	<25.0	<250	<100	<5.00	1.30
1,3,5-Trimethylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
1,4-Dioxane	<250 Jo UJ-	<250 UJ-	<250 UJ-	<50.0 UJ-	<2500 UJ-	<25000 UJ-	<10000 UJ-	<500 R	140 J-
2-Butanone (MEK)	<25.0	<25.0	<25.0	<5.00	<250	<2500	<1000	--	--
4-Methyl-2-pentanone	<25.0	<25.0	<25.0	<5.00	<250	<2500	<1000	--	--
Acetone	<50.0	<50.0	<50.0	<10.0 Jo	<500	<5000	<2000	--	--
Benzene	<2.50 Jo	<2.50 Jo UJ-	<2.50 Jo	<0.500 Jo	<25.0 UJ-	<250	<100	<5.00	0.910
Bromodichloromethane	<2.50	<2.50	<2.50	<0.500 Jo	<25.0	<250	<100	<5.00	<0.500
Bromoform	<2.50	<2.50	<2.50	<0.500 Jo	<25.0	<250	<100	<5.00	<0.500
Bromomethane	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Chloroethane	<2.50 Jo	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Chloroform	<2.50	<2.50	<2.50	<0.500 Jo	<25.0	<250	<100 Jo	<5.00	<0.500
Chloromethane	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	55.2	60.1	49.2	9.59	37.4	<250 Jo	111	28.0	29.0
Dibromochloromethane	<2.50	<2.50	<2.50	0.521	<25.0	<250	<100	<5.00	<0.500
Dichlorodifluoromethane	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Ethylbenzene	<2.50	<2.50 UJ-	<2.50	<0.500	<25.0 UJ-	<250	<100	<5.00	<0.500
Hexachlorobutadiene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Isopropylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-085	SB-086	SB-086	SB-087	SB-087	SB-088	SB-088	SB-089	SB-089
Sample Date	6/5/00	6/5/00	6/6/00	6/6/00	6/6/00	6/6/00	6/6/00	7/25/00	7/25/00
Sample Depth (feet bgs)	16	10	16	12	17	10	16	10	15
m,p-Xylene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	--	--
Methyl tert-butyl ether (MTBE)	5.43	4.28	3.69	0.665	<25.0 Jo	<250	<100	<5.00	4.80
Methylene chloride	<2.50 Jo	<2.50 Jo	<2.50	<0.500	<25.0	<250	<100	<10.0	1.50
n-Butylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
n-Propylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Naphthalene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<10.0	<1.00
o-Xylene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	--	--
p-Isopropyltoluene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
sec-Butylbenzene	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Tetrachloroethene (PCE)	54.8	55.3	48.1	30.4	112	10300	3620	740	950
Toluene	<2.50	<2.50 UJ-	<2.50	<0.500 Jo	<25.0 UJ-	<250	<100	<5.00	<0.500
trans-1,2-Dichloroethene	<2.50	<2.50	<2.50 Jo	<0.500 Jo	<25.0	<250	<100	<5.00	<0.500
Trichloroethene (TCE)	138	85.6	68.4	11.4	263	742	319	180	140
Trichlorofluoromethane	<2.50	<2.50	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Trichlorotrifluoroethane (Freon 113)	14.1	6.18	3.47	<0.500 Jo	41.5	<250	<100	22.0	20.0
Vinyl chloride (VC)	<2.50 Jo	<2.50 Jo	<2.50	<0.500	<25.0	<250	<100	<5.00	<0.500
Xylenes (total)	--	--	--	--	--	--	--	<5.00	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-090	SB-091	SB-091	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097
Sample Date	7/25/00	7/25/00	7/25/00	7/26/00	7/26/00	7/27/00	7/27/00	7/27/00	7/27/00
Sample Depth (feet bgs)	12	10	15	16	16	16	16	16	16
1,1,1-Trichloroethane (1,1,1-TCA)	110	14.0	11.0	50.0	13.0	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	110	54.0	45.0	24.0	16.0	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	85.0	19.0	15.0	64.0	21.0	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	0.950	<0.500	<0.500	0.680 J-	<0.500	<0.500	0.740	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	75.0 J-	<50.0 Jo R	55.0 J-	<50.0 R	<50.0 Jo R	<50.0 R	<50.0 R	<50.0 UJ-	<50.0 R
2-Butanone (MEK)	--	--	--	--	--	--	--	<5.00	5.08
4-Methyl-2-pentanone	--	--	--	--	--	--	--	<5.00	<5.00
Acetone	--	--	--	--	--	--	--	<10.0	25.6
Benzene	0.760	0.570	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.0971
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 UJ+
Chloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.500	<0.500	<0.500	0.590	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	34.0	110	88.0	9.00	3.40	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-090	SB-091	SB-091	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097
Sample Date	7/25/00	7/25/00	7/25/00	7/26/00	7/26/00	7/27/00	7/27/00	7/27/00	7/27/00
Sample Depth (feet bgs)	12	10	15	16	16	16	16	16	16
m,p-Xylene	--	--	--	--	--	--	--	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	3.50	1.50	1.30	13.0	2.00	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<1.00	<1.00	1.40	<1.40 U	<1.00	<1.00	<1.00	0.120	0.112
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.115	<0.500
o-Xylene	--	--	--	--	--	--	--	<0.500	<0.500
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	740	98.0	99.0	3.10	0.890	<0.500	<0.500	<0.500	<0.500
Toluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.0799
trans-1,2-Dichloroethene	<0.500	0.890	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	130	78.0	64.0	110	44.0	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	44.0	41.0	21.0	55.0	11.0	<0.500	<0.500	<0.500	<0.500
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	<0.500	<0.500	1.00	<0.500	<0.500	<0.500	<0.500	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098
Sample Date	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00
Sample Depth (feet bgs)	16	24	32	42	50	61	69	76	87
1,1,1-Trichloroethane (1,1,1-TCA)	289	0.504	<0.500 Jo	3.41	8.19	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	149	<0.500 Jo	<0.500 Jo	1.63	4.14	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	568	0.880	0.510	5.92	13.7	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<20.0	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<20.0	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<20.0 Jo	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<4000 Jo UJ-	<100 UJ-	<100 UJ-	234 J-	<100 UJ-	<100 UJ-	<100 UJ-	<100 UJ-	<100 UJ-
2-Butanone (MEK)	<200	<5.00	<5.00	<5.00 Jo	<5.00 Jo	<5.00	<5.00	<5.00	<5.00
4-Methyl-2-pentanone	<200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<400	<10.0	<10.0	<10.0 Jo	<10.0 Jo	<10.0	<10.0 Jo	<10.0	<10.0 Jo
Benzene	<20.0	<0.500	<0.500 Jo	<0.500 Jo UJ-	<0.500 Jo	<0.500 Jo	<0.500 Jo UJ-	<0.500 Jo	<0.500
Bromodichloromethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo
cis-1,2-Dichloroethene (cis-1,2-DCE)	26.9	<0.500 Jo	<0.500	0.709	1.27	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<20.0	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500
Hexachlorobutadiene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098	SB-098
Sample Date	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00	10/11/00
Sample Depth (feet bgs)	16	24	32	42	50	61	69	76	87
m,p-Xylene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<20.0	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<20.0 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo
n-Butylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<20.0	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<20.0	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500
Toluene	<20.0	<0.500	<0.500	<0.500 Jo UJ-	<0.500 Jo	<0.500 Jo	<0.500 Jo UJ-	<0.500	<0.500
trans-1,2-Dichloroethene	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<20.0 Jo	<0.500 Jo	<0.500	0.570	1.12	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<20.0 Jo	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500
Vinyl chloride (VC)	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-105	SB-106	SB-109	SB-110	SB-111	SB-112	SB-113	SB-116	SB-117
Sample Date	11/15/00	11/15/00	11/15/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	7	7	7	16	16	16	5	5	4
1,1,1-Trichloroethane (1,1,1-TCA)	103 J-	60.3 J-	30.4	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,1,2-Trichloroethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	56.9 J-	33.8 J-	12.3	0.548	<0.500	<0.500 Jo	<1.00	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	35.2 J-	18.8 J-	11.6	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,2,3-Trichlorobenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,2,4-Trichlorobenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,2,4-Trimethylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,2-Dichlorobenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,2-Dichloroethane	<2.50 Jo UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,3,5-Trimethylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
1,4-Dioxane	<500 UJ-	<400 UJ-	<100 UJ-	<100 R	<100 R	<100 R	<200 UJ-	<100 UJ-	<100 UJ-
2-Butanone (MEK)	<25.0 UJ-	<20.0 UJ-	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
4-Methyl-2-pentanone	<25.0 UJ-	<20.0 UJ-	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00
Acetone	<50.0 UJ-	<40.0 UJ-	<10.0	<10.0 Jo	<10.0 Jo	<10.0 Jo	<20.0	<10.0	<10.0
Benzene	<2.50 UJ-	<2.00 UJ-	<0.500 Jo	<0.500 Jo UJ-	<0.500 UJ-	<0.500 Jo	<1.00	<0.500	<0.500
Bromodichloromethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Bromoform	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Bromomethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Chloroethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Chloroform	<2.50 UJ-	<2.00 Jo UJ-	<0.500 Jo	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Chloromethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	49.0 J-	25.5 J-	5.68	<0.500	<0.500	<0.500	0.732	<0.500	<0.500
Dibromochloromethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Dichlorodifluoromethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Ethylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500 UJ-	<0.500 UJ-	<0.500	<1.00	<0.500	<0.500
Hexachlorobutadiene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Isopropylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-105	SB-106	SB-109	SB-110	SB-111	SB-112	SB-113	SB-116	SB-117
Sample Date	11/15/00	11/15/00	11/15/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	7	7	7	16	16	16	5	5	4
m,p-Xylene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<2.50 Jo UJ-	<2.00 Jo UJ-	2.40	4.37	<0.500	2.65	<1.00 Jo	1.08	<0.500 Jo
Methylene chloride	<2.50 Jo UJ-	<2.00 Jo UJ-	<0.500 Jo	<0.500	<0.500	<0.500	<1.00 Jo	<0.500	<0.500
n-Butylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
n-Propylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Naphthalene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
o-Xylene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
p-Isopropyltoluene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
sec-Butylbenzene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Tetrachloroethene (PCE)	112 J-	71.0 J-	36.5	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Toluene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500 UJ-	<0.500 Jo UJ-	<0.500	<1.00	<0.500	<0.500
trans-1,2-Dichloroethene	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Trichloroethene (TCE)	85.9 J-	56.0 J-	35.0	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Trichlorofluoromethane	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	5.60 J-	3.56 J-	2.00	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Vinyl chloride (VC)	<2.50 UJ-	<2.00 UJ-	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-121	SB-122	SB-123	SB-124	SB-125	SB-126	SB-127	SB-129
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00
Sample Depth (feet bgs)	20	16	12	20	24	16	20	12	16
1,1,1-Trichloroethane (1,1,1-TCA)	<125	<1.25 Jo	7.79	3210	944	217	<50.0	<50.0 Jo	0.826
1,1,2-Trichloroethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,1-Dichloroethane (1,1-DCA)	<125 Jo	1.34	7.11	406	414	649	<20.0 Jo	150	0.589
1,1-Dichloroethene (1,1-DCE)	<125 Jo	<1.25 Jo	6.37	2970	303	349	<20.0 Jo	118	<0.500 Jo
1,2,3-Trichlorobenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,2,4-Trichlorobenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,2,4-Trimethylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,2-Dichlorobenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,2-Dichloroethane	<125	<1.25	<2.50	<100 Jo	<20.0 Jo	<20.0	<20.0	<50.0	<0.500
1,3,5-Trimethylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
1,4-Dioxane	<25000 R	<250 R	<500 R	<20000 R	<4000 UJ-	<4000 UJ-	<4000 UJ-	<10000 UJ-	<100 UJ-
2-Butanone (MEK)	<1250	<12.5	<25.0	<1000	<200	<200	<200	<500	<5.00
4-Methyl-2-pentanone	<1250	<12.5	<25.0	<1000	<200	<200	<200	<500	<5.00
Acetone	<2500	<25.0	<50.0	<2000	<400	<400	<400	<1000	<10.0 Jo
Benzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Bromodichloromethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Bromoform	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Bromomethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Chloroethane	<125	<1.25	<2.50	<100	<20.0 Jo	59.0	<20.0	<50.0	<0.500
Chloroform	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Chloromethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	5120	43.5	96.5	333	42.2	61.8	<20.0	2800	<0.500 Jo
Dibromochloromethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Dichlorodifluoromethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Ethylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500 Jo
Hexachlorobutadiene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Isopropylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-121	SB-122	SB-123	SB-124	SB-125	SB-126	SB-127	SB-129
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00
Sample Depth (feet bgs)	20	16	12	20	24	16	20	12	16
m,p-Xylene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	0.579
Methyl tert-butyl ether (MTBE)	<125	<1.25 Jo	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500 Jo
Methylene chloride	<125	<1.25	<2.50	<100	<20.0 Jo	<20.0 Jo	<20.0 Jo	<50.0 Jo	<0.500 Jo
n-Butylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
n-Propylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Naphthalene	<125	<1.25	<2.50	<100	<20.0	<20.0	24.0	<50.0	<0.500
o-Xylene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500 Jo
p-Isopropyltoluene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
sec-Butylbenzene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Tetrachloroethene (PCE)	885	4.39	11.6	1140	<20.0	<20.0	<20.0	<50.0	<0.500
Toluene	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500 Jo
trans-1,2-Dichloroethene	<125 Jo	<1.25 Jo	<2.50 Jo	<100	<20.0	<20.0	<20.0	<50.0 Jo	<0.500
Trichloroethene (TCE)	354	2.14	8.12	862	<20.0 Jo	<20.0	<20.0	188	<0.500
Trichlorofluoromethane	<125	<1.25	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Trichlorotrifluoroethane (Freon 113)	<125	<1.25	<2.50	<100 Jo	<20.0	<20.0	<20.0	<50.0	<0.500
Vinyl chloride (VC)	<125	<1.25 Jo	<2.50	<100	<20.0	<20.0	<20.0	<50.0	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-129	SB-130	SB-130	SB-135	SB-136	SB-137	SB-138	SB-139	SB-140
Sample Date	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	2/23/01
Sample Depth (feet bgs)	32	12	33	16	16	18	12	18	8
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500 Jo	<0.500	3.10	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500 Jo	<0.500	14.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	3.71
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	7.96	<0.500	<0.500	<0.500	<0.500	2.05
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500 Jo
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<100 UJ-	<100 UJ-	<100 UJ-	<100 Jo	<100	<100	<100	<100	101
2-Butanone (MEK)	<5.00 Jo	<5.00 Jo	<5.00 Jo	<5.00	<5.00 Jo	<5.00	<5.00	<5.00	23.5
4-Methyl-2-pentanone	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<10.0 Jo	<10.0 Jo	17.7	<10.0	10.5	<10.0 Jo	<10.0	<10.0 Jo	<10.0 Jo
Benzene	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500 Jo
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.74
Bromoform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	2.04
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	4.21
Chloroform	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	11.8
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500 Jo	<0.500	0.762	0.871	<0.500	<0.500	<0.500	2.28
Dibromochloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.35
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.619	<0.500	<0.500
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-129	SB-130	SB-130	SB-135	SB-136	SB-137	SB-138	SB-139	SB-140
Sample Date	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	2/23/01
Sample Depth (feet bgs)	32	12	33	16	16	18	12	18	8
m,p-Xylene	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	2.94	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500 Jo	<0.500	0.978	<0.500	<0.500	<0.500 Jo	1.45	<0.500 Jo
Methylene chloride	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<1.15 U
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500
o-Xylene	<0.500	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500	1.18	<0.500	<0.500
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	<0.500 Jo	<0.500 Jo	<0.500 Jo	0.569	<0.500	<0.500	<0.500 Jo	<0.500	<0.500 Jo
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo
Trichloroethene (TCE)	<0.500	<0.500	<0.500	2.19	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	11.6	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	0.527
Xylenes (total)	--	--	--	--	--	--	--	--	--

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TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-142	SB-146	SB-147	SB-158	SB-159	SB-160	SB-161	SB-162
Sample Date	1/10/01	12/15/00	1/10/01	1/8/01	1/8/01	1/8/01	2/23/01	2/23/01	2/23/01
Sample Depth (feet bgs)	16	3	12	16	16	16	8	8	8
1,1,1-Trichloroethane (1,1,1-TCA)	1060	<0.500	16.0	6.55	<125	8.65	16.9	7.37	1640
1,1,2-Trichloroethane	<125	<0.500	<0.500	<0.500	<125	2.57	<0.500 Jo	<0.500	<50.0
1,1-Dichloroethane (1,1-DCA)	1130	<0.500 Jo	35.9	2.66	<125	167	9.04	48.3	124
1,1-Dichloroethene (1,1-DCE)	3730	<0.500	3.55	<0.500	<125	120	14.9	1.90	<50.0
1,2,3-Trichlorobenzene	<125 Jo	<0.500 Jo	<0.500	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
1,2,4-Trichlorobenzene	<125	<0.500 Jo	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
1,2,4-Trimethylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
1,2-Dichlorobenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500	<50.0
1,2-Dichloroethane	<125 Jo	<0.500	<0.500	<0.500	<125	3.21	<0.500 Jo	<0.500 Jo	<50.0
1,3,5-Trimethylbenzene	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
1,4-Dioxane	<25000	<100 UJ-	<100 Jo	<100 Jo R	<25000 R	<400 Jo R	<100 Jo	<100 Jo	<10000
2-Butanone (MEK)	<1250	5.30	<5.00	<5.00	<1250	<20.0	<5.00 Jo	<5.00	<500
4-Methyl-2-pentanone	<1250	<5.00	<5.00	<5.00	<1250	<20.0	<5.00	<5.00	<500
Acetone	<2500	102 J	<10.0 Jo	<10.0	<2500	<40.0	77.6	<10.0 Jo	<1000
Benzene	<125	<0.500 Jo	<0.500 Jo	<0.500 Jo	<125	<2.00 Jo	<0.500 Jo UJ-	<0.500 Jo	<50.0
Bromodichloromethane	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Bromoform	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Bromomethane	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Chloroethane	<125 Jo	<0.500	0.602	<0.500	<125	2.29	<0.500	8.79	<50.0
Chloroform	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00 Jo	<0.500	<0.500	<50.0
Chloromethane	<125	<0.500 Jo	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500	<50.0
cis-1,2-Dichloroethene (cis-1,2-DCE)	349	<0.500	9.55	<0.500	4340	20.8	1.68	1.69	<50.0 Jo
Dibromochloromethane	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Dichlorodifluoromethane	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Ethylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500 UJ-	<0.500	<50.0
Hexachlorobutadiene	<125 Jo	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Isopropylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500	<50.0

Notes:

µg/L = micrograms per liter

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< = less than

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-141	SB-142	SB-146	SB-147	SB-158	SB-159	SB-160	SB-161	SB-162
Sample Date	1/10/01	12/15/00	1/10/01	1/8/01	1/8/01	1/8/01	2/23/01	2/23/01	2/23/01
Sample Depth (feet bgs)	16	3	12	16	16	16	8	8	8
m,p-Xylene	<125	<0.500 Jo	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Methyl tert-butyl ether (MTBE)	<125	<0.500 Jo	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
Methylene chloride	<125 Jo	<0.500 Jo	<0.500	<0.500 Jo	<125	<2.00	<0.500 Jo	1.17	<50.0 Jo
n-Butylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
n-Propylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Naphthalene	<125 Jo	<0.500 Jo	1.79	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
o-Xylene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500	<50.0
p-Isopropyltoluene	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
sec-Butylbenzene	<125	<0.500	<0.500 Jo	<0.500	<125	<2.00	<0.500	<0.500 Jo	<50.0
Tetrachloroethene (PCE)	<125	<0.500	25.1	<0.500	394	<2.00 Jo	1.04	0.818	<50.0
Toluene	<125	0.567	<0.500 Jo	<0.500	<125	<2.00	<0.500 Jo UJ-	<0.500 Jo	<50.0
trans-1,2-Dichloroethene	<125	<0.500	<0.500	<0.500	<125 Jo	<2.00 Jo	<0.500	<0.500	<50.0
Trichloroethene (TCE)	<125 Jo	<0.500	8.24	<0.500	219	4.38	1.59	0.501	<50.0
Trichlorofluoromethane	<125	<0.500	<0.500	<0.500	<125	<2.00	<0.500	<0.500	<50.0
Trichlorotrifluoroethane (Freon 113)	<125	<0.500	2.18	<0.500	<125	<2.00	<0.500 Jo	<0.500	<50.0
Vinyl chloride (VC)	<125	<0.500	<0.500	<0.500	<125	2.22	<0.500	<0.500 Jo	<50.0
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-163	SB-164	SB-165	SB-166	SB-167	SB-168	SB-169	SB-170	SB-171
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/23/01
Sample Depth (feet bgs)	8	20	20	12	20	16	16	16	12
1,1,1-Trichloroethane (1,1,1-TCA)	<1000	<0.500	4.03	<0.500	<0.500 UJ-	<0.500	8.67	<0.500 Jo	47.5
1,1,2-Trichloroethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,1-Dichloroethane (1,1-DCA)	<1000	<0.500	22.9	26.5	5.65 J-	30.7	29.8	18.5	61.5
1,1-Dichloroethane (1,1-DCE)	<1000	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo UJ-	3.01	0.631	<0.500	84.7
1,2,3-Trichlorobenzene	<1000 Jo	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,2,4-Trichlorobenzene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,2,4-Trimethylbenzene	<1000 Jo	1.69	<0.500 Jo	<0.500	<0.500 Jo UJ-	<0.500	<0.500	<0.500	<25.0
1,2-Dichlorobenzene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,2-Dichloroethane	<1000	<0.500	<0.500 Jo	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,3,5-Trimethylbenzene	<1000	0.552	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
1,4-Dioxane	<200000	<100	118	<100 Jo	<100 Jo UJ-	<100 Jo	<100 Jo	109	<5000
2-Butanone (MEK)	<10000	<5.00	<5.00 Jo	<5.00 Jo	<5.00 UJ-	<5.00	<5.00	<5.00 Jo	<250
4-Methyl-2-pentanone	<10000	<5.00	5.71	<5.00	<5.00 UJ-	<5.00	<5.00	<5.00	<250
Acetone	<20000	<10.0	<10.0 Jo	<10.0 Jo	<10.0 UJ-	<10.0	<10.0	<10.0 Jo	<500
Benzene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500 Jo	<25.0
Bromodichloromethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Bromoform	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Bromomethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Chloroethane	<1000	<0.500	<0.500 Jo	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Chloroform	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500 Jo	<25.0
Chloromethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
cis-1,2-Dichloroethene (cis-1,2-DCE)	<1000	<0.500	7.78	0.646	0.856 J-	7.34	1.50	<0.500 Jo	1560
Dibromochloromethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Dichlorodifluoromethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Ethylbenzene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Hexachlorobutadiene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Isopropylbenzene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-163	SB-164	SB-165	SB-166	SB-167	SB-168	SB-169	SB-170	SB-171
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/23/01
Sample Depth (feet bgs)	8	20	20	12	20	16	16	16	12
m,p-Xylene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Methyl tert-butyl ether (MTBE)	<1000	<0.500	<0.500 Jo	4.67	3.30 J-	6.74	3.47	0.824	<25.0
Methylene chloride	<1000	<0.500	<0.500	<0.500	<0.500 Jo UJ-	<0.500	<0.500	<0.500	<25.0 Jo
n-Butylbenzene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
n-Propylbenzene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Naphthalene	<1000 Jo	0.976	<0.500 Jo	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
o-Xylene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
p-Isopropyltoluene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
sec-Butylbenzene	<1000	<0.500 Jo	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Tetrachloroethene (PCE)	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500 Jo	<25.0
Toluene	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500 Jo	<0.500	<0.500 Jo	<25.0
trans-1,2-Dichloroethene	<1000	<0.500	<0.500 Jo	<0.500	<0.500 UJ-	<0.500 Jo	<0.500	<0.500	<25.0 Jo
Trichloroethene (TCE)	<1000	<0.500	3.24	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500 Jo	<25.0 Jo
Trichlorofluoromethane	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Trichlorotrifluoroethane (Freon 113)	<1000	<0.500	<0.500	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<25.0
Vinyl chloride (VC)	<1000	<0.500	<0.500 Jo	<0.500 Jo	<0.500 UJ-	0.569	<0.500 Jo	<0.500	<25.0 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-172	SB-173	SB-174	W19A	W21A	W22A	W24A
Sample Date	2/23/01	2/23/01	2/23/01	3/28/00	10/20/99	10/14/99	10/14/99
Sample Depth (feet bgs)	8	16	8	40	15	17	15
1,1,1-Trichloroethane (1,1,1-TCA)	18.5	10.3	524	<0.500	32.0	0.510	18.2
1,1,2-Trichloroethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
1,1-Dichloroethane (1,1-DCA)	70.6	184	236	0.588	136	4.08	27.3
1,1-Dichloroethene (1,1-DCE)	42.7	50.9	732	<0.500	49.1	0.952	57.2
1,2,3-Trichlorobenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
1,2,4-Trichlorobenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
1,2,4-Trimethylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	0.665	<1.00
1,2-Dichlorobenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
1,2-Dichloroethane	<10.0	<2.50 Jo	<25.0 Jo	<0.500	2.85	<0.500	<1.00
1,3,5-Trimethylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
1,4-Dioxane	<2000	<500	<5000	<50.0	--	--	--
2-Butanone (MEK)	<100	<25.0	<250	<5.00	<25.0	<5.00	<10.0
4-Methyl-2-pentanone	<100	<25.0	<250	<5.00	<25.0	<5.00	<10.0
Acetone	<200	<50.0	<500	14.1	<50.0	<10.0	<20.0
Benzene	<10.0	<2.50 Jo UJ-	<25.0	<0.500	<2.50	<0.500	<1.00
Bromodichloromethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Bromoform	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Bromomethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Chloroethane	<10.0	<2.50 Jo	<25.0	<0.500	<2.50	<0.500	<1.00
Chloroform	<10.0	<2.50	<25.0	<0.500	4.06	<0.500	<1.00
Chloromethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	344	5.28	97.1	0.686	5.89	0.705	15.8
Dibromochloromethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Dichlorodifluormethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Ethylbenzene	<10.0	<2.50 UJ-	<25.0	<0.500	<2.50	<0.500	<1.00
Hexachlorobutadiene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Isopropylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-172	SB-173	SB-174	W19A	W21A	W22A	W24A
Sample Date	2/23/01	2/23/01	2/23/01	3/28/00	10/20/99	10/14/99	10/14/99
Sample Depth (feet bgs)	8	16	8	40	15	17	15
m,p-Xylene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Methyl tert-butyl ether (MTBE)	<10.0	<2.50	<25.0	1.02	<2.50	<0.500	<1.00
Methylene chloride	<10.0	<2.50 Jo	<25.0 Jo	<0.500	<2.50	<0.500	<1.00
n-Butylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
n-Propylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Naphthalene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
o-Xylene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
p-Isopropyltoluene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
sec-Butylbenzene	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Tetrachloroethene (PCE)	<10.0	<2.50	86.4	<0.500	<2.50	<0.500	<1.00
Toluene	<10.0	<2.50 Jo UJ-	<25.0	<0.500	<2.50	<0.500	<1.00
trans-1,2-Dichloroethene	<10.0 Jo	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Trichloroethene (TCE)	69.6	<2.50	87.6	<0.500	5.67	<0.500	3.16
Trichlorofluoromethane	<10.0	<2.50	<25.0	<0.500	<2.50	<0.500	<1.00
Trichlorotrifluoroethane (Freon 113)	<10.0	<2.50	<25.0	<0.500	6.86	<0.500	7.06
Vinyl chloride (VC)	<10.0 Jo	<2.50 Jo	<25.0	<0.500	<2.50	<0.500	<1.00
Xylenes (total)	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-004	SB-007	SB-009	SB-012	SB-013	SB-014	SB-015
Sample Date	10/14/99	10/19/99	10/19/99	10/21/99	10/22/99	10/22/99	10/22/99	10/20/99
Sample Depth (feet bgs)	14	12	12	12	12	11	16	12
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	0.164	2860	2550	<0.0500	0.0693	0.293	0.484	0.527
TPH-gasoline	<0.0500	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-017	SB-018	SB-019	SB-020	SB-024	SB-027	SB-029	SB-030
Sample Date	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/18/99	3/22/00	3/22/00
Sample Depth (feet bgs)	12	12	16	12	16	12	17	16
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	<0.0500	0.453	0.271	16.1	0.197	--	0.106	<0.0500
TPH-gasoline	--	--	--	--	--	<0.0500	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-031	SB-032	SB-033	SB-044	SB-045	SB-046	SB-050	SB-051
Sample Date	3/22/00	10/18/99	10/22/99	10/21/99	10/21/99	10/22/99	10/22/99	10/22/99
Sample Depth (feet bgs)	17	14	12	12	12	12	14	12
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	0.0794	0.146	0.337	0.218	0.638	0.211	1.88	0.199
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-058	SB-060	SB-060	SB-061	SB-062	SB-066	SB-080	SB-081
Sample Date	12/10/99	12/7/99	12/8/99	12/2/99	12/6/99	12/28/99	3/23/00	3/22/00
Sample Depth (feet bgs)	25	20	20	16	20	17	8	17
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	0.444	--	0.162	0.287	18.3	0.101	0.0558	0.112
TPH-gasoline	0.0736	0.0617	--	0.0541	1.10	0.0661	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-082	SB-089	SB-089	SB-090	SB-091	SB-091	SB-092	SB-093
Sample Date	3/23/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00	7/26/00	7/26/00
Sample Depth (feet bgs)	8	10	15	12	10	15	16	16
Diesel Range Hydrocarbons	--	0.107 Jy	706 Jy+	0.161 Jy	0.664 Jy	0.494 Jy	0.0651 Jy	0.0626 Jy
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	<0.0500	--	--	--	--	--	--	--
TPH-gasoline	<0.0500	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-094	SB-095	SB-096	SB-097	SB-105	SB-106	SB-109	SB-110
Sample Date	7/27/00	7/27/00	7/27/00	7/27/00	11/15/00	11/15/00	11/15/00	12/6/00
Sample Depth (feet bgs)	16	16	16	16	7	7	7	16
Diesel Range Hydrocarbons	0.0926 Jy	0.0628 Jy	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	--	--	<0.0500	0.660	0.107 Jy	0.0529 Jy	<0.0769	0.601 Jy-
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-111	SB-112	SB-113	SB-116	SB-117	SB-120	SB-121	SB-122
Sample Date	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00	12/6/00	12/6/00	12/6/00
Sample Depth (feet bgs)	16	16	5	5	4	20	16	12
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	<0.0500 Jo	0.0596 NJx	<0.0625 UJ-	<0.0500	<0.0833	0.0586 NJx	0.0792 NJx	0.0596 NJx
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-123	SB-124	SB-125	SB-126	SB-127	SB-129	SB-129	SB-130
Sample Date	12/6/00	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00	12/8/00	12/8/00
Sample Depth (feet bgs)	20	24	16	20	12	16	32	12
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	0.169 NJz+	0.241 J-	0.453 J-	5.05	85.5 J-	0.164 NJz+	4.43 J-	0.141 NJx
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-130	SB-135	SB-136	SB-137	SB-138	SB-139	SB-141
Sample Date	12/8/00	1/16/01	1/16/01	1/16/01	1/16/01	1/16/01	1/10/01
Sample Depth (feet bgs)	33	16	16	18	12	18	16
Diesel Range Hydrocarbons	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
TPH-diesel	0.266 NJz+	<0.0500	<0.0500 Jo UJ-	0.0562 Jy-	0.190 Jy-	<0.0500 Jo	46.0
TPH-gasoline	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-142	SB-146	SB-163	SB-164	SB-165	SB-166	SB-167	SB-168
Sample Date	12/15/00	1/10/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	3	12	8	20	20	12	20	16
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	--	--	<2.50	<0.0500 UJ-	<0.0500	<0.0500	<0.0500	<0.0500
Motor Oil	--	--	--	--	--	--	--	--
TPH-diesel	3.32 J-	0.176 Jy	228	2.16 J-	2.46 Jy-	9.63 Jy-	0.282 Jy-	3.13 Jy-
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-169	SB-170	SB-187	SB-188	SB-189	SB-190	SB-191	SB-194
Sample Date	2/22/01	2/22/01	3/30/01	3/30/01	3/30/01	3/30/01	4/20/01	4/20/01
Sample Depth (feet bgs)	16	16	6	6	6	6	4	4
Diesel Range Hydrocarbons	--	--	--	--	--	--	--	--
Extractable Range Organics (C10-C24)	<0.0500	23.8	<0.500	<0.250	<0.250	<0.250	4.31	<0.0625
Motor Oil	--	--	42.4	18.6	13.9	18.0	2.76	19.3
TPH-diesel	0.538 Jy-	<0.0667	42.7	61.4	39.7	51.7	<0.0500	14.4
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-195	SB-198	W24A
Sample Date	4/20/01	4/20/01	10/14/99
Sample Depth (feet bgs)	8	16	15
Diesel Range Hydrocarbons	--	--	--
Extractable Range Organics (C10-C24)	0.734	0.124	--
Motor Oil	0.366	<0.333	--
TPH-diesel	<0.0500	<0.0667	10.7
TPH-gasoline	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
 Former Remco Hydraulics Facility
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Sample Location	GB-1	GB-2	GB-3	GB-4	GB-5	GB-7	GB-8	H-1	H-1	H-2	H-2
Sample Date	8/19/94	8/19/94	8/19/94	8/19/94	8/18/94	8/19/94	8/19/94	5/20/91	5/20/91	5/20/91	5/20/91
Sample Depth (feet bgs)	9	9	9	9	9	9	9	10	25	10	25
Dissolved Chromium	--	--	--	--	--	--	--	<0.01	0.012	<0.01	0.016
Hexavalent Chromium	<0.02	<0.02	<0.02	<0.02	<0.02	0.27	18	<0.02	<0.02	<0.02	<0.02
Total Chromium	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	H-3	H-3	H-4	H-4	H-5	H-5	H-6	H-6	H-7
Sample Date	5/21/91	5/21/91	5/21/91	5/21/91	5/21/91	5/21/91	5/21/91	5/21/91	5/22/91
Sample Depth (feet bgs)	10	25	10	25	10	25	10	25	10
Dissolved Chromium	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexavalent Chromium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Total Chromium	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	H-7	Rem-07	Rem-07	Rem-08	Rem-08	Rem-09	SB-001	SB-007	SB-008
Sample Date	5/22/91	10/4/95	10/4/95	10/4/95	10/4/95	10/4/95	10/14/99	10/19/99	10/20/99
Sample Depth (feet bgs)	25	18	37	21	40	48.6	14	12	16
Dissolved Chromium	<0.01	<0.02	<0.02	--	<0.02	<0.02	0.0137	<0.00500	<0.00500
Hexavalent Chromium	<0.02	<1.0	<1.0	<0.5	<0.05	<0.5	--	--	--
Total Chromium	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-009	SB-010	SB-012	SB-013	SB-014	SB-015	SB-017
Sample Date	10/21/99	10/21/99	10/22/99	10/20/99	10/22/99	10/20/99	10/22/99
Sample Depth (feet bgs)	12	12	12	11	16	12	12
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	--	--	--	--	--	--	--
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-018	SB-019	SB-020	SB-021	SB-021	SB-024	SB-029
Sample Date	10/22/99	10/22/99	10/22/99	12/17/98	12/17/98	10/22/99	3/22/00
Sample Depth (feet bgs)	12	16	12	16	28	16	17
Dissolved Chromium	168	<0.00500	--	--	--	<0.00500	0.871
Hexavalent Chromium	172	--	0.186	--	--	--	0.856
Total Chromium	--	--	--	1.1	1.9	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-030	SB-031	SB-032	SB-033	SB-034	SB-035	SB-035
Sample Date	3/22/00	3/22/00	10/18/99	10/22/99	10/22/99	12/18/98	12/18/98
Sample Depth (feet bgs)	16	17	14	12	14	16	31
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	--
Hexavalent Chromium	<0.00500	<0.00500	--	--	<0.00500	--	--
Total Chromium	--	--	--	--	--	6.5	0.98

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-036	SB-036	SB-037	SB-037	SB-038	SB-038	SB-038
Sample Date	12/17/98	12/18/98	12/15/98	12/15/98	10/18/99	10/18/99	10/18/99
Sample Depth (feet bgs)	19	34	16	35	15	22	30
Dissolved Chromium	--	--	--	--	<0.00500	--	<0.00500
Hexavalent Chromium	--	--	<0.005	--	<0.00500	<0.00500	<0.00500
Total Chromium	2.5	1.4	0.04	0.27	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
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Sample Location	SB-038	SB-039	SB-039	SB-039	SB-040	SB-040
Sample Date	10/18/99	12/16/98	12/17/98	12/17/98	12/16/98	12/16/98
Sample Depth (feet bgs)	45	14	29	29	16	25
Dissolved Chromium	<0.00500	--	--	--	--	--
Hexavalent Chromium	0.00974	--	--	<0.005	--	--
Total Chromium	--	6.5	0.83	--	0.25	1.6

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-040	SB-041	SB-041	SB-041	SB-042	SB-042	SB-043
Sample Date	12/16/98	12/14/98	12/14/98	12/14/98	10/21/99	10/22/99	10/21/99
Sample Depth (feet bgs)	34	19	19	34	15	23	15
Dissolved Chromium	--	--	--	--	281	0.0121	<0.00500
Hexavalent Chromium	--	--	<0.005	--	336	<0.00500	<0.00500
Total Chromium	14	0.028	--	283	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-043	SB-043	SB-043	SB-043	SB-043	SB-044	SB-045
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99
Sample Depth (feet bgs)	15	23	30	30	74	12	12
Dissolved Chromium	--	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	--	<0.00500	<0.00500	--	<0.00500	--	--
Total Chromium	3.76	--	--	3.89	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-046	SB-047	SB-047	SB-048	SB-048	SB-048	SB-048
Sample Date	10/22/99	10/21/99	10/22/99	10/15/99	10/15/99	10/15/99	10/15/99
Sample Depth (feet bgs)	12	15	26	15	24	34	47
Dissolved Chromium	0.00585	0.140	<0.00500	7.08	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	--	<0.00500	<0.00500	9.13	<0.0200	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	SB-049	SB-049	SB-049	SB-050	SB-051	SB-053
Sample Date	10/19/99	10/19/99	10/19/99	10/19/99	10/22/99	10/22/99	10/22/99
Sample Depth (feet bgs)	15	30	53	68	14	12	12
Dissolved Chromium	33.8	<0.00500	--	0.138	<0.00500	2.84	0.00654
Hexavalent Chromium	38.7	<0.00500	<0.00500	0.00512	--	--	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-056	SB-056	SB-057	SB-058	SB-059	SB-059	SB-060
Sample Date	10/20/99	10/21/99	12/6/99	12/10/99	12/9/99	12/9/99	12/7/99
Sample Depth (feet bgs)	18	32	20	25	30	70	20
Dissolved Chromium	188	0.720	--	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	178	0.792	<0.00500	0.00715	0.00607	<0.00500	<0.00500
Total Chromium	--	--	0.392	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-060	SB-061	SB-061	SB-062	SB-062	SB-062	SB-063
Sample Date	12/7/99	12/2/99	12/7/99	12/6/99	12/6/99	12/6/99	12/7/99
Sample Depth (feet bgs)	32	16	32	20	20	32	22
Dissolved Chromium	<0.00500	22.3	<0.00500	--	--	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	25.8	<0.00500	--	219	<0.00500	<0.00500
Total Chromium	--	--	--	191	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-063	SB-065	SB-065	SB-066	SB-066	SB-067	SB-068
Sample Date	12/8/99	12/9/99	12/10/99	12/28/99	12/28/99	12/28/99	12/10/99
Sample Depth (feet bgs)	33	32	15	17	36	15	10
Dissolved Chromium	<0.00500	<0.00500	<0.00500	16.6	<0.00500	20.2	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	18.7	0.00620	23.9	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-072	SB-072	SB-073	SB-073	SB-074	SB-075	SB-076
Sample Date	12/1/99	12/1/99	11/29/99	11/30/99	12/10/99	12/9/99	12/28/99
Sample Depth (feet bgs)	17	34	16	33.5	16	12	15
Dissolved Chromium	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500	0.686
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.678
Total Chromium	--	--	<0.00500	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-077	SB-078	SB-078	SB-079	SB-080	SB-080	SB-081
Sample Date	12/29/99	12/29/99	12/29/99	12/29/99	3/23/00	3/23/00	3/22/00
Sample Depth (feet bgs)	15	15	34	16	8	24	17
Dissolved Chromium	12.1	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	14.9	<0.0200	<0.0200	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-081	SB-082	SB-082	SB-083	SB-083	SB-084	SB-084
Sample Date	3/23/00	3/23/00	3/23/00	6/5/00	6/5/00	6/5/00	6/5/00
Sample Depth (feet bgs)	28	8	19	5	15	10	15
Dissolved Chromium	<0.00500	<0.00500	<0.00500	--	--	--	--
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	0.317 J-	<0.00500 UJ-	0.00500 J-	<0.00500 UJ-
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-085	SB-085	SB-085	SB-086	SB-086	SB-087	SB-087
Sample Date	6/5/00	6/5/00	6/5/00	6/5/00	6/6/00	6/6/00	6/6/00
Sample Depth (feet bgs)	6	10	16	10	16	12	17
Dissolved Chromium	--	--	--	--	--	--	--
Hexavalent Chromium	<0.00500 UJ-	0.00600 J-	<0.00500 UJ-	<0.00500 UJ-	<0.00500	0.0147 J-	<0.00500 R
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-088	SB-088	SB-089	SB-089	SB-090	SB-091	SB-091
Sample Date	6/6/00	6/6/00	7/25/00	7/25/00	7/25/00	7/25/00	7/25/00
Sample Depth (feet bgs)	10	16	10	15	12	10	15
Dissolved Chromium	--	--	--	--	--	--	--
Hexavalent Chromium	<0.00500	<0.00500	0.0494	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-092	SB-093	SB-094	SB-095	SB-096	SB-097	SB-101
Sample Date	7/26/00	7/26/00	7/27/00	7/27/00	7/27/00	7/27/00	10/11/00
Sample Depth (feet bgs)	16	16	16	16	16	16	12.5
Dissolved Chromium	--	--	--	--	<0.00500	--	<0.00500
Hexavalent Chromium	1.41	0.0245	<0.00500 Jo	<0.00500	0.00496	0.00585	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-101	SB-102	SB-102	SB-103	SB-103	SB-105	SB-106
Sample Date	10/11/00	10/11/00	10/11/00	10/12/00	10/12/00	11/15/00	11/15/00
Sample Depth (feet bgs)	19	13	23	13.5	13.5	7	7
Dissolved Chromium	<0.00500	<0.00500	<0.00500	--	<0.00500	<0.0100	<0.0100
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-109	SB-110	SB-111	SB-112	SB-113	SB-116	SB-117
Sample Date	11/15/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	7	16	16	16	5	5	4
Dissolved Chromium	<0.0100	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	<0.00500 UJ-	<0.00500 UJ-	<0.00500 UJ-	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-120	SB-121	SB-122	SB-123	SB-124	SB-125	SB-126
Sample Date	12/6/00	12/6/00	12/6/00	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	20	16	12	20	24	16	20
Dissolved Chromium	<0.00500	<0.00500	<0.00500	0.0285	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	<0.00500 UJ-	<0.00500 UJ-	<0.00500 UJ-	<0.00500	0.0131	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-127	SB-129	SB-129	SB-130	SB-130	SB-135	SB-136
Sample Date	12/7/00	12/8/00	12/8/00	12/8/00	12/8/00	1/16/01	1/16/01
Sample Depth (feet bgs)	12	16	32	12	33	16	16
Dissolved Chromium	0.00788	<0.00500	<0.00500	<0.00500	0.0185	<0.0100	<0.0100
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-137	SB-138	SB-139	SB-140	SB-141	SB-142	SB-143
Sample Date	1/16/01	1/16/01	1/16/01	2/23/01	1/10/01	12/15/00	12/15/00
Sample Depth (feet bgs)	18	12	18	8	16	3	3
Dissolved Chromium	<0.0100	<0.0100	<0.0100	0.0235	<0.00500	0.0350	<0.00500 Jo
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	--	--	0.0131	<0.00500 Jo
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-144	SB-145	SB-146	SB-163	SB-164	SB-165	SB-166
Sample Date	12/15/00	12/15/00	1/10/01	2/22/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	3	3	12	8	20	20	12
Dissolved Chromium	<0.00500	<0.00500	<0.00500	0.0133	--	0.159	<0.00500 Jo
Hexavalent Chromium	<0.00500	<0.00500	--	<0.00500	<0.00500	0.110	<0.00500 Jo
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-167	SB-168	SB-169	SB-170	SB-176	SB-177	W21A
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	3/19/01	3/19/01	10/20/99
Sample Depth (feet bgs)	20	16	16	16	5	5	15
Dissolved Chromium	<0.00500	<0.00500 Jo	0.00952	0.00864	<0.00500	<0.00500	238
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	219
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-3
CHROMIUM DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W22A	W22A	W24A	W24A	W39A	W40A
Sample Date	10/14/99	10/14/99	10/14/99	10/14/99	1/18/01	1/18/01
Sample Depth (feet bgs)	17	24	15	24	15	16
Dissolved Chromium	0.0776	<0.00500	296	217	<0.00500	<0.00500 Jo
Hexavalent Chromium	<0.00500	<0.00500	319	228	<0.00500	--
Total Chromium	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-007	SB-008	SB-009	SB-010	SB-012	SB-013	SB-014
Sample Date	10/14/99	10/19/99	10/20/99	10/21/99	10/21/99	10/22/99	10/20/99	10/22/99
Sample Depth (feet bgs)	14	12	16	12	12	12	11	16
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Beryllium	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	0.000506	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	<0.0100	0.0151	<0.0100	0.0244	<0.0100	0.0244	<0.0100	0.0197
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0646	<0.0200

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 8

Sample Location	SB-015	SB-017	SB-019	SB-024	SB-032	SB-033	SB-044	SB-045
Sample Date	10/20/99	10/22/99	10/22/99	10/22/99	10/18/99	10/22/99	10/21/99	10/21/99
Sample Depth (feet bgs)	12	12	16	16	14	12	12	12
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	<0.00500	<0.00500	0.00913	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Beryllium	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	<0.0100	0.0152	0.0436	0.0115	<0.0100	<0.0100	<0.0100	<0.0100
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00680
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	0.0293	<0.0200	0.0505	<0.0200	<0.0200	0.0400	<0.0200	0.0405

Notes:

mg/L = milligrams per liter

bgs = below ground surface

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-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-046	SB-050	SB-051	SB-080	SB-080	SB-081	SB-081	SB-082
Sample Date	10/22/99	10/22/99	10/22/99	3/23/00	3/23/00	3/22/00	3/23/00	3/23/00
Sample Depth (feet bgs)	12	14	12	8	24	17	28	8
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	<0.00500	<0.00500	<0.00500	<0.00500	0.0306	<0.00500	0.0294	<0.00500
Dissolved Beryllium	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	<0.0100	<0.0100	0.0178	0.0623	<0.0100	0.0124	<0.0100	<0.0100
Dissolved Lead	<0.00500	<0.00500	<0.00500	0.00653	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	0.0434	0.0247	0.0239	0.0882	0.0342	0.0503	0.0390	0.0342

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-082	SB-101	SB-101	SB-102	SB-102	SB-103	SB-110	SB-111
Sample Date	3/23/00	10/11/00	10/11/00	10/11/00	10/11/00	10/12/00	12/6/00	12/6/00
Sample Depth (feet bgs)	19	12.5	19	13	23	13.5	16	16
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	<0.00500	0.00863	0.0400	0.0671	<0.00500 Jo	<0.00500 Jo	<0.00500	<0.00500 Jo
Dissolved Beryllium	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	<0.0100	<0.0100	<0.0100	<0.0100 Jo	<0.0100	<0.0100	<0.0100	<0.0100
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500 Jo
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300 Jo	<0.0300
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	0.0750	<0.0250 Jo	<0.0250 Jo	<0.0250 Jo	<0.0250 Jo	<0.0250 Jo	0.0306	0.0277

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 5 of 8

Sample Location	SB-112	SB-113	SB-116	SB-117	SB-120	SB-121	SB-122	SB-123
Sample Date	12/6/00	12/7/00	12/7/00	12/7/00	12/6/00	12/6/00	12/6/00	12/6/00
Sample Depth (feet bgs)	16	5	5	4	20	16	12	20
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	0.0130	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo
Dissolved Beryllium	<0.00100	<0.00100 Jo	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 Jo
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	<0.0100	<0.0100 Jo	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0133
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500 Jo
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200 Jo
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300 Jo	<0.0300	<0.0300	0.0525
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	<0.0200 Jo	0.0477	0.0237	0.0424	0.0353	0.0223	0.0236	0.0385

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-124	SB-125	SB-126	SB-127	SB-129	SB-129	SB-140	SB-141
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/8/00	12/8/00	2/23/01	1/10/01
Sample Depth (feet bgs)	24	16	20	12	16	32	8	16
Dissolved Antimony	0.0904	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	0.0291	<0.00500 Jo	0.0234	<0.00500 Jo	<0.00500	0.0177	<0.00500 Jo	<0.00500 Jo
Dissolved Beryllium	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100	<0.00100	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500
Dissolved Copper	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500 Jo
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200 Jo	<0.000200	<0.000200	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300 Jo	<0.0300	<0.0300 Jo	<0.0300	<0.0300	<0.0300	<0.0300 Jo
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700
Dissolved Thallium	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo
Dissolved Zinc	0.0622	0.0760	0.0319	0.0882	0.0283	0.0269	<0.0200	0.0242

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-143	SB-144	SB-145	SB-146	SB-163	SB-165	SB-166
Sample Date	12/15/00	12/15/00	12/15/00	1/10/01	2/22/01	2/22/01	2/22/01
Sample Depth (feet bgs)	3	3	3	12	8	20	12
Dissolved Antimony	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600 Jo
Dissolved Arsenic	<0.00500	<0.00500	<0.00500	<0.00500 Jo	0.00506	0.0123	<0.00500 Jo
Dissolved Beryllium	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 Jo	<0.00100	<0.00100
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.00100	<0.00100
Dissolved Copper	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100 Jo	<0.0100	<0.0100
Dissolved Lead	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500
Dissolved Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200 Jo	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300	0.108	0.0443	<0.0300	<0.0300
Dissolved Selenium	<0.00500 UJ	<0.00500 UJ	<0.00500 UJ	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Silver	<0.00700 UJ-	<0.00700 UJ-	<0.00700 UJ-	<0.00700	<0.00700 Jo	<0.00700	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	<0.0200 Jo	<0.0200 Jo	0.0368	<0.0200 Jo	0.0262	<0.0200	<0.0200

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-4
DISSOLVED METALS DETECTED IN GRAB GROUNDWATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-167	SB-168	SB-169	SB-170	W39A	W40A
Sample Date	2/22/01	2/22/01	2/22/01	2/22/01	1/18/01	1/18/01
Sample Depth (feet bgs)	20	16	16	16	15	16
Dissolved Antimony	<0.0600	<0.0600 Jo	<0.0600	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo
Dissolved Beryllium	<0.00100	<0.00100	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100
Dissolved Cadmium	<0.00100	<0.00100	<0.00100	<0.00100	<0.000500	<0.000500
Dissolved Copper	<0.0100	<0.0100	<0.0100 Jo	<0.0100 Jo	0.0102	0.0414
Dissolved Lead	<0.00500	<0.00500	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo
Dissolved Mercury	<0.000200	<0.000200	<0.000200 Jo	<0.000200 Jo	<0.000200	<0.000200
Dissolved Nickel	<0.0300	<0.0300	<0.0300 Jo	0.0396	<0.0300 Jo	<0.0300
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500
Dissolved Silver	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700 Jo	<0.00700
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500
Dissolved Zinc	<0.0200	<0.0200	0.0428	<0.0200 Jo	<0.0200 Jo	0.112

Notes:

mg/L = milligrams per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3a-5
PAHs DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-008	SB-009	SB-010	SB-012	SB-014	SB-017	SB-018
Sample Date	10/14/99	10/20/99	10/21/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99
Sample Depth (feet bgs)	14	16	12	12	12	16	12	12
Anthracene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Benzo(a)pyrene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Benzo(b)fluoranthene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Benzo(g,h,i)perylene	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Benzo(k)fluoranthene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Chrysene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Dibenz(a,h)anthracene	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Fluoranthene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Fluorene	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Indeno(1,2,3-cd)pyrene	<0.0500	<0.0500	<0.0500	0.0599	<0.0500	<0.0500	<0.0500	<0.0500
Naphthalene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	3.20
Phenanthrene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Pyrene	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-5
PAHs DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-019	SB-020	SB-024	SB-032	SB-033	SB-044	SB-045	SB-046
Sample Date	10/22/99	10/22/99	10/22/99	10/18/99	10/22/99	10/21/99	10/21/99	10/22/99
Sample Depth (feet bgs)	16	12	16	14	12	12	12	12
Anthracene	<0.0500	1.24	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Benzo(a)pyrene	<0.0500	0.575	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Benzo(b)fluoranthene	<0.0500	0.565	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Benzo(g,h,i)perylene	<0.100	4.63	<0.100	<0.100	<0.100	<0.200	<0.100	<0.150
Benzo(k)fluoranthene	<0.0500	0.766	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Chrysene	<0.0500	2.23	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Dibenz(a,h)anthracene	<0.200	5.93	<0.200	<0.000	<0.200	<0.400	<0.200	<0.310
Fluoranthene	<0.0500	0.990	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Fluorene	<0.100	2.42	<0.100	<0.100	<0.100	<0.200	<0.100	<0.150
Indeno(1,2,3-cd)pyrene	<0.0500	2.22	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770
Naphthalene	<0.500	<5.00	<0.500	<0.500	<0.500	<1.00	<0.500	<0.770
Phenanthrene	<0.0500	<0.500	<0.0500	0.0602	<0.0500	<0.100	<0.0500	<0.0770
Pyrene	<0.0500	8.26	<0.0500	<0.0500	<0.0500	<0.100	<0.0500	<0.0770

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-5
PAHs DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-050	SB-051	SB-062	SB-066
Sample Date	10/22/99	10/22/99	12/6/99	12/28/99
Sample Depth (feet bgs)	14	12	20	17
Anthracene	<0.250	<0.0500	<0.0500	<0.0500
Benzo(a)pyrene	<0.250	<0.0500	<0.0500	<0.0500
Benzo(b)fluoranthene	<0.250	<0.0500	<0.100	0.157
Benzo(g,h,i)perylene	<0.500	<0.100	<0.100	<0.100
Benzo(k)fluoranthene	<0.250	<0.0500	<0.0500	<0.0500
Chrysene	<0.250	<0.0500	<0.0500	0.125
Dibenz(a,h)anthracene	<1.00	<0.200	<0.200	<0.200
Fluoranthene	<0.250	<0.0500	<0.100	0.240
Fluorene	<0.500	<0.100	1.27	<0.100
Indeno(1,2,3-cd)pyrene	0.416	<0.0500	<0.0500	<0.0500
Naphthalene	<2.50	<0.500	1.77	<0.500
Phenanthrene	<0.250	<0.0500	<0.0500	0.0939
Pyrene	<0.250	<0.0500	<0.0500	0.137

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-6
PCBs DETECTED IN GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	SB-163	SB-166	SB-187	SB-188	SB-189	SB-190	SB-191	SB-194	SB-195	SB-198
Sample Date	2/22/01	2/22/01	3/30/01	3/30/01	3/30/01	3/30/01	4/20/01	4/20/01	4/20/01	4/20/01
Sample Depth (feet bgs)	8	12	6	6	6	6	4	4	8	16
Aroclor 1016 (µg/L)	6.43	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00

Notes:

µg/L = micrograms per liter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-001	SB-038	SB-038	SB-038	SB-038	SB-042	SB-042	SB-043	SB-043
Sample Date	10/14/99	10/18/99	10/18/99	10/18/99	10/18/99	10/21/99	10/21/99	10/21/99	10/21/99
Sample Depth (feet bgs)	14	15	15	30	30	15	15	15	15
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	--	--
Alkalinity, Total (mg/L)	--	564	--	180	--	532	--	354	--
Carbon dioxide, free (mg/L)	--	66.3	--	12.5	--	6.46	--	10.1	--
Dissolved Oxygen (mg/L)	--	<0.100	--	<0.100	--	2.53	--	2.11	--
Hydrous Iron Oxides (mg/L)	--	--	--	--	--	--	--	0.17	--
Hydrous Manganese Oxides (mg/L)	--	--	--	--	--	--	--	0.31	--
Lead (Organic) (mg/L)	0.340	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	215	--	115	--	262	--	397
pH (pH Units)	--	6.89	--	7.34	--	7.98	--	7.30	--
Sulfate Reducing Bacteria(/100 mil)	--	--	--	--	--	--	--	<20	--

Notes:

mg/L = milligrams per liter

mv = millivolts

mil = milliliter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-3a-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
Page 2 of 4

Sample Location	SB-043	SB-043	SB-043	SB-043	SB-043	SB-043	SB-046	SB-047	SB-047	SB-047
Sample Date	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/18/99	10/21/99	10/21/99	10/22/99
Sample Depth (feet bgs)	15	30	30	30	74	74	8.5	15	26	26
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	--	--	--
Alkalinity, Total (mg/L)	--	158	--	--	--	140	--	440	--	214
Carbon dioxide, free (mg/L)	--	6.73	--	--	--	<5.00	--	11.0	--	15.9
Dissolved Oxygen (mg/L)	--	0.550	--	--	--	0.700	--	0.940	--	0.690
Hydrous Iron Oxides (mg/L)	--	0.33	--	--	0.34	--	0.39	--	--	--
Hydrous Manganese Oxides (mg/L)	--	0.29	--	--	0.63	--	0.37	--	--	--
Lead (Organic) (mg/L)	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	<10.0	--	--	126	--	11.0	276	--
pH (pH Units)	--	7.57	--	--	--	7.74	--	8.44	--	7.43
Sulfate Reducing Bacteria(/100 mil)	--	<20	--	--	<20	--	--	--	--	--

Notes:

mg/L = milligrams per liter

mv = millivolts

mil = milliliter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-3a-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-048	SB-048	SB-048	SB-048	SB-049	SB-049	SB-049	SB-049	SB-049
Sample Date	10/15/99	10/15/99	10/15/99	10/15/99	10/19/99	10/19/99	10/19/99	10/19/99	10/19/99
Sample Depth (feet bgs)	15	15	34	34	15	15	30	30	68
Alkalinity, Bicarbonate (mg/L)	320	--	256	--	196	--	145	--	--
Alkalinity, Total (mg/L)	320	--	256	--	196	--	145	--	--
Carbon dioxide, free (mg/L)	45.2	--	10.4	--	51.6	--	9.14	--	--
Dissolved Oxygen (mg/L)	<0.100	--	<0.100	--	4.83	--	<0.100	--	--
Hydrous Iron Oxides (mg/L)	--	--	--	--	0.5	--	0.32	--	--
Hydrous Manganese Oxides (mg/L)	--	--	--	--	0.38	--	0.11	--	--
Lead (Organic) (mg/L)	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	325	--	178	--	306	--	1780	523
pH (pH Units)	6.90	--	7.75	--	7.62	--	7.76	--	--
Sulfate Reducing Bacteria(/100 mil)	--	--	<20	--	<20	--	<20	--	--

Notes:

mg/L = milligrams per liter

mv = millivolts

mil = milliliter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-7
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GRAB GROUNDWATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-049	W21A	W21A	W22A	W22A	W24A	W24A
Sample Date	10/19/99	10/20/99	10/20/99	10/14/99	10/14/99	10/14/99	10/14/99
Sample Depth (feet bgs)	68	15	15	17	17	15	15
Alkalinity, Bicarbonate (mg/L)	578	345	--	414	--	--	734
Alkalinity, Total (mg/L)	578	345	--	414	--	--	734
Carbon dioxide, free (mg/L)	11.2	114	--	14.0	--	--	161
Dissolved Oxygen (mg/L)	9.40	2.70	--	<0.100	--	--	<0.100
Hydrous Iron Oxides (mg/L)	--	--	--	--	--	--	--
Hydrous Manganese Oxides (mg/L)	--	--	--	--	--	--	--
Lead (Organic) (mg/L)	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	403	--	<0.000	398	--
pH (pH Units)	8.08	6.67	--	8.15	--	--	7.38
Sulfate Reducing Bacteria(/100 mil)	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

mv = millivolts

mil = milliliter

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-3a-8
ANALYTES DETECTED IN MAIN STREET 76 STATION GRAB GROUNDWATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	B-1-Hy-W	B-2-Hy-W	B-3-Hy-W	B-4-Hy-W	B-5-Gb-W	B-6-Hy-W
Sample Depth (feet bgs)	11.5	8.0	8.0	8.0	11.0	11.5
Sample Date	01/19/00	01/19/00	01/19/00	01/19/00	01/19/00	01/19/00
Acetone	54	13	9.1	190	17	<5.0
Chloroform	<0.5	<0.5	<0.5	0.76	<0.5	<0.5
1,1-dichloroethane	<0.5	<0.5	0.58	<0.5	<0.5	<0.5
1,2-dichloroethane	7.5	<0.5	<0.5	<0.5	<0.5	<0.5
methylene chloride	3	<0.5	<1.0	6.3	2.0	<0.5
Methyl tert-butyl ether	0.87	<0.5	1.5	3.2	67	3400
tert-amyl methyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	0.58
tert-butanol	10.0	<10.0	<10.0	<10.0	<10.0	500
TPH-diesel	<50	52	<1.0	<50	<50	<50
TPH-motor oil	610	170	<2.0	<100	300	260

Notes:

µg/L = micrograms per liter

bgs = below ground surface

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

These data are not shown on figures or included in the statistical analysis of grab groundwater samples (Table 5-1-2a).

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	27 Franklin	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	10/26/99	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94
Zone	None	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	13	32	22	4.1	2.6	13	2.2	1.6	1.2	1.6	26
1,1,2,2-Tetrachloroethane	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane (1,1-DCA)	<0.500	2.6	5.9	4.8	0.7	0.7	4.8	0.8	<0.5	<0.5	0.8	10
1,1-Dichloroethene (1,1-DCE)	<0.500	3.8	11	10	1.2	1.1	7.4	<0.5	<0.5	<0.5	0.9	18
1,2,3-Trichlorobenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.6	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.7	<0.5	<0.5	<0.5	<0.5
1,4-Dioxane	<50.0	--	--	--	--	--	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	<5.00	--	--	--	--	--	--	--	--	--	--	--
Acetone	<10.0	--	--	--	--	--	--	--	--	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	4.47	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	<5.00	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.500	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	21.2	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	27 Franklin	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	10/26/99	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94
Zone	None	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2
Ethylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	<0.500	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	<0.500	--	--	--	--	--	--	--	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	<0.500	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	<0.500	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.500	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (TCE)	<0.500	1.1	1.7	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	5.4
Trichlorofluoromethane	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2
Trichlorotrifluoroethane (Freon 113)	<0.500	--	--	--	--	--	--	--	--	--	--	--
Vinyl Acetate	<5.00	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<0.500	<2	--	<2	<2	<2	<2	<2	<2	<2	<2	<2
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/2/95	2/20/96	4/19/96	5/27/97	8/26/97	2/12/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	17	4.1	2.9	9	2.4	1.8	<0.4	3.2	79	2	<5	<5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<5	<0.5	<5	<5
1,1-Dichloroethane (1,1-DCA)	6.6	2.2	1.1	4	0.98	0.91	<0.4	1.5	39	1.4	<5	<5
1,1-Dichloroethene (1,1-DCE)	12	3	4.1	4.9	1.3	1.3	<0.4	2.2	99	1.7	5	<5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.4	<1	--	<0.5	--	<5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.72	<1	<1	<0.4	<1	--	<0.5	--	<5
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	<100	--	<10	<100
2-Hexanone	--	--	--	--	--	--	--	--	<50	--	<50	<50
Acetone	--	--	--	--	--	--	--	--	<100	--	<100	<100
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--	<5	--	<5	<5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
Bromomethane	<2	<2	<2	<3.5	<3.5	<3.5	<0.4	<3.5	<10	<2	<10	<10
Carbon disulfide	--	--	--	--	--	--	--	--	<10	--	<10	<10
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
Chloroethane	<2	<2	<2	<1.6	<1.6	<1.6	<0.4	<1.6	<10	<2	<10	<10
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
Chloromethane	<2	<2	<2	<0.5	<0.5	<0.5	<0.4	<0.5	<10	<2	<10	<10

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/2/95	2/20/96	4/19/96	5/27/97	8/26/97	2/12/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	--	--	--	<0.5	--	<5	<0.5	<5	<5
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<2	<2	<2	<5.4	<5.4	<5.4	<0.4	<5.4	--	<2	--	<10
Ethylbenzene	--	--	--	--	--	--	--	--	<5	--	<5	<5
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<2	<2	<2	<2	<2	<2	<10	<2	<20	<2	<10	<10
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
Toluene	--	--	--	--	--	--	--	--	<5	--	<5	<5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5
Trichloroethene (TCE)	2.5	1.2	0.9	1.6	1.2	1.1	<0.4	<0.5	33	0.6	<5	<5
Trichlorofluoromethane	<2	<2	<2	<5	<5	<5	<0.4	<5	--	<2	--	<5
Trichlorotrifluoroethane (Freon 113)	--	--	1.2	--	--	--	--	--	--	2.7	<5	<5
Vinyl Acetate	--	--	--	--	--	--	--	--	<50	--	<50	<50
Vinyl chloride (VC)	<2	<2	<2	<0.54	<0.54	<0.54	<0.4	<0.54	<10	<2	<10	<10
Xylenes (total)	--	--	--	--	--	--	--	--	<10	--	<10	<10

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1	B2	B2	B2
Sample Date	5/20/98	8/24/98	12/17/98	2/24/99	10/26/99	4/4/00	10/19/00	2/21/01	6/24/91	8/20/91	2/17/92
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<0.5	4	14.7	1.49	0.858	1.61	6.88	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
1,1,2-Trichloroethane	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
1,1-Dichloroethane (1,1-DCA)	<5	0.93	4	10.1	1.71	1.30	2.11	8.51	0.6	2.4	<0.5
1,1-Dichloroethene (1,1-DCE)	<5	1	5	13.7	1.94	1.07	2.57	10.2	<0.5	0.9	<0.5
1,2,3-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
1,2,4-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
1,2,4-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
1,2-Dichloroethane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	0.143	<0.500 Jo	<0.5	--	<0.5
1,2-Dichloropropane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
1,4-Dioxane	--	--	--	--	<50.0	<50.0	<100 UJ-	<100	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<10	<2	<3	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	--
2-Hexanone	<10	<2	<4	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	--
Acetone	<10	<2	<3	<5.00	<10.0	<10.0	<10.0	<10.0	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<5	<0.5	<0.8	<0.500	<0.500	<0.500	0.0786	<0.500 Jo	--	--	--
Bromodichloromethane	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
Bromomethane	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2
Carbon disulfide	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	--
Carbon tetrachloride	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5
Chloroethane	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	7.4	26	<2
Chloroform	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.5	--	<0.5
Chloromethane	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 6 of 108

Sample Location	B1	B1	B1	B1	B1	B1	B1	B1	B2	B2	B2
Sample Date	5/20/98	8/24/98	12/17/98	2/24/99	10/26/99	4/4/00	10/19/00	2/21/01	6/24/91	8/20/91	2/17/92
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<0.5	<0.7	0.982	<0.500	<0.500	0.238	0.857	--	<0.5	<0.5
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2
Ethylbenzene	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
Hexachlorobutadiene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
Isopropylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
m,p-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10	<2	<0.7	<0.500	<0.500	<0.500	0.0819	<0.500	--	--	--
Methylene chloride	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2
n-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
n-Propylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
Naphthalene	--	--	--	<0.500	<0.500	<0.500	0.123	<0.500 Jo	--	--	--
o-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
p-Isopropyltoluene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
sec-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
tert-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
Tetrachloroethene (PCE)	<5	<0.5	<0.9	2.95	0.804	<0.500	1.85	8.37	<0.5	<0.5	<0.5
Toluene	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--
trans-1,2-Dichloroethene	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	<0.5	<0.5
Trichloroethene (TCE)	<5	0.56	3	6.40	1.10	<0.500	1.39	5.54	<0.5	<0.5	<0.5
Trichlorofluoromethane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2
Trichlorotrifluoroethane (Freon 113)	<5	<2	11	24.8	3.39	1.04	6.99	27.7	--	--	--
Vinyl Acetate	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	--	--	--
Vinyl chloride (VC)	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<2	--	<2
Xylenes (total)	<5	<0.5	<2	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2
Sample Date	5/18/92	8/17/92	10/3/95	4/18/96	2/11/98	5/21/98	8/25/98	12/17/98	2/24/99	10/25/99	4/4/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.5	<0.5	<1	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	7	1.2	<0.4	<5	<5	<5	0.88	1	0.782	1.01	0.847
1,1-Dichloroethene (1,1-DCE)	3.2	<0.5	<0.4	19	20	<5	12	16	8.94	17.6	6.80
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.5	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.5	<0.5	<0.4	<5	<5	<5	0.74	1	0.590	0.873	<0.500
1,2-Dichloropropane	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.5	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	--	--	--	--	--	--	--	<50.0	<50.0
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	<100	<100	<10	<2	<3	<5.00	<5.00	<5.00
2-Hexanone	--	--	--	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00
Acetone	--	--	--	<100	<100	<10	<2	<3	<5.00	<10.0	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500
Bromodichloromethane	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500
Bromomethane	<2	<2	<0.4	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500
Carbon disulfide	--	--	--	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00
Carbon tetrachloride	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500
Chloroethane	49	20	<0.4	66	54	39	43	59	42.8	50.5	36.0
Chloroform	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500
Chloromethane	<2	<2	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2
Sample Date	5/18/92	8/17/92	10/3/95	4/18/96	2/11/98	5/21/98	8/25/98	12/17/98	2/24/99	10/25/99	4/4/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	0.8	<0.500	0.681	<0.500
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<2	<2	<0.4	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500
Ethylbenzene	--	--	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
Isopropylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
m,p-Xylene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	<10	<2	<0.7	<0.500	<0.500	<0.500
Methylene chloride	<2	<2	<10	<20	<10	<5	<0.5	<0.8	<0.500	<0.500	<0.500
n-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
n-Propylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
Naphthalene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
o-Xylene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
p-Isopropyltoluene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
sec-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
tert-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500
Toluene	--	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500
Trichlorofluoromethane	<2	<2	<0.4	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	<5	<5	<2	<0.8	<0.500	<0.500	<0.500
Vinyl Acetate	--	--	--	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00
Vinyl chloride (VC)	<2	<2	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	<10	<10	<5	<0.5	<2	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B3	B3	B3	B3	B3	B3	B3	B3	B3
Sample Date	10/18/00	2/21/01	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	10/2/95	4/18/96	2/11/98	5/20/98
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	3.1	1.6	26	30	16	2.4	<5	<5	<5
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
1,1,2-Trichloroethane	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<1	<5	<5	<5
1,1-Dichloroethane (1,1-DCA)	0.818	0.922	<0.5	0.9	<0.5	4.8	7.4	1.2	<5	<5	<5
1,1-Dichloroethene (1,1-DCE)	10.9	10.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
1,2,3-Trichlorobenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	--	<5	--
1,2-Dichloroethane	0.623	0.707	<0.5	--	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
1,2-Dichloropropane	<0.500	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
1,3,5-Trimethylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	--	<5	--
1,4-Dioxane	<100 UJ-	<100	--	--	--	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	--	--	--	--	--	--	<100	<100	<10
2-Hexanone	<5.00	<5.00	--	--	--	--	--	--	<50	<50	<10
Acetone	<10.0 Jo	<10.0	--	--	--	--	--	--	<100	<100	<10
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	<0.500	--	--	--	--	--	--	<5	<5	<5
Bromodichloromethane	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Bromomethane	<0.500	<0.500	<2	--	<2	<2	<2	<0.4	<10	<10	<10
Carbon disulfide	<5.00	<5.00	--	--	--	--	--	--	<10	<10	<5
Carbon tetrachloride	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Chloroethane	43.8	38.9	<2	<2	<2	<2	<2	<0.4	<10	<10	<10
Chloroform	<0.500	<0.500	<0.5	--	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Chloromethane	<0.500	<0.500	<2	--	<2	<2	<2	<0.4	<10	<10	<10

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B3	B3	B3	B3	B3	B3	B3	B3	B3
Sample Date	10/18/00	2/21/01	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	10/2/95	4/18/96	2/11/98	5/20/98
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500 Jo	0.536	--	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<0.500	<2	--	<2	<2	<2	<0.4	--	<10	<5
Ethylbenzene	<0.500	<0.500	--	--	--	--	--	--	<5	<5	<5
Hexachlorobutadiene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
Isopropylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
m,p-Xylene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	--	--	--	--	--	--	--	--	<10
Methylene chloride	<0.500	<0.500	<2	--	<2	<2	<2	<10	<20	<10	<5
n-Butylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
n-Propylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
Naphthalene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
o-Xylene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	<0.500	<0.500	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.500	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Toluene	<0.500	<0.500	--	--	--	--	--	--	<5	<5	<5
trans-1,2-Dichloroethene	<0.500	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Trichloroethene (TCE)	<0.500	<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<5	<5
Trichlorofluoromethane	<0.500	<0.500	<2	--	<2	<2	<2	<0.4	--	<5	<5
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	--	--	--	--	--	--	--	<5	<5
Vinyl Acetate	<5.00	<5.00	--	--	--	--	--	--	<50	<50	<10
Vinyl chloride (VC)	<0.500 Jo	<0.500 Jo	<2	--	<2	<2	<2	<0.4	<10	<10	<10
Xylenes (total)	--	--	--	--	--	--	--	--	<10	<10	<5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3	B3	B4	B4	B4	B4
Sample Date	8/24/98	12/17/98	2/24/99	10/25/99	4/3/00	10/18/00	2/21/01	8/20/91	2/17/92	5/18/92	8/17/92
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.7	<0.500	<1.00	0.592	0.640 J-	<0.500	68	46	70	51
1,1,2,2-Tetrachloroethane	<0.5	<0.9	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.9	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
1,1-Dichloroethane (1,1-DCA)	1.6	<0.8	<0.500	<1.00	<0.500	1.03 J-	<0.500 Jo	28	23	34	25
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	42	44	64	38
1,2,3-Trichlorobenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
1,2,4-Trichlorobenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
1,2,4-Trimethylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
1,4-Dioxane	--	--	--	<100	<50.0	<100 UJ-	<100	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<2	<3	<5.00	<10.0	<5.00	<5.00 UJ-	<5.00	--	--	--	--
2-Hexanone	<2	<4	<5.00	<10.0	<5.00	<5.00 UJ-	<5.00	--	--	--	--
Acetone	<2	<3	<5.00	<20.0	<10.0	<10.0 UJ-	<10.0	--	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Bromodichloromethane	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.9	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<2	<2	<2
Carbon disulfide	<2	<0.7	<5.00	<10.0	<5.00	<5.00 UJ-	<5.00	--	--	--	--
Carbon tetrachloride	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	<2	<2	<2	<2
Chloroform	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.6	<0.500	<1.00	<0.500	<0.500 Jo UJ-	<0.500	--	<2	<2	<2

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3	B3	B4	B4	B4	B4
Sample Date	8/24/98	12/17/98	2/24/99	10/25/99	4/3/00	10/18/00	2/21/01	8/20/91	2/17/92	5/18/92	8/17/92
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	2.8	<0.5	4.1	3.1
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<2	<2	<2
Ethylbenzene	<0.5	<0.6	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Hexachlorobutadiene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Isopropylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
m,p-Xylene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<2	<0.7	<0.500	<1.00	<0.500	0.380 UJ-	<0.500	--	--	--	--
Methylene chloride	0.59	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<2	<2	<2
n-Butylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
n-Propylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Naphthalene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
o-Xylene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
p-Isopropyltoluene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
sec-Butylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
tert-Butylbenzene	--	--	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Tetrachloroethene (PCE)	<0.5	<0.9	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
trans-1,2-Dichloroethene	<0.5	<0.7	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	<0.5	<0.5	<0.5	<0.5
Trichloroethene (TCE)	<0.5	<0.9	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	16	12	19	12
Trichlorofluoromethane	<0.5	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<2	17	8.7
Trichlorotrifluoroethane (Freon 113)	<2	<0.8	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	--	--	--
Vinyl Acetate	<2	<0.7	<10.0	<10.0	<5.00	<5.00 UJ-	<5.00	--	--	--	--
Vinyl chloride (VC)	<0.5	<0.6	<0.500	<1.00	<0.500	<0.500 UJ-	<0.500	--	<2	<2	<2
Xylenes (total)	<0.5	<2	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	100	30	44	26	57	35	17	23	21	26	22	19
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
1,1-Dichloroethane (1,1-DCA)	38	19	17	14	27	21	9.1	15	47	20	16	15
1,1-Dichloroethene (1,1-DCE)	77	39	40	23	39	39	15	18	38	29	29	24
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1	<1
1,2-Dichloroethane	1.3	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.72	<1	<1
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--	--	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
Bromomethane	<2	<2	<2	<2	<2	<2	<2	<2	<20	<3.5	<3.5	<3.5
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
Chloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<20	<1.6	<1.6	<1.6
Chloroform	0.6	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<5	<0.5	0.5	<0.5
Chloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<20	<0.5	<0.5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	3.8	2.5	2.4	1.3	2.8	3.3	2.7	3	<5	--	--	--
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<20	<5.4	<5.4	<5.4
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<2	<2	<2	<2	<2	<2	<2	<2	<20	<2	<2	<2
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.5	1.1	0.7	0.6	0.5	2.2	3.2	1.5	41	6.4	7.3	3.7
Toluene	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5
Trichloroethene (TCE)	25	9.8	15	8.2	11	12	7.3	11	16	16	14	11
Trichlorofluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<20	11	<5	<5
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	--	<10	--	--	--
Vinyl Acetate	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<2	<2	<2	<2	<2	<2	<2	<2	<20	0.62	<0.54	<0.54
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

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-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	10/3/95	2/20/96	4/19/96	5/27/97	8/26/97	2/12/98	5/21/98	8/25/98	12/18/98	2/24/99	10/26/99
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	20	31	22	14	16	11	7.6	15	11	11.2	6.56
1,1,2,2-Tetrachloroethane	<0.4	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<1.00
1,1,2-Trichloroethane	<1	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<1.00
1,1-Dichloroethane (1,1-DCA)	15	24	22	15	16	13	10	14	14	13.8	11.6
1,1-Dichloroethene (1,1-DCE)	22	48	32	21	26	26	14	20	20	19.2	12.9
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.4	<5	--	<0.5	--	<5	--	--	--	<0.500	<1.00
1,2-Dichloroethane	<0.4	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<1.00
1,2-Dichloropropane	<0.4	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<1.00
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.4	<5	--	<0.5	--	<5	--	--	--	<0.500	<1.00
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	<100
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	<100	--	<10	<100	<10	<2	<3	<5.00	<10.0
2-Hexanone	--	--	<50	--	<50	<50	<10	<2	<4	<5.00	<10.0
Acetone	--	--	<100	--	<100	<100	<10	<2	<3	<5.00	<20.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	<5	--	<5	<5	<5	<0.5	<0.8	0.547	<1.00
Bromodichloromethane	<0.4	--	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<1.00
Bromomethane	<0.4	<18	<10	<2	<10	<10	<10	<0.5	<0.9	<0.500	<1.00
Carbon disulfide	--	--	<10	--	<10	<10	<5	<2	<0.7	<5.00	<10.0
Carbon tetrachloride	<0.4	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<1.00
Chloroethane	<0.4	<7.8	<10	<2	<10	<10	<10	<0.5	<0.7	<0.500	<1.00
Chloroform	0.42	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<1.00
Chloromethane	<0.4	<2.5	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<1.00

Notes:

µg/L = micrograms per liter

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Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	10/3/95	2/20/96	4/19/96	5/27/97	8/26/97	2/12/98	5/21/98	8/25/98	12/18/98	2/24/99	10/26/99
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	2.9	--	<5	2.4	<5	<5	<5	2.6	2	2.37	3.34
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.4	<27	--	<2	--	<10	<5	0.75	<0.7	<0.500	<1.00
Ethylbenzene	--	--	<5	--	<5	<5	<5	<0.5	<0.6	<0.500	<1.00
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
Isopropylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
m,p-Xylene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	<10	<2	<0.7	<0.500	<1.00
Methylene chloride	<10	<10	<20	<2	<10	<10	<5	<0.5	<0.8	<0.500	<1.00
n-Butylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
n-Propylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
Naphthalene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
o-Xylene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	<0.500	<1.00
Tetrachloroethene (PCE)	8.4	30	21	27	19	40	30	49	49	64.2	44.2
Toluene	--	--	<5	--	<5	<5	<5	<0.5	<0.8	<0.500	<1.00
trans-1,2-Dichloroethene	<0.4	<2.5	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<1.00
Trichloroethene (TCE)	12	26	18	14	15	12	9.1	15	15	11.6	9.49
Trichlorofluoromethane	6.2	<25	--	<2	--	<5	<5	<0.5	<0.8	<0.500	<1.00
Trichlorotrifluoroethane (Freon 113)	--	--	--	45	42	53	<5	71	78	72.3	46.6
Vinyl Acetate	--	--	<50	--	<50	<50	<10	<2	<0.7	<10.0	<10.0
Vinyl chloride (VC)	<0.4	<2.7	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<1.00
Xylenes (total)	--	--	<10	--	<10	<10	<5	<0.5	<2	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 17 of 108

Sample Location	B4	B4	B4	B5	B5	B5	B5	B5	B5	B5	B5
Sample Date	4/4/00	10/19/00	2/21/01	10/4/95	4/24/96	2/13/98	5/21/98	8/25/98	12/17/98	2/24/99	10/26/99
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	3.45	4.81	4.58	<0.4	7	<5	<5	<0.5	<0.7	<0.500	<0.500
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<2.50	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<2.50	<1	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	9.02	8.89	10.3	11	26	14	12	10	9	8.44	8.03
1,1-Dichloroethene (1,1-DCE)	10.7	11.1	10.4	1.4	6	<5	<5	1.5	<0.8	1.40	1.18
1,2,3-Trichlorobenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<2.50	<0.4	--	<5	--	--	--	<0.500	<0.500
1,2-Dichloroethane	<0.500	0.146	<2.50	<0.4	<5	7	<5	<0.5	<0.8	<0.500	<0.500
1,2-Dichloropropane	<0.500	<0.500	<2.50	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.500	<2.50	<0.4	--	<5	--	--	--	<0.500	<0.500
1,4-Dioxane	<50.0	31.4 UJ-	<500	--	--	--	--	--	--	--	<50.0
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	<25.0	--	<100	<100	<10	<2	<3	<5.00	<5.00
2-Hexanone	<5.00	<5.00	<25.0	--	<50	<50	<10	<2	<4	<5.00	<5.00
Acetone	<10.0	<10.0	<50.0	--	<100	<100	<10	<2	<3	<5.00	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	0.264	<2.50 Jo	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
Bromodichloromethane	<0.500	<0.500	<2.50	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Bromomethane	<0.500	<0.500	<2.50	<0.4	<10	<10	<10	<0.5	<0.9	<0.500	<0.500
Carbon disulfide	<5.00	<5.00	<25.0	--	<10	<10	<5	<2	<0.7	<5.00	<5.00
Carbon tetrachloride	<0.500	<0.500	<2.50	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloroethane	<0.500	<0.500	<2.50	<0.4	<10	<10	<10	<0.5	<0.7	<0.500	<0.500
Chloroform	<0.500	0.135	<2.50	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloromethane	<0.500	<0.500	<2.50	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B5	B5	B5	B5	B5	B5	B5	B5
Sample Date	4/4/00	10/19/00	2/21/01	10/4/95	4/24/96	2/13/98	5/21/98	8/25/98	12/17/98	2/24/99	10/26/99
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	3.77	3.00	<2.50 Jo	22	43	34	33	27	26	27.2	27.2
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<0.500	<2.50	<0.4	--	<10	<5	<0.5	<0.7	<0.500	<0.500
Ethylbenzene	<0.500	<0.500	<2.50	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500
Hexachlorobutadiene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
m,p-Xylene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<2.50	--	--	--	<10	<2	<0.7	<0.500	<0.500
Methylene chloride	<0.500	<0.500	<2.50	<10	<20	<10	<5	<0.5	<0.8	<0.500	<0.500
n-Butylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
Naphthalene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
o-Xylene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
p-Isopropyltoluene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
sec-Butylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
tert-Butylbenzene	<0.500	<0.500	<2.50	--	--	--	--	--	--	<0.500	<0.500
Tetrachloroethene (PCE)	44.1	37.9	61.1	8.9	5	<5	<5	1.4	3	3.65	2.98
Toluene	<0.500	<0.500	<2.50	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
trans-1,2-Dichloroethene	<0.500	<0.500	<2.50	0.78	<5	<5	<5	0.75	<0.7	0.735	0.639
Trichloroethene (TCE)	7.72	8.85	8.33	5.2	<5	<5	<5	1.9	4	3.64	3.13
Trichlorofluoromethane	<0.500	<0.500	<2.50	<0.4	--	<5	<5	<0.5	<0.8	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	43.8	40.1	48.7	--	--	<5	<5	<2	<0.8	<0.500	<0.500
Vinyl Acetate	<5.00	<5.00	<25.0	--	<50	<50	<10	<2	<0.7	<10.0	<5.00
Vinyl chloride (VC)	<0.500	<0.500	<2.50	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500
Xylenes (total)	--	--	--	--	<10	<10	<5	<0.5	<2	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B5	B5	B5	CW	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A
Sample Date	4/7/00	10/27/00	2/23/01	10/26/99	1/22/97	2/13/98	5/22/98	8/25/98	12/17/98	2/25/99
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	2.50	<1.00	1.54	51.0	81	<5	<5	<0.5	7	3.68
1,1,2,2-Tetrachloroethane	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.9	<0.500
1,1,2-Trichloroethane	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.9	<0.500
1,1-Dichloroethane (1,1-DCA)	14.4	8.96	11.5	31.0	73	50	49	45	52	48.9
1,1-Dichloroethene (1,1-DCE)	3.94	1.10	3.35	<1.00	28	8	5	4.3	9	9.55
1,2,3-Trichlorobenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
1,2,4-Trichlorobenzene	<0.500	<1.00	<0.500	<10.0	--	--	--	--	--	<0.500
1,2,4-Trimethylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<1.00	<0.500	<10.0	--	<5	--	--	--	<0.500
1,2-Dichloroethane	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.8	<0.500
1,2-Dichloropropane	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.8	<0.500
1,3,5-Trimethylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<1.00	<0.500	<10.0	--	<5	--	--	--	<0.500
1,4-Dioxane	<50.0	<200 UJ-	<100	<100	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<10.0	<5.00	<10.0	<100	<100	<10	<2	<3	<5.00
2-Hexanone	<5.00	<10.0	<5.00	<10.0	<50	<50	<10	<2	<4	<5.00
Acetone	<10.0	<20.0	<10.0	<20.0	<100	<100	<10	<2	<3	<5.00
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	<1.00 Jo	<0.500 Jo	<1.00	<5	<5	<5	<0.5	<0.8	<0.500
Bromodichloromethane	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.7	<0.500
Bromomethane	<0.500	<1.00	<0.500	<1.00	<10	<10	<10	<0.5	<0.9	<0.500
Carbon disulfide	<5.00	<10.0	<5.00 Jo	<10.0	<10	<10	<5	<2	<0.7	<5.00
Carbon tetrachloride	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.7	<0.500
Chloroethane	<0.500	<1.00	<0.500 Jo	<1.00	<10	<10	<10	<0.5	<0.7	<0.500
Chloroform	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.7	<0.500
Chloromethane	<0.500	<1.00	<0.500	<1.00	<10	<10	<10	<0.5	<0.6	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 20 of 108

Sample Location	B5	B5	B5	CW	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A
Sample Date	4/7/00	10/27/00	2/23/01	10/26/99	1/22/97	2/13/98	5/22/98	8/25/98	12/17/98	2/25/99
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	27.9	24.5	28.4	<1.00	6	14	10	8.8	28	22.2
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<1.00	<0.500	<1.00	--	<10	<5	<0.5	<0.7	<0.500
Ethylbenzene	<0.500	<1.00	<0.500	<1.00	<5	<5	<5	<0.5	<0.6	<0.500
Hexachlorobutadiene	<0.500	<1.00	<0.500	<10.0	--	--	--	--	--	<0.500
Isopropylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
m,p-Xylene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	<1.00 Jo	<0.500 Jo	<1.00	--	--	<10	2.5	5	4.32
Methylene chloride	<0.500	<1.00 Jo	<0.500	<1.00	<20	<10	<5	<0.5	<0.8	<0.500
n-Butylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
n-Propylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
Naphthalene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
o-Xylene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
p-Isopropyltoluene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
sec-Butylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
tert-Butylbenzene	<0.500	<1.00	<0.500	<1.00	--	--	--	--	--	<0.500
Tetrachloroethene (PCE)	3.25	1.86	8.07	<1.00	<5	12	7.3	8.2	57	45.7
Toluene	<0.500	<1.00 Jo	<0.500	<1.00	<5	<5	<5	<0.5	<0.8	<0.500
trans-1,2-Dichloroethene	0.876	<1.00 Jo	0.949	<1.00	<5	<5	<5	<0.5	<0.7	<0.500
Trichloroethene (TCE)	4.73	2.62	5.62	<1.00	<5	6	<5	5	11	11.1
Trichlorofluoromethane	<0.500	<1.00	<0.500	<1.00	--	<5	<5	<0.5	<0.8	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<1.00	<0.500	<1.00	--	<5	<5	<2	<0.8	<0.500
Vinyl Acetate	<5.00	<10.0	<5.00	<10.0	<50	<50	<10	<2	<0.7	<10.0
Vinyl chloride (VC)	<0.500	<1.00	<0.500	<1.00	<10	<10	<10	<0.5	<0.6	0.597
Xylenes (total)	--	--	--	--	<10	<10	<5	<0.5	<2	--

Notes:

µg/L = micrograms per liter

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-- = not analyzed

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For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	10/28/99	4/12/00	10/27/00	2/22/01	1/22/97	5/27/97	8/26/97	2/13/98	5/22/98	8/25/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	1.33	1.56	1.06	3.61	13	26	19	16	46	27
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
1,1,2-Trichloroethane	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
1,1-Dichloroethane (1,1-DCA)	42.7	39.9	47.0	46.1	24	29	26	25	41	26
1,1-Dichloroethene (1,1-DCE)	3.93	5.05	5.15	8.96	5	6.7	6	8	14	5.6
1,2,3-Trichlorobenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<1.00	<1.00	--	<0.5	--	<5	--	--
1,2-Dichloroethane	<0.500	0.143	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
1,2-Dichloropropane	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
1,3,5-Trimethylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.500	<1.00	<1.00	--	<0.5	--	<5	--	--
1,4-Dioxane	95.7	120	<200 Jo UJ-	<200 Jo	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	<10.0	<10.0	<100	--	<10	<100	<10	<2
2-Hexanone	<5.00	<5.00	<10.0	<10.0	<50	--	<50	<50	<10	<2
Acetone	<10.0	<10.0	<20.0	<20.0	<100	--	<100	<100	<10	<2
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	0.126	<1.00 Jo	<1.00 Jo	<5	--	<5	<5	<5	<0.5
Bromodichloromethane	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
Bromomethane	<0.500	<0.500	<1.00	<1.00	<10	<2	<10	<10	<10	<0.5
Carbon disulfide	<5.00	<5.00	<10.0	<10.0	<10	--	<10	<10	<5	<2
Carbon tetrachloride	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
Chloroethane	<0.500	<0.500	<1.00	<1.00	<10	<2	<10	<10	<10	<0.5
Chloroform	<0.500	<0.500	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
Chloromethane	<0.500	<0.500	<1.00	<1.00	<10	<2	<10	<10	<10	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	10/28/99	4/12/00	10/27/00	2/22/01	1/22/97	5/27/97	8/26/97	2/13/98	5/22/98	8/25/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	10.6	24.8	19.6	36.2	9	9.1	8	9	6	8.4
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<0.500	<1.00	<1.00	--	<2	--	<10	<5	<0.5
Ethylbenzene	<0.500	<0.500	<1.00	<1.00	<5	--	<5	<5	<5	<0.5
Hexachlorobutadiene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
Isopropylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
m,p-Xylene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	3.19	3.56	3.68	2.35	--	--	--	--	<10	<2
Methylene chloride	<0.500	<0.500	<1.00 Jo	<1.00 Jo	<20	<2	<10	<10	<5	<0.5
n-Butylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
n-Propylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
Naphthalene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
o-Xylene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
sec-Butylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
tert-Butylbenzene	<0.500	<0.500	<1.00	<1.00	--	--	--	--	--	--
Tetrachloroethene (PCE)	10.8	36.0	16.9	21.7	<5	1.6	<5	<5	<5	1.2
Toluene	<0.500	<0.500	<1.00	<1.00	<5	--	<5	<5	<5	<0.5
trans-1,2-Dichloroethene	<0.500	0.115	<1.00	<1.00	<5	<0.5	<5	<5	<5	<0.5
Trichloroethene (TCE)	4.93	12.1	8.02	12.0	<5	3.1	<5	<5	<5	2.7
Trichlorofluoromethane	<0.500	<0.500	<1.00	<1.00	--	<2	--	<5	<5	<0.5
Trichlorotrifluoroethane (Freon 113)	<0.500	0.0507	<1.00	<1.00	--	<0.5	<5	<5	<5	<2
Vinyl Acetate	<5.00	<5.00	<10.0	<10.0	<50	--	<50	<50	<10	<2
Vinyl chloride (VC)	<0.500	<0.500 Jo	<1.00 Jo	<1.00 Jo	<10	<2	<10	<10	<10	<0.5
Xylenes (total)	--	--	--	--	<10	--	<10	<10	<5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B	MW-1	MW-2	MW-3	MW-4	OW-01
Sample Date	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01	9/11/00	9/11/00	9/11/00	9/11/00	1/17/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	NA
1,1,1-Trichloroethane (1,1,1-TCA)	15	11.6	3.69	29.4	14.5	28.0	<5.00	<0.500	<0.500	<0.500	<0.5
1,1,2,2-Tetrachloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,1,2-Trichloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,1-Dichloroethane (1,1-DCA)	22	19.0	8.69	37.4	26.0	38.3	<5.00	0.0476	<0.500	<0.500	<0.5
1,1-Dichloroethene (1,1-DCE)	4	4.48	2.18	7.72	5.48	8.77	<5.00	<0.500	<0.500	<0.500	<0.5
1,2,3-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,2,4-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,2,4-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,2-Dichloroethane	<0.8	<0.500	<0.500	0.215	<0.500 Jo	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
1,2-Dichloropropane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,3,5-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
1,4-Dioxane	--	--	<50.0	91.9	<100 Jo UJ-	117	<500 UJ-	<50.0 UJ-	<50.0 UJ-	<50.0 UJ-	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<3	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	--
2-Hexanone	<4	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	--
Acetone	<3	<5.00	<10.0	2.66	<10.0 Jo	<10.0 Jo	<100	<10.0	<10.0	<10.0	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.8	<0.500	<0.500	0.179	<0.500 Jo	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
Bromodichloromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Bromomethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Carbon disulfide	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	--
Carbon tetrachloride	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Chloroethane	<0.7	<0.500	<0.500	0.188	<0.500 Jo	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
Chloroform	<0.7	<0.500	<0.500	0.228	<0.500 Jo	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
Chloromethane	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B	MW-1	MW-2	MW-3	MW-4	OW-01
Sample Date	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01	9/11/00	9/11/00	9/11/00	9/11/00	1/17/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	NA
cis-1,2-Dichloroethene (cis-1,2-DCE)	8	9.99	8.00	11.3	10.1	11.6	<5.00	<0.500	<0.500	<0.500	<0.5
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Ethylbenzene	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Hexachlorobutadiene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Isopropylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
m,p-Xylene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	3	1.54	0.618	3.54	2.11	3.33	279	0.265	0.122	26.0	--
Methylene chloride	<0.8	<0.500	<0.500	0.0755	<0.500 Jo	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
n-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
n-Propylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Naphthalene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
o-Xylene	--	<0.500	<0.500	0.0766	<0.500 Jo	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
p-Isopropyltoluene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
sec-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
tert-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Tetrachloroethene (PCE)	2	2.55	0.651	5.01	1.98	2.41	<5.00	<0.500	<0.500	<0.500	<0.5
Toluene	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
trans-1,2-Dichloroethene	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
Trichloroethene (TCE)	2	2.35	1.83	4.25	2.77	3.86	<5.00	<0.500	<0.500	<0.500	<0.5
Trichlorofluoromethane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.5
Trichlorotrifluoroethane (Freon 113)	<0.8	<0.500	<0.500	0.168	<0.500 Jo	<0.500 Jo	0.794	<0.500	<0.500	<0.500	--
Vinyl Acetate	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	<50.0	<5.00	<5.00	<5.00	--
Vinyl chloride (VC)	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<5.00	<0.500	<0.500	<0.500	<0.5
Xylenes (total)	<2	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-03	OW-04	OW-05	OW-07	OW-09	OW-10	OW-11	OW-11	OW-11	OW-14	OW-17
Sample Date	1/17/98	12/18/97	12/18/97	12/18/97	12/18/97	12/19/97	12/17/97	5/27/98	5/27/98	1/17/98	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	--	2	<0.5	100
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
1,1-Dichloroethane (1,1-DCA)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	56
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	31
1,2,3-Trichlorobenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
1,2,4-Trichlorobenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
1,2,4-Trimethylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
1,3,5-Trimethylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	<0.5
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	<5	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	<5	--	--
Acetone	--	--	--	--	--	--	--	<5	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.5	--	--	--	--	--	--	--	<1	<0.5	--
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5
Carbon disulfide	--	--	--	--	--	--	--	--	<1	--	--
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.56	<1	--	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-03	OW-04	OW-05	OW-07	OW-09	OW-10	OW-11	OW-11	OW-11	OW-14	OW-17
Sample Date	1/17/98	12/18/97	12/18/97	12/18/97	12/18/97	12/19/97	12/17/97	5/27/98	5/27/98	1/17/98	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	47
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.5	--	--	--	--	--	--	<1	--	<0.5	--
Ethylbenzene	<0.5	--	--	--	--	--	--	--	<1	<0.5	--
Hexachlorobutadiene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
Isopropylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
m,p-Xylene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	<0.5	1.4	14	<0.5	--	<0.5	<5	--	--	2.7
Methylene chloride	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
n-Butylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
n-Propylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
Naphthalene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
o-Xylene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
p-Isopropyltoluene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
sec-Butylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
tert-Butylbenzene	<0.5	--	--	--	--	--	--	--	--	<0.5	--
Tetrachloroethene (PCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	80
Toluene	<0.5	--	--	--	--	--	--	<1	--	<0.5	--
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<1	<0.5	<0.5
Trichloroethene (TCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	68
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	<1	--	--	--
Vinyl Acetate	--	--	--	--	--	--	--	--	<5	--	--
Vinyl chloride (VC)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	<0.5
Xylenes (total)	--	--	--	--	--	--	--	<1	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-17	OW-17	OW-21	OW-21	OW-21	OW-21	OW-22	OW-22	OW-23	OW-23
Sample Date	5/28/98	5/28/98	12/17/97	5/27/98	5/27/98	12/14/00	12/19/97	11/9/99	1/17/98	3/28/01
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane (1,1,1-TCA)	--	87	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
1,1,2,2-Tetrachloroethane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,1,2-Trichloroethane	--	<5	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
1,1-Dichloroethane (1,1-DCA)	53	--	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,1-Dichloroethene (1,1-DCE)	30	--	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
1,2,3-Trichlorobenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	<0.5	--	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,2-Dichloroethane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,2-Dichloropropane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	<0.5	--	--	<0.500	<0.5	<0.500	<0.5	<0.500
1,4-Dioxane	--	--	--	--	--	<100 UJ-	--	<50.0	--	<100
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	<25	--	<5	--	<5.00	--	<5.00	--	<5.00
2-Hexanone	--	<25	--	--	<5	<5.00	--	<5.00	--	<5.00
Acetone	--	<25	--	<5	--	<10.0	--	<10.0	--	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	--	<5	--	<1	--	<0.500	--	<0.500	<0.5	<0.500
Bromodichloromethane	--	<5	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
Bromomethane	--	<5	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
Carbon disulfide	--	<5	--	--	<1	<5.00	--	<5.00	--	<5.00
Carbon tetrachloride	--	<5	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
Chloroethane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Chloroform	--	<5	1.1	--	<1	<0.500	<0.5	<0.500	<0.5	0.108
Chloromethane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-17	OW-17	OW-21	OW-21	OW-21	OW-21	OW-22	OW-22	OW-23	OW-23
Sample Date	5/28/98	5/28/98	12/17/97	5/27/98	5/27/98	12/14/00	12/19/97	11/9/99	1/17/98	3/28/01
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene (cis-1,2-DCE)	67	--	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	--	<5	--	--	<1	<0.500	--	<0.500	<0.5	<0.500
Ethylbenzene	--	<5	--	--	<1	<0.500	--	<0.500	<0.5	<0.500
Hexachlorobutadiene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
Isopropylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
m,p-Xylene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	<25	10	--	<5	<0.500	--	<0.500	--	<0.500
Methylene chloride	--	<5	<0.5	--	<1	<0.500	<0.5	<0.500	<0.5	<0.500
n-Butylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
n-Propylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
Naphthalene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500 Jo
o-Xylene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
p-Isopropyltoluene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
sec-Butylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
tert-Butylbenzene	--	--	--	--	--	<0.500	--	<0.500	<0.5	<0.500
Tetrachloroethene (PCE)	--	89	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Toluene	--	<5	--	<1	--	<0.500	--	<0.500	<0.5	<0.500
trans-1,2-Dichloroethene	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Trichloroethene (TCE)	65	--	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Trichlorofluoromethane	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Trichlorotrifluoroethane (Freon 113)	--	12	--	--	<1	<0.500	--	<0.500	--	<0.500
Vinyl Acetate	--	<25	--	--	<5	<5.00	--	<5.00	--	<5.00
Vinyl chloride (VC)	--	<5	<0.5	<1	--	<0.500	<0.5	<0.500	<0.5	<0.500
Xylenes (total)	--	<5	--	<1	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-24	OW-25	OW-28	OW-29	OW-29	OW-29	OW-29	OW-30	OW-32	OW-32
Sample Date	12/18/97	1/17/98	12/19/97	12/17/97	5/27/98	5/28/98	12/14/00	12/17/97	12/17/97	12/14/00
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.5	<0.5	0.54	<1	<1	<0.500 Jo	<0.5	<0.5	<0.500
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,2,3-Trichlorobenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
1,2,4-Trichlorobenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
1,2,4-Trimethylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	--	--	<0.500	<0.5	<0.5	<0.500
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
1,3,5-Trimethylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	--	--	<0.500	<0.5	<0.5	<0.500
1,4-Dioxane	--	--	--	--	--	--	<100 UJ-	--	--	<100 UJ-
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	<5	<5	<5.00	--	--	<5.00
2-Hexanone	--	--	--	--	<5	<5	<5.00	--	--	<5.00
Acetone	--	--	--	--	<5	<5	<10.0	--	--	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	--	<0.5	--	--	<1	<1	<0.500	--	--	<0.500
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.500	<0.5	<0.5	<0.500
Bromomethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Carbon disulfide	--	--	--	--	<1	<1	<5.00	--	--	<5.00
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Chloroethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Chloroform	<0.5	<0.5	<0.5	<0.5	11	<1	<0.500 Jo	<0.5	<0.5	<0.500
Chloromethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500 Jo	<0.5	<0.5	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-24	OW-25	OW-28	OW-29	OW-29	OW-29	OW-29	OW-30	OW-32	OW-32
Sample Date	12/18/97	1/17/98	12/19/97	12/17/97	5/27/98	5/28/98	12/14/00	12/17/97	12/17/97	12/14/00
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	--	<0.5	--	--	<1	<1	<0.500	--	--	<0.500
Ethylbenzene	--	<0.5	--	--	<1	<1	<0.500	--	--	<0.500
Hexachlorobutadiene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
Isopropylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
m,p-Xylene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.5	--	--	<0.5	<5	<5	<0.500	<0.5	<0.5	<0.500
Methylene chloride	44	<0.5	<0.5	<0.5	<1	<1	<0.500 Jo	<0.5	<0.5	<0.500 Jo
n-Butylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
n-Propylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
Naphthalene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
o-Xylene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
p-Isopropyltoluene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
sec-Butylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
tert-Butylbenzene	--	<0.5	--	--	--	--	<0.500	--	--	<0.500
Tetrachloroethene (PCE)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Toluene	--	<0.5	--	--	<1	<1	<0.500	--	--	<0.500
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Trichloroethene (TCE)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	<1	<1	<0.500	--	--	<0.500
Vinyl Acetate	--	--	--	--	<5	<5	<5.00	--	--	<5.00
Vinyl chloride (VC)	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.500	<0.5	<0.5	<0.500
Xylenes (total)	--	--	--	--	<1	<1	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-33	OW-33	OW-34	OW-34	OW-35	OW-36	P-1	P-2	P-3	P-4
Sample Date	12/17/97	12/14/00	12/17/97	12/14/00	2/13/98	12/17/97	3/27/00	3/27/00	3/27/00	3/27/00
Zone	NA	NA	NA	NA	NA	NA	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.500	<0.5	<0.500 Jo	<5	<0.5	4.01	1.04	156	<0.500
1,1,2,2-Tetrachloroethane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,1,2-Trichloroethane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.5	<0.500	<0.5	<0.500 Jo	<5	<0.5	20.9	8.21	17.2	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.500	<0.5	<0.500	<5	<0.5	2.77	0.782	7.64	<0.500
1,2,3-Trichlorobenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
1,2,4-Trichlorobenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
1,2,4-Trimethylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,2-Dichloroethane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,2-Dichloropropane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,3,5-Trimethylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
1,4-Dioxane	--	<100 UJ-	--	<100 UJ-	--	--	<250	<50.0	<250	<50.0
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	<5.00	--	<5.00	<100	--	<25.0	<5.00	<25.0	<5.00
2-Hexanone	--	<5.00	--	<5.00	<50	--	<25.0	<5.00	<25.0	<5.00
Acetone	--	<10.0	--	<10.0	<100	--	<50.0	<10.0	<50.0	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	--	<0.500	--	<0.500	<5	--	<2.50	<0.500	<2.50	<0.500
Bromodichloromethane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
Bromomethane	<0.5	<0.500	<0.5	<0.500	<10	<0.5	<2.50	<0.500	<2.50	<0.500
Carbon disulfide	--	<5.00	--	<5.00	<10	--	<25.0	<5.00	<25.0	<5.00
Carbon tetrachloride	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
Chloroethane	<0.5	<0.500	<0.5	<0.500	<10	<0.5	<2.50	<0.500	<2.50	<0.500
Chloroform	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
Chloromethane	<0.5	<0.500	<0.5	<0.500	<10	<0.5	<2.50	<0.500	<2.50	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-33	OW-33	OW-34	OW-34	OW-35	OW-36	P-1	P-2	P-3	P-4
Sample Date	12/17/97	12/14/00	12/17/97	12/14/00	2/13/98	12/17/97	3/27/00	3/27/00	3/27/00	3/27/00
Zone	NA	NA	NA	NA	NA	NA	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.500	<0.5	<0.500	<5	<0.5	121	25.9	3.87	<0.500
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	--	<0.500	--	<0.500	<10	--	<2.50	<0.500	<2.50	<0.500
Ethylbenzene	--	<0.500	--	<0.500	<5	--	<2.50	<0.500	<2.50	<0.500
Hexachlorobutadiene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
Isopropylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
m,p-Xylene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.5	<0.500	<0.5	<0.500 Jo	--	<0.5	<2.50	1.46	<2.50	<0.500
Methylene chloride	<0.5	<0.500	<0.5	<0.500	<10	<0.5	<2.50	<0.500	<2.50	<0.500
n-Butylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
n-Propylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
Naphthalene	--	<0.500 Jo	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
o-Xylene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
p-Isopropyltoluene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
sec-Butylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
tert-Butylbenzene	--	<0.500	--	<0.500	--	--	<2.50	<0.500	<2.50	<0.500
Tetrachloroethene (PCE)	<0.5	<0.500	<0.5	<0.500	<5	<0.5	5.36	3.13	3.42	<0.500
Toluene	--	8.01	--	<0.500	<5	--	<2.50	<0.500	<2.50	<0.500
trans-1,2-Dichloroethene	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
Trichloroethene (TCE)	<0.5	<0.500	<0.5	<0.500	<5	<0.5	5.06	3.03	5.76	<0.500
Trichlorofluoromethane	<0.5	<0.500	<0.5	<0.500	<5	<0.5	<2.50	<0.500	<2.50	<0.500
Trichlorotrifluoroethane (Freon 113)	--	<0.500	--	<0.500	<5	--	13.1	<0.500	<2.50	<0.500
Vinyl Acetate	--	<5.00	--	<5.00	<50	--	<25.0	<5.00	<25.0	<5.00
Vinyl chloride (VC)	<0.5	<0.500	<0.5	<0.500	<10	<0.5	<2.50	<0.500	<2.50	<0.500
Xylenes (total)	--	--	--	--	<10	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	P-5	P-6	TW1	TW1	TW1	TW1	TW1	TW1	TW10	TW10	TW10
Sample Date	3/27/00	3/27/00	9/13/00	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	9/13/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	16.7	11.5	7.52
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500 Jo
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	14.4	<100 Jo	<25.0 Jo	<50.0 Jo	<50.0 Jo UJ-	<250	15.8	12.5	8.52
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	16.0	10.3	6.30
1,2,3-Trichlorobenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,2-Dichloroethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	<0.500 Jo
1,2-Dichloropropane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
1,4-Dioxane	<50.0	<50.0	<250 UJ-	<20000 UJ-	<5000 UJ-	<10000 UJ-	<10000 UJ-	<50000	<200 Jo UJ-	<500 UJ-	102 J-
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	<25.0	1350	2150	2970	8390 J-	18000	<20.0	<25.0	<5.00 Jo
2-Hexanone	<5.00	<5.00	<25.0	<1000	<250	<500	<500 UJ-	<2500	<20.0	<25.0	<5.00
Acetone	<10.0	<10.0	<50.0	<2000	895	2400	6480 J-	13400	<40.0 Jo	<50.0	12.8
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	<0.500 Jo
Bromodichloromethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Bromomethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50 UJ-	<0.500
Carbon disulfide	<5.00	<5.00	<25.0	<1000	<250	<500	<500 UJ-	<2500	<20.0	<25.0	<5.00
Carbon tetrachloride	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Chloroethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Chloroform	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	<0.540 U
Chloromethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	P-5	P-6	TW1	TW1	TW1	TW1	TW1	TW1	TW10	TW10	TW10
Sample Date	3/27/00	3/27/00	9/13/00	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	9/13/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<2.50 Jo	<100	<25.0	<50.0	<50.0 UJ-	<250	33.4	23.5	16.7
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Ethylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Hexachlorobutadiene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Isopropylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
m,p-Xylene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500 Jo
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500 Jo
Methylene chloride	<0.500	<0.500	<2.50 Jo	<100 Jo	<25.0	<50.0 Jo	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	0.513
n-Butylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
n-Propylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Naphthalene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
o-Xylene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50	<0.500 Jo
p-Isopropyltoluene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
sec-Butylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
tert-Butylbenzene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<2.50 Jo	152	60.5	<50.0 Jo	<50.0 Jo UJ-	<250	<2.00 Jo	<2.50 Jo	<0.500 Jo
Toluene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	<0.500 Jo
trans-1,2-Dichloroethene	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00 Jo	<2.50 Jo	0.675
Trichloroethene (TCE)	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	27.9	15.9	9.17
Trichlorofluoromethane	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	191	<100 Jo	<25.0 Jo	<50.0 Jo	<50.0 Jo UJ-	<250	<2.00	<2.50	<0.500 Jo
Vinyl Acetate	<5.00	<5.00	<25.0	<1000	<250	<500	<500 UJ-	<2500	<20.0	<25.0	<5.00
Vinyl chloride (VC)	<0.500	<0.500	<2.50	<100	<25.0	<50.0	<50.0 UJ-	<250	<2.00	<2.50	<0.500 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW10	TW10	TW10	TW10	TW11	TW11	TW11	TW11	TW11	TW2	TW2
Sample Date	12/27/00	1/22/01	2/21/01	2/21/01	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	12.7	11.7	10.7	3.53	3.41	3.80	3.47	3.42	2.51	23.8	15.6
1,1,2,2-Tetrachloroethane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,1,2-Trichloroethane	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<0.500 Jo	<1.00	<5.00	<2.50
1,1-Dichloroethane (1,1-DCA)	14.0	14.7	12.2	23.2	18.2	22.1	19.7	23.0	19.6	238	119
1,1-Dichloroethene (1,1-DCE)	11.6	9.86	10.2	18.4	17.0	18.4	8.45	14.7	13.0	43.6	33.6
1,2,3-Trichlorobenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,2,4-Trichlorobenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,2,4-Trimethylbenzene	<0.500	<1.00 Jo	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,2-Dichloroethane	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<1.00 Jo	<5.00	<2.50 Jo
1,2-Dichloropropane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,3,5-Trimethylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
1,4-Dioxane	<100 Jo UJ-	<200	<100 Jo	154	<100 Jo UJ-	182 J-	207 J-	165 J-	<200 Jo	<500	<250 Jo UJ-
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<10.0	<5.00	<5.00	<10.0	<5.00	<5.00 Jo	<5.00	<10.0	<50.0	<25.0
2-Hexanone	<5.00	<10.0	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<10.0	<50.0	<25.0
Acetone	<10.0 Jo	<20.0 Jo	<10.0 Jo	<10.0 Jo	<20.0 Jo	17.6	<10.0 Jo	<10.0 Jo	<20.0 Jo	<100	<50.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500 Jo	<1.00 Jo	<0.500 Jo	0.860	<1.00 Jo	0.883	0.787	0.807	<1.00 Jo	<5.00	<2.50 Jo
Bromodichloromethane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Bromomethane	<0.500	<1.00	<0.500	<0.500	<1.00	0.628 J-	<0.500	<0.500	<1.00	<5.00	<2.50
Carbon disulfide	<5.00	<10.0	<5.00	<5.00	<10.0	5.67 J+	<5.00 Jo	<5.00 Jo	<10.0	<50.0	<25.0
Carbon tetrachloride	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Chloroethane	<0.500	<1.00	<0.500 Jo	<0.500 Jo	<1.00	<0.500	<0.500	<0.500 Jo	<1.00 Jo	<5.00	0.902
Chloroform	0.855	<1.00 Jo	0.739	2.64	<2.48 U	2.52	<2.38 U	2.41	1.97	<5.00	0.432
Chloromethane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW10	TW10	TW10	TW10	TW11	TW11	TW11	TW11	TW11	TW2	TW2
Sample Date	12/27/00	1/22/01	2/21/01	2/21/01	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	26.4	27.5	22.5	37.8	35.5	38.0	33.5	36.8	31.9	<5.00	7.21
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Ethylbenzene	<0.500	<1.00 Jo	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Hexachlorobutadiene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Isopropylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
m,p-Xylene	<0.500 Jo	1.42	<0.500 Jo	<0.500	<1.00	0.594	<0.500 Jo	<0.500 Jo	<1.00	<5.00	<2.50
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500	<1.00	<0.500 Jo	<0.500	<0.500	<1.00	<5.00	<2.50
Methylene chloride	<0.500 Jo	<1.00	1.16	1.48	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<1.00	<5.00	<2.50
n-Butylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
n-Propylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Naphthalene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500 Jo	<0.500	<0.500	<1.00	<5.00	<2.50
o-Xylene	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<1.00	0.501	<0.500 Jo	<0.500 Jo	<1.00 Jo	<5.00	<2.50
p-Isopropyltoluene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
sec-Butylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
tert-Butylbenzene	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Tetrachloroethene (PCE)	0.667	<1.00 Jo	0.722	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<1.00	<5.00	2.65
Toluene	0.639	<1.00 Jo	0.580	0.555	<1.00 Jo	1.54	0.619	0.567	<1.00 Jo	<5.00	<2.50
trans-1,2-Dichloroethene	1.15	<1.00 Jo	1.02	1.51	1.10	1.48	1.22	1.41	1.05	<5.00	<2.50
Trichloroethene (TCE)	18.9	13.9	16.6	12.9	10.7	13.5	11.3	12.7	8.98	<5.00	1.87
Trichlorofluoromethane	<0.500	<1.00	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	<5.00	<2.50
Trichlorotrifluoroethane (Freon 113)	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<1.00 Jo	292	135
Vinyl Acetate	<5.00	<10.0	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<10.0	<50.0	<25.0
Vinyl chloride (VC)	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<1.00 Jo	<0.500	<0.500 Jo	<0.500 Jo	<1.00 Jo	<5.00	<2.50
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW2	TW2	TW2	TW2	TW2	TW3	TW3	TW3	TW3	TW3	TW3
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	28.1	34.7	41.3	26.8	45.5	2.34	3.28	<5.00 Jo	4.76	5.18	4.40 J-
1,1,2,2-Tetrachloroethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,1,2-Trichloroethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500 Jo	<1.25 Jo	<1.00 Jo UJ-
1,1-Dichloroethane (1,1-DCA)	304	302	341	267	321	25.3	36.0	44.7	43.1	51.6	49.1 J-
1,1-Dichloroethene (1,1-DCE)	54.9	44.9	54.9	33.1	49.7	23.1	28.1	49.1	32.0	35.2	23.8 J-
1,2,3-Trichlorobenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,2,4-Trichlorobenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,2,4-Trimethylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,2-Dichloroethane	<10.0 Jo	<5.00 Jo	<5.00 Jo	<5.00 Jo	<5.00 Jo	0.569	<1.00 Jo	<5.00 Jo	0.783	<1.25 Jo	<1.00 Jo UJ-
1,2-Dichloropropane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500 Jo	<1.25	<1.00 UJ-
1,3,5-Trimethylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
1,4-Dioxane	<2000 UJ-	<1000 UJ-	<1000 Jo UJ-	<1000	<1000	165	147 J-	<1000 Jo UJ-	193 J-	<250 Jo UJ-	<200 Jo UJ-
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<100	<50.0	<50.0	<50.0	<50.0	<5.00	<10.0	<50.0	<5.00 Jo	<12.5	<10.0 UJ-
2-Hexanone	<100	<50.0	<50.0	<50.0	<50.0	<5.00	<10.0	<50.0	<5.00	<12.5	<10.0 UJ-
Acetone	<200 Jo	<100 Jo	<100 Jo	<100 Jo	<100 Jo	<10.0	<20.0 Jo	<100	<10.0 Jo	<25.0 Jo	<20.0 Jo UJ-
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<10.0 Jo	<5.00 Jo	6.67	<5.00 Jo	8.88	0.759	<1.00 Jo	<5.00 Jo	0.870	<1.25 Jo	<1.00 Jo UJ-
Bromodichloromethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Bromomethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Carbon disulfide	<100	<50.0	<50.0	<50.0	<50.0	<5.00	<10.0	<50.0	<5.00	<12.5	<10.0 UJ-
Carbon tetrachloride	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Chloroethane	<10.0	<5.00 Jo	<5.00 Jo	<5.00 Jo	<5.00	<0.500	<1.00 Jo	<5.00	<0.500 Jo	<1.25 Jo	<1.00 Jo UJ-
Chloroform	<10.0	<5.00 Jo	<5.00 Jo	<5.00 Jo	<5.00 Jo	2.56	2.41	<5.00 Jo	<2.66 U	2.50	2.11 J-
Chloromethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW2	TW2	TW2	TW2	TW2	TW3	TW3	TW3	TW3	TW3	TW3
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<10.0 Jo	8.58	10.7	9.23	12.9	25.5	27.9	38.2	29.3	28.0	24.7 J-
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Ethylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Hexachlorobutadiene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Isopropylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
m,p-Xylene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Methylene chloride	<10.0 Jo	<5.00 Jo	<5.00 Jo	<5.00	<5.00	<0.500	<1.00 Jo	<5.00 Jo	<0.500 Jo	<1.25 Jo	<1.00 UJ-
n-Butylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
n-Propylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Naphthalene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25 Jo	<1.00 UJ-
o-Xylene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500 Jo	<1.25 Jo	<1.00 UJ-
p-Isopropyltoluene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
sec-Butylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
tert-Butylbenzene	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Tetrachloroethene (PCE)	14.2	9.38	10.7	<5.00 Jo	14.6	1.87	1.02	<5.00 Jo	1.04	<1.25 Jo	<1.00 Jo UJ-
Toluene	<10.0	<5.00 Jo	5.84	<5.00 Jo	13.5	0.965	1.08	<5.00 Jo	1.35	1.28	<1.00 Jo UJ-
trans-1,2-Dichloroethene	<10.0	<5.00	<5.00	<5.00	<5.00	0.766	<1.00 Jo	<5.00 Jo	0.791	<1.25 Jo	<1.00 Jo UJ-
Trichloroethene (TCE)	<10.0 Jo	<5.00 Jo	<5.00 Jo	<5.00 Jo	<5.00 Jo	8.54	9.99	13.9	11.8	9.91	6.33 J-
Trichlorofluoromethane	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00	<5.00	<0.500	<1.25	<1.00 UJ-
Trichlorotrifluoroethane (Freon 113)	336	243	292	118	146	1.09	<1.00 Jo	<5.00	<0.500 Jo	<1.25 Jo	<1.00 Jo UJ-
Vinyl Acetate	<100	<50.0	<50.0	<50.0	<50.0	<5.00	<10.0	<50.0	<5.00	<12.5	<10.0 UJ-
Vinyl chloride (VC)	<10.0	<5.00	<5.00	<5.00	<5.00	<0.500	<1.00 Jo	<5.00	<0.500 Jo	<1.25 Jo	<1.00 Jo UJ-
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW3	TW4	TW4	TW4	TW4	TW4	TW4	TW4	TW5	TW5	TW5
Sample Date	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	6.74	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	15.5	18.3	<125
1,1,2,2-Tetrachloroethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,1,2-Trichloroethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,1-Dichloroethane (1,1-DCA)	63.5	29.9	30.1	<50.0 Jo	29.3	49.2	51.1	55.0	256	251	134
1,1-Dichloroethene (1,1-DCE)	31.8	<10.0	<10.0 Jo	<50.0 Jo	<25.0 Jo	<25.0 Jo	<25.0 Jo	<50.0	40.8	43.5	<125 Jo
1,2,3-Trichlorobenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,2,4-Trichlorobenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,2,4-Trimethylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	200	--	--	--
1,2-Dichlorobenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,2-Dichloroethane	<2.00 Jo	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00 Jo	<125
1,2-Dichloropropane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,3,5-Trimethylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
1,4-Dioxane	<400 Jo	<1000	<1000 UJ-	<10000 UJ-	<2.66 UJ-	<5000 UJ-	<5000	<10000	<500	<500 Jo UJ-	<25000 UJ-
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<20.0	<100	<100	<500	<250 Jo	387	<250	806	<50.0	<50.0	<1250 Jo
2-Hexanone	<20.0	<100	<100	<500	<250	<250	<250	<500	<50.0	<50.0	<1250
Acetone	<40.0 Jo	<200	<200	<1000	1620	3220	3950	6350	<100	<100	<2500
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<2.00 Jo	<10.0	<10.0 Jo	<50.0	<25.0	<25.0 Jo	<25.0	<50.0	<5.00	6.74	<125
Bromodichloromethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Bromomethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Carbon disulfide	<20.0	<100	<100	<500	<250	<250	<250	<500	<50.0	<50.0	<1250
Carbon tetrachloride	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Chloroethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00 Jo	<125
Chloroform	2.44	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00 Jo	<125
Chloromethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW3	TW4	TW4	TW4	TW4	TW4	TW4	TW4	TW5	TW5	TW5
Sample Date	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	27.2	<10.0	<10.0 Jo	354	890	1080	1030	944	6.42	7.59	<125
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Ethylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Hexachlorobutadiene	<2.00	<10.0	<10.0	<50.0	<25.0 Jo	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Isopropylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
m,p-Xylene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125 Jo
Methylene chloride	<2.00	<10.0	<10.0	<50.0 Jo	<25.0 Jo	<25.0 Jo	<25.0	76.8	<5.00	<5.00 Jo	<155 U
n-Butylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
n-Propylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Naphthalene	<2.00	<10.0	<10.0	<50.0	<25.0 Jo	<25.0	<25.0	<50.0	<5.00	<5.00	<125
o-Xylene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
p-Isopropyltoluene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
sec-Butylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
tert-Butylbenzene	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Tetrachloroethene (PCE)	<2.00 Jo	672	377	2310	2290	889	315	209	69.8	78.4	196
Toluene	<2.00 Jo	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00 Jo	<125
trans-1,2-Dichloroethene	<2.00 Jo	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Trichloroethene (TCE)	9.29	<10.0	<10.0 Jo	234	80.8	75.6	43.3	62.6	<5.00	5.01	<125
Trichlorofluoromethane	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Trichlorotrifluoroethane (Freon 113)	<2.00 Jo	513	579	163	101	195	130	131	108	144	<125 Jo
Vinyl Acetate	<20.0	<100	<100	<500	<250	<250	<250	<500	<50.0	<50.0	<1250
Vinyl chloride (VC)	<2.00	<10.0	<10.0	<50.0	<25.0	<25.0	<25.0	<50.0	<5.00	<5.00	<125
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW5	TW5	TW5	TW5	TW6	TW6	TW6	TW6	TW6	TW6	TW6
Sample Date	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<25.0 Jo	<25.0	<25.0 UJ-	<20.0	1.87	0.729	<5.00 Jo	<0.500 Jo	1.31	1.71	1.37
1,1,2,2-Tetrachloroethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,1,2-Trichloroethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	103	122	113 J-	148	17.6	9.16	24.0	16.9	18.3	21.6	17.4
1,1-Dichloroethene (1,1-DCE)	45.7	53.9	37.1 J-	42.1	17.2	6.91	10.9	5.45	14.9	19.7	14.7
1,2,3-Trichlorobenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,2,4-Trichlorobenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,2,4-Trimethylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	80.0	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,2-Dichloroethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500 Jo	<5.00	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo
1,2-Dichloropropane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,3,5-Trimethylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
1,4-Dioxane	<5000 UJ-	<5000 UJ-	<5000 UJ-	<4000	<50.0	<50.0 Jo UJ-	<1000 UJ-	<100 UJ-	<200 Jo UJ-	<100	<100 Jo
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	2170	2960	2800 J-	2450	<5.00	<5.00	<50.0	<5.00	<10.0	<5.00	<5.00
2-Hexanone	<250	<250	<250 UJ-	<200	<5.00	<5.00	<50.0	<5.00	<10.0	<5.00	<5.00
Acetone	835	1230	1250 J-	1460	<10.0	<10.0	<100	<10.0	<20.0	<10.0	<10.0
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<25.0	<25.0 Jo UJ-	<25.0 UJ-	<20.0 Jo	<0.500	<0.500 Jo	<5.00	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo
Bromodichloromethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Bromomethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Carbon disulfide	<250	<250	<250 UJ-	<200	<5.00	<5.00	<50.0	<5.00	<10.0	<5.00	<5.00
Carbon tetrachloride	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Chloroethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Chloroform	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500 Jo	<5.00	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo
Chloromethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW5	TW5	TW5	TW5	TW6	TW6	TW6	TW6	TW6	TW6	TW6
Sample Date	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<25.0 Jo	<25.0 Jo	<25.0 UJ-	<20.0 Jo	1.62	0.550	<5.00 Jo	0.628	1.44	2.21	1.53
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Ethylbenzene	<25.0	<25.0 UJ-	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Hexachlorobutadiene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Isopropylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
m,p-Xylene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Methylene chloride	<25.0	<25.0 Jo	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00 Jo	<0.500	<1.00 Jo	<0.500	<0.500
n-Butylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
n-Propylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Naphthalene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
o-Xylene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
p-Isopropyltoluene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
sec-Butylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
tert-Butylbenzene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Tetrachloroethene (PCE)	79.5	68.4	50.0 J-	41.2	8.67	3.98	5.05	1.95	4.82	4.93	4.84
Toluene	<25.0	<25.0 UJ-	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
trans-1,2-Dichloroethene	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Trichloroethene (TCE)	<25.0	<25.0	<25.0 UJ-	<20.0 Jo	0.557	<0.500 Jo	<5.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo
Trichlorofluoromethane	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	45.1	35.1	<25.0 UJ-	<20.0 Jo	2.81	2.61	<5.00 Jo	4.22	5.32	5.49	6.47
Vinyl Acetate	<250	<250	<250 UJ-	<200	<5.00	<5.00	<50.0	<5.00	<10.0	<5.00	<5.00
Vinyl chloride (VC)	<25.0	<25.0	<25.0 UJ-	<20.0	<0.500	<0.500	<5.00	<0.500	<1.00	<0.500 Jo	<0.500 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW7	TW7	TW7	TW7	TW7	TW7	TW8	TW8	TW8	TW8	TW8
Sample Date	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500 Jo	<10.0 Jo	2.12	0.575	<0.500 Jo
1,1,2,2-Tetrachloroethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<12.5 Jo	<125 Jo	<20.0 Jo	<25.0 Jo	24.2	25.8	19.6	22.9	23.9	26.8	29.6
1,1-Dichloroethene (1,1-DCE)	<12.5 Jo	<125	<20.0	<25.0	<20.0 Jo	<25.0	1.04	<10.0 Jo	1.66	1.21	1.08
1,2,3-Trichlorobenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,2-Dichloroethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,2-Dichloropropane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
1,4-Dioxane	<1250	<25000 UJ-	<4000 UJ-	<5000 UJ-	<4000	<5000	<50.0 Jo UJ-	<2000 UJ-	<100 Jo UJ-	<100 Jo UJ-	<100
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<125	<1250 Jo	412	485	692	784	<5.00	<100	<5.00	<5.00	<5.00
2-Hexanone	<125	<1250	<200	<250	<200	<250	<5.00	<100	<5.00	<5.00	<5.00
Acetone	<250 Jo	<2500 Jo	979	2520	3290	2970	<10.0 Jo	<200	<10.0 Jo	<10.0 Jo	<10.0 Jo
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--	--
Benzene	<12.5 Jo	<125	<20.0	<25.0 Jo	<20.0 Jo	<25.0	<0.500	<10.0	<0.500	<0.500 Jo	<0.500
Bromodichloromethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Bromomethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Carbon disulfide	<125	<1250	<200	<250	<200	<250	<5.00	<100	<5.00 Jo	<5.00	<5.00 Jo
Carbon tetrachloride	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Chloroethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Chloroform	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500 Jo	<0.500 Jo	<0.500
Chloromethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500 Jo	<10.0	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW7	TW7	TW7	TW7	TW7	TW7	TW8	TW8	TW8	TW8	TW8
Sample Date	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	<12.5	<125	373	691	854	1020	3.34	<10.0 Jo	3.80	2.90	2.78
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Ethylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Hexachlorobutadiene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Isopropylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
m,p-Xylene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<12.5	<125	<20.0	<25.0	<20.0	<25.0	4.52	<10.0 Jo	4.78	4.96	5.58
Methylene chloride	<12.5	<125 Jo	<20.0	<25.0 Jo	<20.0	<25.0	<0.500 Jo	<10.0 Jo	<0.500	<0.500 Jo	<0.500
n-Butylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
n-Propylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Naphthalene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
o-Xylene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
p-Isopropyltoluene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
sec-Butylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
tert-Butylbenzene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	685	657	381	520	315	167	<0.500	<10.0	<0.500	<0.500	<0.500
Toluene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500 Jo	<0.500
trans-1,2-Dichloroethene	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500 Jo	<10.0	<0.500 Jo	<0.500 Jo	<0.500
Trichloroethene (TCE)	<12.5 Jo	<125	110	68.7	56.1	42.0	2.25	<10.0 Jo	2.58	2.16	1.56
Trichlorofluoromethane	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500	<10.0	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	511	<125 Jo	20.1	<25.0 Jo	<20.0 Jo	<25.0 Jo	<0.500	<10.0	<0.500	<0.500	<0.500
Vinyl Acetate	<125	<1250	<200	<250	<200	<250	<5.00	<100	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<12.5	<125	<20.0	<25.0	<20.0	<25.0	<0.500 Jo	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW8	TW9	TW9	TW9	TW9	TW9	TW9	W1	W1	W1
Sample Date	2/21/01	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	2/21/01	6/24/91	8/20/91	2/17/92
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500 Jo	24.7	10.4	11.8	14.6	19.0	13.6	18	<5	4.1
1,1,2,2-Tetrachloroethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<5	--	<0.5
1,1,2-Trichloroethane	<0.500	<1.00	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<5	--	<0.5
1,1-Dichloroethane (1,1-DCA)	25.1	12.5	10.3	9.61	11.6	15.6	12.3	16	2.9	<0.5
1,1-Dichloroethene (1,1-DCE)	0.904	8.95	<10.0 Jo	5.02	6.27	8.04	5.74	7.9	<5	<0.5
1,2,3-Trichlorobenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
1,2,4-Trichlorobenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
1,2,4-Trimethylbenzene	<0.500	<1.00	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	--
1,2-dichloro-1,1,2-trifluoro-ethane (TIC)	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<5	--	<0.5
1,2-Dichloroethane	<0.500	<1.00 Jo	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<5	--	<0.5
1,2-Dichloropropane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<5	<5	<0.5
1,3,5-Trimethylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500 Jo	<0.500	--	--	--
1,3-Dioxolane (TIC)	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<5	--	<0.5
1,4-Dioxane	<100 Jo	<100 Jo UJ-	<2000 UJ-	110 J-	<100 Jo UJ-	<100 Jo	<100 Jo	--	--	--
1-propanol (TIC)	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<10.0	<100	<5.00 Jo	5.30	5.30	16.8	--	--	--
2-Hexanone	<5.00	<10.0	<100	<5.00	<5.00	<5.00	<5.00	--	--	--
Acetone	<10.0 Jo	<20.0 Jo	<200	15.0	12.8	10.9	12.4	--	--	--
arsenous acid (TIC)	--	--	--	--	--	--	--	--	--	--
Benzene	<0.500	<1.00 Jo	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	--
Bromodichloromethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500 Jo	<0.500	<5	--	<0.5
Bromomethane	<0.500	<1.00	<10.0 UJ-	<0.500	<0.500	<0.500	<0.500	<20	--	<2
Carbon disulfide	<5.00	<10.0	<100 Jo	27.0	19.0	16.4	9.98	--	--	--
Carbon tetrachloride	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<5	--	<0.5
Chloroethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500 Jo	<20	<20	<2
Chloroform	<0.500 Jo	<1.00 Jo	<10.0	<0.714 U	0.751	0.816	0.617	<5	--	<0.5
Chloromethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<20	--	<2

Notes:

µg/L = micrograms per liter

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Bold values indicate a detection.

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TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW8	TW9	TW9	TW9	TW9	TW9	TW9	W1	W1	W1
Sample Date	2/21/01	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	2/21/01	6/24/91	8/20/91	2/17/92
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.68	12.5	<10.0 Jo	8.39	9.48	12.6	9.41	--	23	<0.5
Di-isopropyl ether (TIC)	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<20	--	<2
Ethylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
Hexachlorobutadiene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
Isopropylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
m,p-Xylene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
methyl cyclohexane (TIC)	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	4.84	<1.00 Jo	<10.0 Jo	1.34	1.06	0.766	1.07	--	--	--
Methylene chloride	<0.500 Jo	<1.00 Jo	<10.0 Jo	<0.500	<0.500 Jo	<0.500	0.912	33	--	<2
n-Butylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
n-Propylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
Naphthalene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
o-Xylene	<0.500	<1.00	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	--
p-Isopropyltoluene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
sec-Butylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
tert-Butylbenzene	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	--	--	--
Tetrachloroethene (PCE)	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<5	<5	<0.5
Toluene	<0.500	<1.00	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	--	--	--
trans-1,2-Dichloroethene	<0.500	<1.00 Jo	<10.0	<0.500 Jo	<0.500 Jo	0.504	<0.500 Jo	<5	<5	<0.5
Trichloroethene (TCE)	0.793	3.24	<10.0 Jo	2.07	2.53	2.89	2.26	6.6	<5	<0.5
Trichlorofluoromethane	<0.500	<1.00	<10.0	<0.500	<0.500	<0.500	<0.500	<20	--	<2
Trichlorotrifluoroethane (Freon 113)	<0.500	<1.00 Jo	<10.0	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	--
Vinyl Acetate	<5.00	<10.0 Jo	<100	<5.00	<5.00	<5.00	<5.00	--	--	--
Vinyl chloride (VC)	<0.500 Jo	<1.00	<10.0	<0.500	<0.500 Jo	<0.500	<0.500 Jo	<20	--	<2
Xylenes (total)	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	5/18/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	10/20/94	10/20/94
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	68	3.5	25	43	35	19	20	24	25	26	--	17
1,1,2,2-Tetrachloroethane	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	--	<0.4
1,1,2-Trichloroethane	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	<1	--
1,1-Dichloroethane (1,1-DCA)	22	2.3	21	32	28	26	16	29	34	29	--	27
1,1-Dichloroethene (1,1-DCE)	<10	0.8	<5	<5	16	13	<10	10	<5	7.5	--	4.8
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<10	<0.5	<5	<12	<5	<5	<10	<0.5	<5	<5	<0.4	--
1,2-Dichloroethane	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	--	<0.4
1,2-Dichloropropane	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	--	<0.4
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<10	<0.5	<5	<10	<5	<5	<10	<0.5	<5	<5	<0.4	--
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	<0.4	--
Bromomethane	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	<0.4	--
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	--	<0.4
Chloroethane	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	<0.4	--
Chloroform	<10	<0.5	<5	<5	<5	<5	<10	0.8	<5	<5	--	<0.4
Chloromethane	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	<0.4	--
cis-1,2-Dichloroethene (cis-1,2-DCE)	12	1.5	9	12	13	8.2	24	11	9.7	8.1	--	<0.5
Dichlorodifluoromethane	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	<0.4	--

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TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	5/18/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	10/20/94	10/20/94
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<40	<2	<20	<20	<20	<20	300	<2	<20	<20	--	<10
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<10	<0.5	<5	<5	<5	<5	<10	1.8	<5	<5	--	<0.4
Toluene	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<10	<0.5	<5	<5	<5	<5	<10	<0.5	<5	<5	<0.4	--
Trichloroethene (TCE)	<10	<0.5	<5	<5	26	<5	<10	5.2	<5	<5	--	0.8
Trichlorofluoromethane	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	--	<0.4
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Acetate	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<40	<2	<20	<20	<20	<20	<40	<2	<20	<20	--	<0.4
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

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-- = not analyzed

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For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	11/16/94	2/16/95	5/16/95	8/15/95	10/3/95	2/20/96	4/18/96	5/27/97	8/26/97	2/13/98	5/22/98	8/26/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	29	31	26	27	1.8	12	21	11	15	9	<5	19
1,1,2,2-Tetrachloroethane	<0.5	<2.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
1,1,2-Trichloroethane	<0.5	<2.5	<0.5	<0.5	<1	<0.5	<5	<0.5	<5	<5	<5	<0.5
1,1-Dichloroethane (1,1-DCA)	19	35	33	34	2.7	22	41	17	26	15	8.4	20
1,1-Dichloroethene (1,1-DCE)	37	11	11	9	0.69	6.4	9	3.8	6	<5	<5	4.5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.5	<2.5	<1	<1	<0.4	<1	--	<0.5	--	<5	--	--
1,2-Dichloroethane	<0.5	<2.5	0.58	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
1,2-Dichloropropane	<0.5	<2.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.5	<3.6	<1	<1	<0.4	<1	--	<0.5	--	<5	--	--
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	<100	--	<10	<100	<10	<2
2-Hexanone	--	--	--	--	--	--	<50	--	<50	<50	<10	<2
Acetone	--	--	--	--	--	--	<100	--	<100	<100	<10	<2
Benzene	--	--	--	--	--	--	<5	--	<5	<5	<5	<0.5
Bromodichloromethane	<0.5	<2.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
Bromomethane	<2	<18	<3.5	<3.5	<0.4	<3.5	<10	<2	<10	<10	<10	<0.5
Carbon disulfide	--	--	--	--	--	--	<10	--	<10	<10	<5	<2
Carbon tetrachloride	<0.5	<2.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
Chloroethane	<2	<7.8	<1.6	<1.6	<0.4	<1.6	<10	<2	<10	<10	<10	<0.5
Chloroform	<0.5	<2.5	0.99	0.59	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
Chloromethane	<2	<2.5	<0.5	<0.5	<0.4	<0.5	<10	<2	<10	<10	<10	<0.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	2.4	--	--	--	1	--	9	6	16	11	<5	9
Dichlorodifluoromethane	<2	<27	<5.4	<5.4	<0.4	<5.4	--	<2	--	<10	<5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	11/16/94	2/16/95	5/16/95	8/15/95	10/3/95	2/20/96	4/18/96	5/27/97	8/26/97	2/13/98	5/22/98	8/26/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Ethylbenzene	--	--	--	--	--	--	<5	--	<5	<5	<5	<0.5
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	<10	<2
Methylene chloride	<2	<10	<2	<2	<10	<2	<20	<2	<10	<20	<5	<0.5
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	1.4	<2.5	2	1.8	<0.4	1.4	<5	0.8	<5	<5	<5	1
Toluene	--	--	--	--	--	--	<5	--	<5	<5	<5	<0.5
trans-1,2-Dichloroethene	<0.5	<2.5	<0.5	<0.5	<0.4	<0.5	<5	<0.5	<5	<5	<5	<0.5
Trichloroethene (TCE)	13	3	5.2	3.5	0.41	5	<5	2.3	<5	<5	<5	3
Trichlorofluoromethane	13	<25	<5	<5	<0.4	<5	--	<2	--	<5	<5	<0.5
Trichlorotrifluoroethane (Freon 113)	27	--	--	--	--	--	--	<0.5	<5	<5	<5	<2
Vinyl Acetate	--	--	--	--	--	--	<50	--	<50	<50	<10	<2
Vinyl chloride (VC)	<2	<2.7	<0.54	<0.54	<0.4	<0.54	<10	<2	<10	<10	<10	<0.5
Xylenes (total)	--	--	--	--	--	--	<10	--	<10	<10	<5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W10A	W10A	W10A	W10A	W11A
Sample Date	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01	4/7/00	7/13/00	10/19/00	2/20/01	4/11/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	4	7.91	0.619	1.03	7.61	10.6	<0.500	<0.500	1.04	<0.500 Jo	0.665
1,1,2,2-Tetrachloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	8	13.4	4.82	3.17	15.7	17.6	<0.500	<0.500	0.155	<0.500	48.2
1,1-Dichloroethene (1,1-DCE)	2	3.49	1.76	0.686	2.87	3.78	<0.500	<0.500	1.33	<0.500 Jo	8.11
1,2,3-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	<50.0	46.1	<100 Jo UJ-	<100 Jo	<50.0	<50.0 UJ-	<100 UJ-	<100	154
2-Butanone (MEK)	<3	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Hexanone	<4	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<3	<5.00	<10.0	<10.0	<10.0 Jo	<10.0 Jo	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	<0.8	0.536	0.565	0.0639	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	<0.7	<5.00	<5.00	<5.00	197 J-	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.7	<0.500	<0.500	0.684	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	8	13.6	17.5	1.47	8.92	8.34	<0.500	<0.500	0.115	<0.500	23.2
Dichlorodifluoromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W1	W1	W1	W1	W1	W1	W10A	W10A	W10A	W10A	W11A
Sample Date	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01	4/7/00	7/13/00	10/19/00	2/20/01	4/11/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.6	<0.500	1.02	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	--	<0.500	4.16	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	0.9	1.01	<0.500	0.517	1.22	1.65	<0.500	<0.500	<0.500	<0.500	3.27
Methylene chloride	<0.8	<0.500	<0.500	0.0698	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	--	<0.500	1.70	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.9	0.778	<0.500	0.156	1.01	1.07	<0.500	<0.500	0.157	<0.500	<0.500
Toluene	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	1	2.36	1.44	0.410	2.20	2.53	<0.500	<0.500	0.326	<0.500	1.82
Trichlorofluoromethane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl Acetate	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<0.6	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	<2	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W11A	W11A	W11A	W11B	W11B	W11B	W12A	W12A	W12A	W12A	W13A	W13A
Sample Date	7/13/00	10/26/00	2/22/01	10/27/00	2/22/01	5/3/01	4/10/00	7/14/00	10/27/00	2/23/01	10/26/00	2/21/01
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	1.84	1.12	<1.00 Jo	<0.500	<0.500	<0.500 Jo	<2.00	1.08	<1.25	<1.00	<0.500	<0.500 Jo
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,1,2-Trichloroethane	<1.00	<1.00	<1.00	<0.500	<0.500	3.97	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	50.3	59.1	49.0	1.32	2.98	<0.500 Jo	65.1	76.0	70.9	74.6	15.4	10.9
1,1-Dichloroethene (1,1-DCE)	7.81	8.18	7.14	<0.500	<0.500 Jo	<0.500 Jo	<2.00	1.86	<1.25 Jo	<1.00 Jo	<0.500	<0.500
1,2,3-Trichlorobenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,2,4-Trimethylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,2-Dichloroethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,2-Dichloropropane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,3,5-Trimethylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
1,4-Dioxane	182 J-	263 J-	<200 Jo	<100 UJ-	<100	<100.00	<200	120 J-	<250 Jo UJ-	209	185 J-	165
2-Butanone (MEK)	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<20.0	<10.0	<12.5	<10.0	<5.00	<5.00
2-Hexanone	12.1	<10.0	<10.0	<5.00	<5.00	<5.00	<20.0	<10.0	<12.5	<10.0	<5.00	<5.00
Acetone	<20.0	<20.0	<20.0	<10.0	<10.0	<10.00	<40.0	<20.0	<25.0	<20.0	<10.0	<10.0
Benzene	<1.00 Jo	<1.00 Jo	<1.00 Jo	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Bromodichloromethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Bromomethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500 UJ-	<0.500
Carbon disulfide	<10.0	<10.0	<10.0 Jo	<5.00	<5.00	<5.00	<20.0	<10.0	<12.5	<10.0	<5.00	<5.00
Carbon tetrachloride	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Chloroethane	<1.00	<1.00	<1.00	<0.500 Jo	<0.500 Jo	<0.500 Jo	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Chloroform	<1.00	<1.00	<1.00	<0.500	<0.500 Jo	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Chloromethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	20.8	22.2	22.9	0.733	2.10	2.59	<2.00	0.997	<1.25 Jo	<1.00 Jo	<0.500	<0.500
Dichlorodifluormethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W11A	W11A	W11A	W11B	W11B	W11B	W12A	W12A	W12A	W12A	W13A	W13A
Sample Date	7/13/00	10/26/00	2/22/01	10/27/00	2/22/01	5/3/01	4/10/00	7/14/00	10/27/00	2/23/01	10/26/00	2/21/01
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Hexachlorobutadiene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Isopropylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
m,p-Xylene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	3.80	5.16	3.24	<0.500 Jo	<0.500 Jo	<0.500 Jo	<2.00	<1.00	<1.25	<1.00	<0.500 Jo	<0.500
Methylene chloride	<1.00	<1.00 Jo	<1.00	<0.500 Jo	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00 Jo	<0.500 Jo	<0.500
n-Butylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
n-Propylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Naphthalene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
o-Xylene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
p-Isopropyltoluene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
sec-Butylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
tert-Butylbenzene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Tetrachloroethene (PCE)	8.65	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	4.44	<1.25	<1.00	<0.500	<0.500
Toluene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Trichloroethene (TCE)	4.59	1.75	2.17	<0.500	<0.500 Jo	<0.500	<2.00	3.04	<1.25 Jo	<1.00 Jo	<0.500	<0.500
Trichlorofluoromethane	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<1.00 Jo	<1.00	<1.00	<0.500	<0.500	<0.500	<2.00	0.750	<1.25 Jo	<1.00	<0.500	<0.500
Vinyl Acetate	<10.0	<10.0	<10.0	<5.00	<5.00	<5.0	<20.0	<10.0	<12.5	<10.0	<5.00	<5.00
Vinyl chloride (VC)	<1.00 Jo	<1.00 Jo	<1.00 Jo	<0.500	<0.500	<0.500	<2.00	<1.00	<1.25	<1.00	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W13A	W14A	W14A	W14A	W14A	W15A	W15A	W15A	W15A	W16A	W16A	W16A
Sample Date	5/30/91	4/11/00	7/12/00	10/19/00	2/22/01	4/6/00	7/12/00	10/18/00	2/20/01	4/6/00	7/12/00	10/18/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500 Jo	113	99.4	106	92.4	<0.500	0.144	<0.500 Jo	<0.500	<0.500	0.413	<0.500 Jo
1,1,2,2-Tetrachloroethane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500 Jo	85.9	79.3	81.2	70.7	<0.500	<0.500	<0.500	<0.500	<0.500	0.0867	<0.500 Jo
1,1-Dichloroethene (1,1-DCE)	<0.500 Jo	188	164	175	137	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	0.0931	<0.500 Jo
1,2,3-Trichlorobenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	0.105	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	126.00	<1250	<2500 UJ-	<5000 UJ-	<4000	<50.0	<50.0 UJ-	<100 UJ-	<100	<50.0	<50.0 UJ-	<100 UJ-
2-Butanone (MEK)	<5.00	<125	<250	<250	<200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Hexanone	<5.0	<125	<250	<250	<200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<10.00	<250	<500	<500	<400	<10.0	3.15	<10.0 Jo	<10.0	<10.0	<10.0	<10.0
Benzene	<0.500	<12.5	<25.0	<25.0 Jo	<20.0 Jo	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<0.5	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<0.5	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	<5.00	<125	<250	<250	<200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.500	<12.5	<25.0	<25.0 Jo	<20.0	<0.500	0.203	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.02	23.3	19.8	<25.0 Jo	<20.0 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	0.102	<0.500
Dichlorodifluoromethane	<0.500	<12.5	<25.0	<25.0 Jo	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W13A	W14A	W14A	W14A	W14A	W15A	W15A	W15A	W15A	W16A	W16A	W16A
Sample Date	5/30/91	4/11/00	7/12/00	10/19/00	2/22/01	4/6/00	7/12/00	10/18/00	2/20/01	4/6/00	7/12/00	10/18/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	0.137	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<12.5	<25.0	<25.0 Jo	<20.0 Jo	<0.500	0.0920	<0.500	<0.500	<0.500	0.0949	<0.500
Methylene chloride	<0.500	<12.5	<25.0	<25.0 Jo	<20.0 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	0.739	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<12.5	5.78	<25.0 Jo	<20.0 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	641	578	535	559	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<0.500	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	0.679	727	1160	1210	1000	<0.500	0.0998	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl Acetate	<5.00	<125	<250	<250	<200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<0.50	<12.5	<25.0	<25.0	<20.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W16A	W17A	W17A	W17A	W17A	W17B	W17B	W17B	W18A	W18A	W18A	W18A
Sample Date	2/20/01	4/6/00	7/12/00	10/24/00	2/22/01	10/24/00	2/22/01	5/3/01	4/6/00	7/12/00	10/24/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500 Jo	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	145	111	71.9	85.2
1,1,2,2-Tetrachloroethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,1,2-Trichloroethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,1-Dichloroethane (1,1-DCA)	<0.500 Jo	<5.00	0.587	<10.0 Jo	<0.500	<0.500 Jo	<20.0 Jo	<0.500	22.9	19.1	15.0	17.3
1,1-Dichloroethene (1,1-DCE)	<0.500 Jo	<5.00	0.431	<10.0 Jo	<0.500	<0.500	<20.0	<0.500	41.9	32.4	24.2	29.6
1,2,3-Trichlorobenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,2,4-Trichlorobenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,2,4-Trimethylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,2-Dichlorobenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,2-Dichloroethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,2-Dichloropropane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,3,5-Trimethylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,4-Dichlorobenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
1,4-Dioxane	<100	<500	<250 UJ-	<2000 UJ-	<100	<100 UJ-	<4000	<100.00	<200	<250 UJ-	<200 UJ-	<500
2-Butanone (MEK)	<5.00	<50.0	<25.0	<100	<5.00	<5.00	<200	<5.00	<20.0	<25.0	<10.0	<25.0
2-Hexanone	<5.00	<50.0	<25.0	<100	<5.00	<5.00	<200	<5.00	<20.0	<25.0	<10.0	<25.0
Acetone	<10.0	<100	<50.0	<200	<10.0 Jo	<10.0	<400	<10.00	<40.0	<50.0	<20.0	<50.0
Benzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	<2.00	<2.50	<1.00 Jo	<2.50
Bromodichloromethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Bromomethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Carbon disulfide	<5.00	<50.0	<25.0	<100	57.8	<5.00	<200	<5.00	<20.0	<25.0	<10.0	<25.0
Carbon tetrachloride	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Chloroethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Chloroform	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	<2.00	0.399	<1.00 Jo	<2.50 Jo
Chloromethane	<0.500 Jo	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	4.06	3.45	2.68	3.25
Dichlorodifluormethane	<0.500	<5.00	1.24	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50

Notes:

µg/L = micrograms per liter

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Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W16A	W17A	W17A	W17A	W17A	W17B	W17B	W17B	W18A	W18A	W18A	W18A
Sample Date	2/20/01	4/6/00	7/12/00	10/24/00	2/22/01	10/24/00	2/22/01	5/3/01	4/6/00	7/12/00	10/24/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Hexachlorobutadiene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Isopropylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
m,p-Xylene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Methyl tert-butyl ether (MTBE)	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	10.1	33.8	27.2	44.2
Methylene chloride	<0.500	<5.00	<2.50	<10.0 Jo	<0.500	<0.500 Jo	<20.0 Jo	<0.500	<2.00	<2.50	<1.00 Jo	<2.50
n-Butylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
n-Propylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Naphthalene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0		<2.00	<2.50	<1.00	<2.50
o-Xylene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
p-Isopropyltoluene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
sec-Butylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
tert-Butylbenzene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Tetrachloroethene (PCE)	<0.500	<5.00	<2.50	<10.0	<0.500 Jo	<0.500 Jo	<20.0	<0.500	19.6	17.7	12.0	18.6
Toluene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500 Jo	<20.0	<0.500	<2.00	<2.50	<1.00 Jo	<2.50
trans-1,2-Dichloroethene	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Trichloroethene (TCE)	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	17.9	16.7	11.4	14.9
Trichlorofluoromethane	<0.500	<5.00	<2.50	<10.0	<0.500	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Trichlorotrifluoroethane (Freon 113)	<0.500	792	178	830	<0.500	1.15	1290	<0.500	7.52	4.52	1.86	2.51
Vinyl Acetate	<5.00	<50.0	<25.0	<100	<5.00	<5.00	<200	<5.00	<20.0	<25.0	<10.0	<25.0
Vinyl chloride (VC)	<0.500	<5.00	<2.50	<10.0	<0.500 Jo	<0.500	<20.0	<0.500	<2.00	<2.50	<1.00	<2.50
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W19A	W19A	W19A	W19A	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	4/6/00	7/12/00	10/24/00	2/22/01	6/24/91	8/20/91	2/17/92	10/2/95	4/18/96	2/13/98	5/21/98	8/25/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	3.43	3.53	2.97	3.25	3.6	59	<0.5	<0.4	<5	<5	<5	<0.5
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<1	<5	<5	<5	<0.5
1,1-Dichloroethane (1,1-DCA)	12.9	13.3	12.8	20.3	0.9	5	<0.5	1	<5	<5	<5	0.74
1,1-Dichloroethene (1,1-DCE)	4.43	4.19	3.60	6.56	<0.5	9.9	<0.5	<0.4	<5	<5	<5	<0.5
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<0.4	--	<5	--	--
1,2-Dichloroethane	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5
1,2-Dichloropropane	<0.500	<0.500	<0.500	<0.500	<0.5	<0.5	<0.5	<0.4	<5	<5	<5	<0.5
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<0.4	--	<5	--	--
1,4-Dioxane	<50.0	<50.0 Jo UJ-	<100 UJ-	<100	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	<5.00	<5.00	<5.00	--	--	--	--	<100	<100	<10	<2
2-Hexanone	<5.00	<5.00	<5.00	<5.00	--	--	--	--	<50	<50	<10	<2
Acetone	<10.0	<10.0	<10.0	<10.0	--	--	--	--	<100	<100	<10	<2
Benzene	<0.500	0.0785	<0.500 Jo	<0.500 Jo	--	--	--	--	<5	<5	<5	<0.5
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5
Bromomethane	<0.500	<0.500	<0.500	<0.500	<2	--	<2	<0.4	<10	<10	<10	<0.5
Carbon disulfide	<5.00	<5.00	<5.00	<5.00	--	--	--	--	<10	<10	<5	<2
Carbon tetrachloride	<0.500	<0.500	<0.500	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5
Chloroethane	<0.500	<0.500	<0.500	<0.500	<2	<2	<2	<0.4	<10	<10	<10	<0.5
Chloroform	0.514	0.423	<0.500 Jo	<0.500 Jo	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5
Chloromethane	<0.500	<0.500	0.988	<0.500	<2	--	<2	<0.4	<10	<10	<10	<0.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	15.1	15.3	14.2	22.6	--	4.6	<0.5	1.4	<5	<5	<5	0.92
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<2	--	<2	<0.4	--	<10	<5	<0.5

Notes:
µg/L = micrograms per liter
< = less than
-- = not analyzed
Bold values indicate a detection.
For a complete summary of results, see Appendix 5-1.
Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W19A	W19A	W19A	W19A	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	4/6/00	7/12/00	10/24/00	2/22/01	6/24/91	8/20/91	2/17/92	10/2/95	4/18/96	2/13/98	5/21/98	8/25/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	<5	<5	<5	<0.5
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500	0.234	<0.500 Jo	<0.500 Jo	--	--	--	--	--	--	<10	<2
Methylene chloride	<0.500	0.0884	<0.500 Jo	<0.500	<2	--	<2	<10	<20	<10	<5	0.61
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
Naphthalene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
o-Xylene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
tert-Butylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.5	<0.5	<0.5	<0.4	<5	<5	<5	<0.5
Toluene	<0.500	<0.500	<0.500 Jo	<0.500	--	--	--	--	<5	<5	<5	<0.5
trans-1,2-Dichloroethene	<0.500	0.0977	<0.500	<0.500 Jo	<0.5	<0.5	<0.5	<0.4	<5	<5	<5	<0.5
Trichloroethene (TCE)	1.17	0.930	0.835	1.33	0.6	4.8	<0.5	1.1	<5	<5	<5	<0.5
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<2	--	<2	<0.4	--	<5	<5	<0.5
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	<0.500	--	--	--	--	--	<5	<5	<2
Vinyl Acetate	<5.00	<5.00	<5.00	<5.00	--	--	--	--	<50	<50	<10	<2
Vinyl chloride (VC)	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<2	--	<2	<0.4	<10	<10	<10	<0.5
Xylenes (total)	--	--	--	--	--	--	--	--	<10	<10	<5	<0.5

Notes:
µg/L = micrograms per liter
< = less than
-- = not analyzed
Bold values indicate a detection.
For a complete summary of results, see Appendix 5-1.
Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W2	W2	W2	W2	W2	W2	W20A	W20A	W20A	W20A	W21A
Sample Date	12/17/98	2/25/99	10/28/99	4/11/00	10/27/00	2/22/01	4/6/00	7/12/00	10/17/00	2/20/01	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	21.7	47.3	43.2	44.1	67.0
1,1,2,2-Tetrachloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,1,2-Trichloroethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	3.83
1,1-Dichloroethane (1,1-DCA)	<0.8	0.794	0.710	0.742	0.844	0.858	27.5	27.4	25.6	30.4	274
1,1-Dichloroethene (1,1-DCE)	<0.8	<0.500	<0.500	0.0938	<0.500	<0.500 Jo	69.0	69.1	73.5	80.5	82.4
1,2,3-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,2,4-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,2,4-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,2-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,2-Dichloroethane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00 Jo	<5.00	3.91
1,2-Dichloropropane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,3,5-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,4-Dichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
1,4-Dioxane	--	--	<50.0	<50.0	<100 UJ-	<100	<500	<500 UJ-	<1000 UJ-	<1000	--
2-Butanone (MEK)	<3	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<50.0	<50.0	<50.0	<25.0
2-Hexanone	<4	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<50.0	<50.0	<50.0	<25.0
Acetone	<3	<5.00	<10.0	<10.0	<10.0 Jo	<10.0	<100	<100	<100	<100 Jo	<50.0
Benzene	<0.8	<0.500	<0.500	0.231	<0.500 Jo	<0.500 Jo	<5.00	<5.00	<5.00	<5.00	<2.50
Bromodichloromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Bromomethane	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Carbon disulfide	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<50.0	<50.0	<50.0	<25.0
Carbon tetrachloride	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Chloroethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	2.83
Chloroform	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	5.12
Chloromethane	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	1.63	<5.00 Jo	<5.00	<2.50
cis-1,2-Dichloroethene (cis-1,2-DCE)	1	0.996	0.944	0.930	0.939	1.09	243	269	282	291	12.7
Dichlorodifluoromethane	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

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TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 62 of 108

Sample Location	W2	W2	W2	W2	W2	W2	W20A	W20A	W20A	W20A	W21A
Sample Date	12/17/98	2/25/99	10/28/99	4/11/00	10/27/00	2/22/01	4/6/00	7/12/00	10/17/00	2/20/01	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Hexachlorobutadiene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Isopropylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
m,p-Xylene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Methyl tert-butyl ether (MTBE)	<0.7	0.548	0.548	0.622	0.540	0.583	<5.00	<5.00	<5.00	<5.00	<2.50
Methylene chloride	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
n-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
n-Propylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Naphthalene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
o-Xylene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
p-Isopropyltoluene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
sec-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
tert-Butylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Tetrachloroethene (PCE)	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	13.6	17.1	20.9	17.6	<2.50
Toluene	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
trans-1,2-Dichloroethene	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	1.01	<5.00 Jo	<5.00 Jo	<2.50
Trichloroethene (TCE)	<0.9	<0.500	<0.500	0.0720	<0.500 Jo	<0.500 Jo	11.9	14.0	16.3	14.7	10.5
Trichlorofluoromethane	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Trichlorotrifluoroethane (Freon 113)	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	0.671	<5.00	<5.00	6.95
Vinyl Acetate	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	<50.0	<50.0	<50.0	<50.0	<25.0
Vinyl chloride (VC)	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<2.50
Xylenes (total)	<2	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W21A	W21A	W21A	W21A	W21A	W21A	W21A	W21A	W22A	W22A	W22A
Sample Date	2/2/00	4/5/00	7/13/00	10/25/00	11/28/00	12/28/00	1/22/01	2/22/01	10/28/99	2/2/00	4/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	53.9	76.5	49.3	67.5	51.3	61.0	46.7 J-	59.7	10.5	8.15	25.7
1,1,2,2-Tetrachloroethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0 Jo	5.35 J-	5.98	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	390	804	317	418	388	514	425 J-	453	13.9	13.0	23.1
1,1-Dichloroethene (1,1-DCE)	95.2	162	75.2	119	87.9	122	92.6 J-	115	4.97	3.35	7.72
1,2,3-Trichlorobenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,2-Dichloroethane	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0 Jo	<5.00 Jo UJ-	5.27	<0.500	<0.500	<0.500
1,2-Dichloropropane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
1,4-Dioxane	<500	<1000	<1000 UJ-	<1000 Jo UJ-	<2000 UJ-	<2000 UJ-	<1000 UJ-	<1000	--	75.4	105
2-Butanone (MEK)	<50.0	<100	<100	<50.0	<100	<100	<50.0 UJ-	<50.0	<5.00	<5.00	<5.00
2-Hexanone	<50.0	<100	<100	<50.0	<100	<100	<50.0 UJ-	<50.0	<5.00	<5.00	<5.00
Acetone	<100	<200	<200	<100 Jo	<200	<200	<100 UJ-	<100	<10.0	<10.0	10.3
Benzene	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0 Jo	<5.00 Jo UJ-	<5.00 Jo	<0.500	<0.500	<0.500
Bromodichloromethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Bromomethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Carbon disulfide	<50.0	<100	<100	<50.0	<100	<100	<50.0 UJ-	<50.0	<5.00	<5.00	<5.00
Carbon tetrachloride	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Chloroethane	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0 Jo	<5.00 Jo UJ-	5.42	<0.500	<0.500	<0.500
Chloroform	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0 Jo	<5.00 Jo UJ-	<5.00 Jo	0.565	<0.500	0.624
Chloromethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	18.7	37.0	14.1	19.9	22.0	23.5	22.7 J-	23.9	2.06	1.67	3.01
Dichlorodifluoromethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W21A	W21A	W21A	W21A	W21A	W21A	W21A	W21A	W22A	W22A	W22A
Sample Date	2/2/00	4/5/00	7/13/00	10/25/00	11/28/00	12/28/00	1/22/01	2/22/01	10/28/99	2/2/00	4/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Hexachlorobutadiene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Isopropylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
m,p-Xylene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 Jo UJ-	<5.00 Jo	1.08	1.65	2.24
Methylene chloride	<5.00	<10.0	<10.0	<5.00 Jo	<10.0 Jo	<10.0 Jo	<5.00 UJ-	5.81 U	<0.500	<0.500	<0.500
n-Butylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
n-Propylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Naphthalene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
o-Xylene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
p-Isopropyltoluene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
sec-Butylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
tert-Butylbenzene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<5.00	<10.0	<10.0 Jo	<5.00 Jo	<10.0 Jo	<10.0	<5.00 Jo UJ-	<5.00 Jo	<0.500	<0.500	<0.500
Toluene	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	0.513
trans-1,2-Dichloroethene	<5.00	<10.0	<10.0	<5.00 Jo	<10.0	<10.0	<5.00 Jo UJ-	<5.00 Jo	<0.500	<0.500	<0.500
Trichloroethene (TCE)	12.7	20.1	10.3	13.9	13.8	16.4	12.4 J-	17.5	1.05	0.778	1.47
Trichlorofluoromethane	<5.00	<10.0	<10.0	<5.00	<10.0	<10.0	<5.00 UJ-	<5.00	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	5.21	<10.0	<10.0 Jo	8.50	<10.0 Jo	<10.0 Jo	<5.00 Jo UJ-	6.77	<0.500	<0.500	<0.500
Vinyl Acetate	<50.0	<100	<100	<50.0	<100	<100	<50.0 UJ-	<50.0	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<5.00	<10.0	<10.0	<5.00 Jo	<10.0	<10.0	<5.00 Jo UJ-	<0.500 Jo	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W22A	W22A	W22A	W22A	W22A	W22A	W23A	W23A	W23A	W24A	W24A	W24A
Sample Date	7/14/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	10/17/00	2/19/01	5/3/01	10/28/99	2/2/00	4/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	23.8	20.3	21.0	19.7	11.2	8.88	<0.500 Jo	<0.500	<0.500	7.87	17.7	20.1
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,1,2-Trichloroethane	0.154	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,1-Dichloroethane (1,1-DCA)	25.6	24.2	21.6	23.2	16.4	13.7	5.97	14.8	15.00	17.7	24.4	30.6
1,1-Dichloroethene (1,1-DCE)	9.65	9.05	7.27	6.24	3.91	2.75	1.33	3.26	4.48	21.0	57.6	54.6
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,2-Dichloroethane	0.234	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,2-Dichloropropane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,4-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
1,4-Dioxane	98.4 J-	134 J-	163 J-	119 J-	120	125	<100 Jo UJ-	110	<100.00 Jo	--	<100	<125
2-Butanone (MEK)	1.12	<5.00 Jo	<5.00	<5.00 Jo	<5.00 Jo	<5.00	<5.00	<5.00	<5.00	<10.0	<10.0	<12.5
2-Hexanone	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<10.0	<12.5
Acetone	8.91	<10.0 Jo	<10.0 Jo	<10.0 Jo	<10.0 Jo	<10.0 Jo	<10.0	<10.0	<10.00	<20.0	<20.0	<25.0
Benzene	0.350	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500 Jo	<1.00	<1.00	<1.25
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Bromomethane	<0.500	<0.500 UJ-	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Carbon disulfide	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<10.0	<12.5
Carbon tetrachloride	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Chloroethane	0.336	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Chloroform	0.611	0.620	<0.610 U	0.709	0.708	<0.500 Jo	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
cis-1,2-Dichloroethene (cis-1,2-DCE)	3.79	3.78	3.36	3.19	2.35	1.89	1.98	7.27	11.10	7.19	17.9	14.5
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W22A	W22A	W22A	W22A	W22A	W22A	W23A	W23A	W23A	W24A	W24A	W24A
Sample Date	7/14/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	10/17/00	2/19/01	5/3/01	10/28/99	2/2/00	4/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Isopropylbenzene	0.102	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
m,p-Xylene	<0.500	<0.500	<0.500 Jo	<0.500	1.39	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Methyl tert-butyl ether (MTBE)	1.90	2.20	1.93	2.12	1.89	2.24	0.685	2.90	2.13	<1.00	<1.00	<1.25
Methylene chloride	0.137	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Naphthalene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	--	<1.00	<1.00	<1.25
o-Xylene	0.0709	<0.500 Jo	<0.500 Jo	<0.500 Jo	0.509	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
tert-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Tetrachloroethene (PCE)	3.70	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Toluene	0.527	0.674	<0.500 Jo	0.501	0.590	<0.500 Jo	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
trans-1,2-Dichloroethene	0.142	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500 Jo	<0.500 Jo	<1.00	<1.00	<1.25
Trichloroethene (TCE)	2.73	1.76	1.51	1.24	0.932	0.737	<0.500	<0.500	<0.500	1.36	4.28	4.09
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<1.25
Trichlorotrifluoroethane (Freon 113)	0.216	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	42.9	2.11	7.03
Vinyl Acetate	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<10.0	<12.5
Vinyl chloride (VC)	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<0.500 Jo	<0.500 Jo	0.648	0.738	<1.00	<1.00	<1.25
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W25A	W25A	W25A	W25A	W26A
Sample Date	7/14/00	9/25/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	18.4	<250	16.0	12.7	15.9	13.0	14.4	<100	<100 Jo	<100 Jo	71.4	19.1
1,1,2,2-Tetrachloroethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,1,2-Trichloroethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50	<100	<100	<100	<50.0	<5.00
1,1-Dichloroethane (1,1-DCA)	26.2	<250	44.9	34.9	45.6	37.0	47.5	<100	<100 Jo	<100 Jo	69.8	149
1,1-Dichloroethene (1,1-DCE)	51.5	<250 Jo	70.7	47.5 J-	59.6	38.7	51.7	<100	<100 Jo	<100 Jo	52.2	173
1,2,3-Trichlorobenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,2,4-Trichlorobenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,2,4-Trimethylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,2-Dichlorobenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,2-Dichloroethane	0.771	<250	<5.00 Jo	<2.50 Jo	<2.50 Jo	0.581	<2.50 Jo	<100	<100	<100	<50.0	6.32
1,2-Dichloropropane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,3,5-Trimethylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,4-Dichlorobenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
1,4-Dioxane	65.8 UJ-	<25000 UJ-	<1000 UJ-	<500 UJ-	<500 UJ-	129	<500 Jo	<10000	<10000 UJ-	<20000 UJ-	<10000	509
2-Butanone (MEK)	<25.0	<2500	<50.0	<25.0	<25.0	<5.00	<25.0	<1000	<1000	<1000	<500	<50.0
2-Hexanone	<25.0	<2500	<50.0	<25.0	<25.0	<5.00	<25.0	<1000	<1000	<1000	<500	<50.0
Acetone	<50.0	<5000	<100 Jo	<50.0	<50.0	<10.0 Jo	<50.0	<2000	<2000	<2000	<1000	<100
Benzene	0.601	<250	<5.00 Jo	<2.50 Jo	<2.50 Jo	<0.500 Jo	<2.50 Jo	<100	<100	<100	<50.0	<5.00
Bromodichloromethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Bromomethane	<2.50	<250	<5.00 UJ-	<2.50	<2.50 UJ+	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Carbon disulfide	<25.0	<2500	<50.0	<25.0	<25.0	<5.00 Jo	<25.0	<1000	<1000	<1000	<500	<50.0
Carbon tetrachloride	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Chloroethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50 Jo	<100	<100	<100	<50.0	<5.00
Chloroform	0.613	<250	<5.00 Jo	<2.50 Jo	<2.50 Jo	0.536	<2.50 Jo	<100	<100	<100	<50.0 Jo	<5.00
Chloromethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	16.7	<250	12.4	10.9	13.5	11.2	10.7	134	138	273	130	121
Dichlorodifluormethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W25A	W25A	W25A	W25A	W26A
Sample Date	7/14/00	9/25/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<2.50	<250	<5.00	<2.50 Jo	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Hexachlorobutadiene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Isopropylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
m,p-Xylene	<2.50	<250	<5.00	<2.50 Jo	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Methyl tert-butyl ether (MTBE)	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50	<100	<100	<100	<50.0	<5.00
Methylene chloride	<2.50	<250 Jo	<5.00 Jo	<2.50	<2.50	<0.500	7.51	<100	<100	<100	<50.0	<5.00
n-Butylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
n-Propylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Naphthalene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0 Jo	<5.00
o-Xylene	<2.50	<250	<5.00	<2.50 Jo	<2.50	<0.500 Jo	<2.50	<100	<100	<100	<50.0	<5.00
p-Isopropyltoluene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
sec-Butylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
tert-Butylbenzene	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Tetrachloroethene (PCE)	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50	4750	6100	7030	3330	<5.00
Toluene	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50	<100	<100	<100	<50.0	<5.00
trans-1,2-Dichloroethene	0.516	<250	<5.00	<2.50	<2.50 Jo	<0.500 Jo	<2.50 Jo	<100	<100	<100	<50.0	<5.00
Trichloroethene (TCE)	4.72	<250	<5.00 Jo	2.64	3.25	2.93	3.11	331	352	820	389	237
Trichlorofluoromethane	<2.50	<250	<5.00	<2.50	<2.50	<0.500	<2.50	<100	<100	<100	<50.0	<5.00
Trichlorotrifluoroethane (Freon 113)	3.09	<250	17.3	21.4	14.9	15.6	14.8	<100	<100	<100	<50.0	<5.00
Vinyl Acetate	<25.0	<2500	<50.0	<25.0	<25.0	<5.00	<25.0	<1000	<1000	<1000	<500	<50.0
Vinyl chloride (VC)	<2.50	<250	<5.00	<2.50	<2.50	<0.500 Jo	<2.50	<100	<100	<100	<50.0	5.52
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W26A	W26A	W26A	W27A	W27A	W27A	W27A	W28A	W28A	W28A	W28A	W29A
Sample Date	7/13/00	10/26/00	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00	7/14/00	10/26/00	2/21/01	4/7/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	9.82	<50.0 Jo	<12.5 Jo	12.8	14.8	13.8	0.947	364	263	167	594	2710
1,1,2,2-Tetrachloroethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,1,2-Trichloroethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,1-Dichloroethane (1,1-DCA)	113	83.7	101	35.1	77.3	63.8	19.9	1650	595	355	677	261
1,1-Dichloroethene (1,1-DCE)	124	91.7	115	9.07	45.8	48.2	7.67	308	255	124	323	3540
1,2,3-Trichlorobenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,2,4-Trichlorobenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,2,4-Trimethylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,2-Dichlorobenzene	<5.00	<50.0	<12.5	0.714	<2.50 Jo	<5.00	0.837	<50.0	<12.5	<5.00	<12.5	<100
1,2-Dichloroethane	<5.00 Jo	<50.0	<12.5	<0.500	<2.50 Jo	<5.00	<0.500	<50.0	4.76	<5.00 Jo	<12.5 Jo	<100
1,2-Dichloropropane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,3,5-Trimethylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
1,4-Dichlorobenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
1,4-Dioxane	<500 UJ-	<10000 UJ-	<2500	<50.0	<250 Jo UJ-	<1000 UJ-	<100 Jo	<5000	873 UJ-	<1000 Jo UJ-	<2500 Jo	<10000
2-Butanone (MEK)	<50.0	<500	<125	7.86	<25.0	<50.0	<5.00	<500	<125	<50.0	<125	<1000
2-Hexanone	<50.0	<500	<125	<5.00	<25.0	<50.0	<5.00	<500	<125	<50.0	<125	<1000
Acetone	<100	<1000	<250	<10.0	<50.0	<100	<10.0	<1000	<250	<100	<250	<2000
Benzene	<5.00 Jo	<50.0	<12.5	<0.500	<2.50 Jo	<5.00 Jo	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
Bromodichloromethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Bromomethane	<5.00	<50.0 UJ-	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Carbon disulfide	<50.0	<500	<125	<5.00	<25.0	<50.0	<5.00	<500	<125	<50.0	<125	<1000
Carbon tetrachloride	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Chloroethane	<5.00 Jo	<50.0	<12.5	<0.500	<2.50 Jo	<5.00	0.612	<50.0	13.1	5.26 J-	<12.5 Jo	<100
Chloroform	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
Chloromethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
cis-1,2-Dichloroethene (cis-1,2-DCE)	281	1100	277	11.6	163	202	18.7	211	57.5	31.2	84.1	131
Dichlorodifluoromethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W26A	W26A	W26A	W27A	W27A	W27A	W27A	W28A	W28A	W28A	W28A	W29A
Sample Date	7/13/00	10/26/00	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00	7/14/00	10/26/00	2/21/01	4/7/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Hexachlorobutadiene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Isopropylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
m,p-Xylene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Methyl tert-butyl ether (MTBE)	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
Methylene chloride	<5.00	<50.0 Jo	<12.5	<0.500	<2.50	<5.00	<0.500 Jo	<50.0	2.39	<5.00	<12.5 Jo	<100
n-Butylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
n-Propylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Naphthalene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500 Jo	<50.0	<12.5	<5.00	<12.5 Jo	<100
o-Xylene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
p-Isopropyltoluene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
sec-Butylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
tert-Butylbenzene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Tetrachloroethene (PCE)	10.6	<50.0	<12.5	<0.500	6.87	<5.00	<0.500 Jo	<50.0	42.5	<5.00	<12.5	193
Toluene	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
trans-1,2-Dichloroethene	<5.00 Jo	<50.0	<12.5 Jo	<0.500	<2.50 Jo	<5.00 Jo	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
Trichloroethene (TCE)	462	2280	637	4.57	73.4	127	8.11	<50.0	9.18	<5.00 Jo	<12.5 Jo	391
Trichlorofluoromethane	<5.00	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	<12.5	<5.00	<12.5	<100
Trichlorotrifluoroethane (Freon 113)	<5.00 Jo	<50.0	<12.5	<0.500	<2.50	<5.00	<0.500	<50.0	1.89	<5.00	<12.5	<100
Vinyl Acetate	<50.0	<500	<125	<5.00	<25.0	<50.0	<5.00	<500	<125	<50.0	<125	<1000
Vinyl chloride (VC)	5.74	<50.0	<12.5 Jo	<0.500	<2.50 Jo	<5.00 Jo	<0.500 Jo	<50.0	<12.5	<5.00	<12.5	<100
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W29A	W29A	W29A1	W29A1	W29B1	W29B1	W29B2	W29B2	W3	W3	W3	W3
Sample Date	7/12/00	10/17/00	2/2/01	2/22/01	2/2/01	2/23/01	2/2/01	2/23/01	6/24/91	8/20/91	2/17/92	10/4/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	4050	3320	1160	1790	208	132	<0.500 Jo	<0.500	5.2	3.9	130	<0.4
1,1,2,2-Tetrachloroethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
1,1,2-Trichloroethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<1
1,1-Dichloroethane (1,1-DCA)	474	449	200	256	44.9	28.0	<0.500	<0.500	0.7	1.3	27	2.3
1,1-Dichloroethene (1,1-DCE)	6070	5870	2060 J+	2980	239 J+	146	0.502 J+	<0.500 Jo	<0.5	<0.5	<0.5	<0.4
1,2,3-Trichlorobenzene	<100	<100	<100	<50.0	<10.0 Jo	<5.00	<0.500	<0.500	--	--	--	--
1,2,4-Trichlorobenzene	<100	<100	<100	<50.0	<10.0 Jo	<5.00	<0.500	<0.500	--	--	--	--
1,2,4-Trimethylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
1,2-Dichlorobenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
1,2-Dichloroethane	46.6	<100 Jo	<100 Jo	<50.0 Jo	<10.0 Jo	<5.00 Jo	<0.500	<0.500	<0.5	--	<0.5	<0.4
1,2-Dichloropropane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
1,3,5-Trimethylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
1,4-Dichlorobenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
1,4-Dioxane	<10000 UJ-	<20000 UJ-	<20000	<10000	<2000	<1000	<100	<100	--	--	--	--
2-Butanone (MEK)	<1000	<1000	<1000	<500	<100	<50.0	<5.00	<5.00	--	--	--	--
2-Hexanone	<1000	<1000	<1000	<500	<100	<50.0	<5.00	<5.00	--	--	--	--
Acetone	<2000	<2000	<2000	<1000	<200	<100	<10.0	<10.0	--	--	--	--
Benzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Bromodichloromethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
Bromomethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<0.4
Carbon disulfide	<1000	<1000	<1000	<500	<100	<50.0	<5.00	<5.00 Jo	--	--	--	--
Carbon tetrachloride	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
Chloroethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	<2	<2	<0.4
Chloroform	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
Chloromethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<0.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	254	267	155	190	11.2	7.16	<0.500	<0.500	--	--	<0.5	<0.5
Dichlorodifluoromethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<0.4

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W29A	W29A	W29A1	W29A1	W29B1	W29B1	W29B2	W29B2	W3	W3	W3	W3
Sample Date	7/12/00	10/17/00	2/2/01	2/22/01	2/2/01	2/23/01	2/2/01	2/23/01	6/24/91	8/20/91	2/17/92	10/4/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Ethylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Hexachlorobutadiene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Isopropylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
m,p-Xylene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Methyl tert-butyl ether (MTBE)	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Methylene chloride	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<10
n-Butylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
n-Propylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Naphthalene	<100	<100	<100	<50.0	<10.0 Jo	<5.00	<0.500	<0.500	--	--	--	--
o-Xylene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
p-Isopropyltoluene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
sec-Butylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
tert-Butylbenzene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	--	--	--	--
Tetrachloroethene (PCE)	411	457	200	232	<10.0 Jo	<5.00 Jo	<0.500 Jo	<0.500 Jo	<0.5	<0.5	<0.5	<0.4
Toluene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500 Jo	<0.500	--	--	--	--
trans-1,2-Dichloroethene	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<0.5	--	<0.5	<0.4
Trichloroethene (TCE)	732	722	285	371	<10.0 Jo	<5.00 Jo	<0.500 Jo	<0.500 Jo	<0.5	<0.5	<0.5	<0.4
Trichlorofluoromethane	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<0.4
Trichlorotrifluoroethane (Freon 113)	67.4	<100 Jo	<100 Jo	<50.0 Jo	<10.0 Jo	<5.00 Jo	<0.500	<0.500	--	--	--	--
Vinyl Acetate	<1000	<1000	<1000	<500	<100	<50.0	<5.00	<5.00	--	--	--	--
Vinyl chloride (VC)	<100	<100	<100	<50.0	<10.0	<5.00	<0.500	<0.500	<2	--	<2	<0.4
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W30B
Sample Date	4/19/96	2/12/98	5/22/98	8/26/98	12/17/98	2/25/99	10/28/99	4/11/00	11/8/00	2/22/01	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5	1.3	<0.7	9.09	<0.500	0.239	0.909	50.0	<0.500
1,1,2,2-Tetrachloroethane	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500
1,1-Dichloroethane (1,1-DCA)	9	5	5.6	4.6	3	6.93	3.58	3.24	4.93	27.6	<0.500
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<0.5	<0.8	0.549	<0.500	0.259	0.541	3.52	<0.500
1,2,3-Trichlorobenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500
1,2-Dichloropropane	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	--	--	--	--	52.7	37.1	<100 Jo UJ-	238	<100 UJ-
2-Butanone (MEK)	<100	<100	<10	<2	<3	<5.00	<5.00	<5.00	<5.00 Jo	<5.00	<5.00
2-Hexanone	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<100	<100	<10	10	<3	44.1	<10.0	2.16	16.7	<10.0 Jo	<10.0
Benzene	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500
Bromodichloromethane	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<10	<10	<10	<0.5	<0.7	<0.500	<0.500	0.255	<0.500 Jo	<0.500 Jo	<0.500
Chloroform	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500
Chloromethane	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	0.89	<0.7	0.963	0.622	0.291	1.26	0.862	<0.500
Dichlorodifluoromethane	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W30B
Sample Date	4/19/96	2/12/98	5/22/98	8/26/98	12/17/98	2/25/99	10/28/99	4/11/00	11/8/00	2/22/01	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	B-Zone
Ethylbenzene	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	--	--	<10	<2	<0.7	0.678	<0.500	0.384	0.530	1.65	<0.500
Methylene chloride	<20	<10	<5	0.52	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo
n-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	--	--	--	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500
o-Xylene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	1.31	<0.500
Toluene	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500
trans-1,2-Dichloroethene	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	0.102	<0.500 Jo	1.27	<0.500
Trichlorofluoromethane	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	--	<5	<5	<2	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl Acetate	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	0.11	<0.500 Jo	<0.500	<0.500
Xylenes (total)	<10	<10	<5	<0.5	<2	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W30B	W30B	W31B	W31B	W31B	W31B	W31C	W31C	W31C	W31C	W32A	W32A
Sample Date	2/23/01	5/3/01	9/22/00	10/27/00	2/22/01	5/3/01	9/22/00	10/27/00	2/23/01	5/3/01	9/21/00	10/17/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	2.68	1.25	2.25	2.17	0.613	<0.500	<0.500 Jo	<0.500 Jo	<1.25	<1.25 Jo
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	9.15	11.4	15.5	14.90	<0.500 Jo	<0.500	<0.500	<0.500 Jo	<1.25	<1.25
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	1.59	2.17	2.81	2.76	<0.500 Jo	<0.500	<0.500	<0.500 Jo	<1.25	<1.25
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,2-Dichloroethane	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,2-Dichloropropane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,4-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
1,4-Dioxane	<100	<100.00	57.2 J-	<100 Jo JJ-	<100 Jo	<100.00 Jo	<50.0 JJ-	<100 JJ-	<100	<100.00	<125 R	<250 R
2-Butanone (MEK)	<5.00	<0.500	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5	<12.5
2-Hexanone	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5	<12.5
Acetone	<10.0 Jo	<10.00	<10.0	<10.0	<10.0	<10.00	<10.0 Jo	<10.0	<10.0	<10.00	<25.0	<25.0
Benzene	<0.500	<0.500	<0.500 Jo	0.831	0.860	0.806	<0.500	<0.500	<0.500	<0.500 Jo	<1.25	<1.25 Jo
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Carbon disulfide	19.9	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5	<12.5
Carbon tetrachloride	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25 Jo
Chloroethane	<0.500	<0.500	0.606	2.21	2.74	2.20	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Chloroform	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<1.25	<1.25
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	3.23	5.50	5.19	4.25	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Dichlorodifluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W30B	W30B	W31B	W31B	W31B	W31B	W31C	W31C	W31C	W31C	W32A	W32A
Sample Date	2/23/01	5/3/01	9/22/00	10/27/00	2/22/01	5/3/01	9/22/00	10/27/00	2/23/01	5/3/01	9/21/00	10/17/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<1.25	<1.25
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	1.27	1.21	1.72	1.35	<0.500	<0.500	<0.500	<0.500	109	91.8
Methylene chloride	<1.34 U	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500	<1.25 Jo	<1.25
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Naphthalene	<0.500	--	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500	--	<1.25	<1.25
o-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
tert-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<1.25	<1.25
Toluene	<0.500 Jo	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Trichloroethene (TCE)	<0.500	<0.500	0.620	0.540	0.831	0.933	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25 Jo
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<1.25	<1.25
Vinyl Acetate	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5	<12.5
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.25	<1.25 Jo
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W32A	W33A	W33A	W33A	W34A	W34A	W34A	W35A	W35A	W35A	W36A	W36A
Sample Date	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<1.00	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	9.21	9.12	1.30	0.970	0.942
1,1,2,2-Tetrachloroethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<1.00	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	7.00	8.26	0.978	1.77	1.50
1,1-Dichloroethene (1,1-DCE)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	2.17	2.39	<0.500 Jo	<0.500 Jo	<0.500 Jo
1,2,3-Trichlorobenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	<200	<50.0 R	<100 R	<100	<50.0 R	<100 R	<100	<50.0 R	<100 Jo UJ-	<100	<50.0 R	<100 UJ-
2-Butanone (MEK)	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Hexanone	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Benzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<1.00	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	0.861	0.888	<0.500 Jo	<0.500 Jo	<0.500 Jo
Chloromethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	3.59	4.04	0.552	<0.500 Jo	<0.500 Jo
Dichlorodifluormethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 78 of 108

Sample Location	W32A	W33A	W33A	W33A	W34A	W34A	W34A	W35A	W35A	W35A	W36A	W36A
Sample Date	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	78.7	<0.500 Jo	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	0.595	0.583	<0.500	<0.500 Jo	<0.500 Jo
Methylene chloride	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500
Toluene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	0.510	<0.500 Jo	<0.500	<0.500
Trichlorofluoromethane	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	3.26	3.99	0.895	<0.500 Jo	<0.500 Jo
Vinyl Acetate	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W36A	W37A	W37A	W37A	W37A	W37A	W37A	W38A	W38A	W38A	W38A	W39A
Sample Date	2/21/01	9/13/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	9/22/00	10/26/00	2/19/01	5/3/01	2/2/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	4.76	3.48	1.95	1.88	1.84	<0.500 Jo	47.0	25.2	528	451.00	1.35
1,1,2,2-Tetrachloroethane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,1,2-Trichloroethane	<0.500	<1.00	<0.500 Jo	<1.00	<0.500	<0.500	<0.500	<2.50 Jo	<2.00 Jo	<25.0 Jo	<50.00 Jo	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	35.1	35.3	23.2	27.8	24.1	5.03	149	86.9	2430	1860.00	0.622
1,1-Dichloroethene (1,1-DCE)	<0.500	36.2	39.3	18.8	20.7	19.4	3.16	125	85.0	1850	1560.00	<0.500 Jo
1,2,3-Trichlorobenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,2,4-Trichlorobenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,2,4-Trimethylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,2-Dichlorobenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,2-Dichloroethane	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500	<0.500 Jo	<0.500	<2.50 Jo	<2.00 Jo	25.9	<50.00 Jo	<0.500
1,2-Dichloropropane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,3,5-Trimethylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,4-Dichlorobenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
1,4-Dioxane	<100	119 J-	158 J-	<200 Jo UJ-	<100 Jo UJ-	<100 Jo	<100	<250 Jo UJ-	<400 Jo UJ-	<5000 Jo	<10000.00	<100
2-Butanone (MEK)	<5.00	<10.0	<5.00	<10.0	<5.00	<5.00	<5.00	<25.0	<20.0	<250	<500.00	<5.00
2-Hexanone	<5.00	<10.0	<5.00	<10.0	<5.00	<5.00	<5.00	<25.0	<20.0	<250	<500.00	<5.00
Acetone	<10.0	<20.0 Jo	<10.0 Jo	<20.0	<10.0	<10.0 Jo	<10.0	<50.0	<40.0	<500	<1000.00	<10.0
Benzene	<0.500	<1.00 Jo	0.877	<1.00 Jo	0.591	0.517	<0.500 Jo	<2.50	<2.00	<25.0	<50.00	<0.500
Bromodichloromethane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Bromomethane	<0.500	<1.00	<0.500 UJ-	<1.00	<0.500 UJ+	<0.500	<0.500	<2.50	<2.00 UJ-	<25.0	<50.00	<0.500
Carbon disulfide	<5.00	<10.0	<5.00	<10.0	<5.00	<5.00	<5.00	<25.0	<20.0	<250	<500.00	<5.00
Carbon tetrachloride	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Chloroethane	<0.500	<1.00 Jo	<0.500	<1.00	<0.500 Jo	<0.500 Jo	<0.500	<2.50	<2.00	39.0	<50.00 Jo	<0.500
Chloroform	<0.500	<1.49 U	1.43	<1.00 U	0.882	0.814	<0.500 Jo	<2.50	<2.00	<25.0 Jo	<50.00	<0.500 Jo
Chloromethane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0 Jo	<50.00	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	11.0	12.1	8.70	8.10	8.21	1.58	12.4	6.40	163	184.00	<0.500 Jo
Dichlorodifluormethane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W36A	W37A	W37A	W37A	W37A	W37A	W37A	W38A	W38A	W38A	W38A	W39A
Sample Date	2/21/01	9/13/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	9/22/00	10/26/00	2/19/01	5/3/01	2/2/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Hexachlorobutadiene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Isopropylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
m,p-Xylene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500 Jo
Methylene chloride	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
n-Butylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
n-Propylbenzene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Naphthalene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50 Jo	<2.00	<25.0	--	<0.500
o-Xylene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
p-Isopropyltoluene	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
sec-Butylbenzene	<0.500	<1.00	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<0.500 Jo	<2.50	<2.00	<25.0	<50.00	<0.500
tert-Butylbenzene	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<2.50	<2.00	<25.0	<50.00	<0.500
Tetrachloroethene (PCE)	<0.500	1.24	1.69	<1.00 Jo	0.974	1.02	<0.500 Jo	<2.50	<2.00	<25.0	<50.00	<0.500
Toluene	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
trans-1,2-Dichloroethene	<0.500	<1.00 Jo	<0.500 Jo	<1.00	<0.500 Jo	<0.500 Jo	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Trichloroethene (TCE)	<0.500	19.2	15.1	8.22	7.83	8.24	1.73	<2.50 Jo	<2.00 Jo	<25.0 Jo	<50.00 Jo	<0.500
Trichlorofluoromethane	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<2.50	<2.00	<25.0	<50.00	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500	<2.50 Jo	<2.00 Jo	<25.0 Jo	<50.00 Jo	<0.500
Vinyl Acetate	<5.00	<10.0	<5.00	<10.0	<5.00	<5.00	<5.00	<25.0	<20.0	<250	<500.00	<5.00
Vinyl chloride (VC)	<0.500	<1.00 Jo	<0.500 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.500	<2.50	<2.00	<25.0 Jo	<50.00	<0.500
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 81 of 108

Sample Location	W39A	W4	W4	W4	W4	W4	W4	W4	W4	W4	W4	W4
Sample Date	2/22/01	6/24/91	8/20/91	2/17/92	10/2/95	4/19/96	2/12/98	5/21/98	8/25/98	12/17/98	2/24/99	10/28/99
Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	2.7	1.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
1,1,2,2-Tetrachloroethane	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1,2-Trichloroethane	<0.500	<0.5	--	<0.5	<1	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	4.3	3.6	<0.5	1.9	<5	<5	<5	2.8	3	3.45	1.27
1,1-Dichloroethene (1,1-DCE)	<0.500	2.3	2	<0.5	1.7	<5	<5	<5	1.2	1	1.34	0.541
1,2,3-Trichlorobenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2-Dichlorobenzene	<0.500	<0.5	--	<0.5	<0.4	--	<5	--	--	--	<0.500	<0.500
1,2-Dichloroethane	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,2-Dichloropropane	<0.500	<0.5	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,4-Dichlorobenzene	<0.500	<0.5	--	<0.5	<0.4	--	<5	--	--	--	<0.500	<0.500
1,4-Dioxane	<100	--	--	--	--	--	--	--	--	--	--	<50.0
2-Butanone (MEK)	<5.00	--	--	--	--	<100	<100	<10	<2	<3	<5.00	<5.00
2-Hexanone	<5.00	--	--	--	--	<50	<50	<10	<2	<4	<5.00	<5.00
Acetone	<10.0 Jo	--	--	--	--	<100	<100	<10	<2	<3	<5.00	<10.0
Benzene	<0.500	--	--	--	--	<5	<5	<5	<0.5	<0.8	0.616	<0.500
Bromodichloromethane	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Bromomethane	<0.500	<2	--	<2	<0.4	<10	<10	<10	<0.5	<0.9	<0.500	<0.500
Carbon disulfide	<5.00	--	--	--	--	<10	<10	<5	<2	<0.7	<5.00	<5.00
Carbon tetrachloride	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloroethane	<0.500	<2	<2	<2	<0.4	<10	<10	<10	<0.5	<0.7	<0.500	<0.500
Chloroform	<0.500	<0.5	--	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloromethane	<0.500	<2	--	<2	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	--	70	48	15.3	21	11	12	12	11	12.7	7.80
Dichlorodifluormethane	<0.500	<2	--	<2	<0.4	--	<10	<5	<0.5	<0.7	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W39A	W4	W4	W4	W4	W4	W4	W4	W4	W4	W4	W4
Sample Date	2/22/01	6/24/91	8/20/91	2/17/92	10/2/95	4/19/96	2/12/98	5/21/98	8/25/98	12/17/98	2/24/99	10/28/99
Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Ethylbenzene	<0.500	--	--	--	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500
Hexachlorobutadiene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Isopropylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
m,p-Xylene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	0.777
Methyl tert-butyl ether (MTBE)	<0.500	--	--	--	--	--	--	<10	<2	<0.7	<0.500	<0.500
Methylene chloride	<0.500 Jo	<2	--	<2	<10	<20	<10	<5	<0.5	<0.8	<0.500	<0.500
n-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
n-Propylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Naphthalene	<0.500 Jo	--	--	--	--	--	--	--	--	--	<0.500	<0.500
o-Xylene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
p-Isopropyltoluene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
sec-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
tert-Butylbenzene	<0.500	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.5	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
Toluene	<0.500 Jo	--	--	--	--	<5	<5	<5	<0.5	<0.8	<0.500	4.38
trans-1,2-Dichloroethene	<0.500	0.9	0.6	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Trichloroethene (TCE)	<0.500	0.6	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
Trichlorofluoromethane	<0.500	<2	--	<2	<0.4	--	<5	<5	<0.5	<0.8	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	--	--	--	--	--	<5	<5	<2	<0.8	<0.500	<0.500
Vinyl Acetate	<5.00	--	--	--	--	<50	<50	<10	<2	<0.7	<10.0	<5.00
Vinyl chloride (VC)	<0.500	<2	--	<2	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500
Xylenes (total)	--	--	--	--	--	<10	<10	<5	<0.5	<2	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 83 of 108

Sample Location	W4	W4	W4	W40A	W40A	W41A	W41A	W42A	W42A	W43A	W43A	W5
Sample Date	4/12/00	10/27/00	2/22/01	2/2/01	2/22/01	2/2/01	2/21/01	2/2/01	2/21/01	2/2/01	2/21/01	6/24/91
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	C-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500 Jo	<0.500 Jo	5.08	0.812	67.6	70.8	<0.500	<0.500	<0.500 Jo	<0.500	3.5
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	<0.5
1,1-Dichloroethane (1,1-DCA)	2.55	1.92	3.96	4.36	<0.500 Jo	46.5	45.2	<0.500	<0.500	<0.500 Jo	<0.500 Jo	1.4
1,1-Dichloroethene (1,1-DCE)	0.828	0.626	0.892	0.952 J+	<0.500 Jo	94.7 J+	93.5	<0.500	<0.500	<0.500 Jo	<0.500	<0.5
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
1,2-Dichloroethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50 Jo	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	<0.5
1,2-Dichloropropane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
1,4-Dichlorobenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
1,4-Dioxane	58.1	<100 Jo JJ-	<100 Jo	<100	<100	<500	<500	<100	<100	<100	<100	--
2-Butanone (MEK)	<5.00	<5.00	<5.00	<5.00	<5.00	<25.0	<25.0	<5.00	<5.00	<5.00	<5.00	--
2-Hexanone	<5.00	<5.00	<5.00	<5.00	<5.00	<25.0	<25.0	<5.00	<5.00	<5.00	<5.00	--
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<50.0	<10.0 Jo	<10.0	<10.0	<10.0	--
Benzene	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<2.50 Jo	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	--
Bromodichloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
Bromomethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<2
Carbon disulfide	<5.00	<5.00	<5.00	<5.00	<5.00	<25.0	<25.0	<5.00	<5.00	<5.00	<5.00	--
Carbon tetrachloride	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
Chloroethane	<0.500	<0.500	<0.500 Jo	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<2
Chloroform	<0.500	<0.500	<0.500	0.924	<0.500 Jo	<2.50 Jo	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	<0.5
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	9.12	6.30	7.85	1.42	<0.500 Jo	12.1	11.4	<0.500	<0.500	<0.500	<0.500	--
Dichlorodifluormethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<2

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 84 of 108

Sample Location	W4	W4	W4	W40A	W40A	W41A	W41A	W42A	W42A	W43A	W43A	W5
Sample Date	4/12/00	10/27/00	2/22/01	2/2/01	2/22/01	2/2/01	2/21/01	2/2/01	2/21/01	2/2/01	2/21/01	6/24/91
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	C-Zone
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
Hexachlorobutadiene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
Methyl tert-butyl ether (MTBE)	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	3.16	5.83	<0.500	<0.500	<0.500 Jo	<0.500 Jo	--
Methylene chloride	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	<2
n-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
Naphthalene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	--
o-Xylene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
p-Isopropyltoluene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
sec-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
tert-Butylbenzene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	5.42	5.59	<0.500	<0.500	<0.500	<0.500	<0.5
Toluene	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	--
trans-1,2-Dichloroethene	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<0.5
Trichloroethene (TCE)	<0.500	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500	105	118	<0.500	<0.500	<0.500 Jo	<0.500	<0.5
Trichlorofluoromethane	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<2.50	<0.500	<0.500	<0.500	<0.500	<2
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	2.61	<0.500	46.6	52.2	<0.500	<0.500	<0.500	<0.500	--
Vinyl Acetate	<5.00	<5.00	<5.00	<5.00	<5.00	<25.0	<25.0	<5.00	<5.00	<5.00	<5.00	--
Vinyl chloride (VC)	<0.500	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<2.50 Jo	<2.50 Jo	<0.500	<0.500	<0.500	<0.500	<2
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5
Sample Date	8/20/91	10/3/95	4/25/96	2/12/98	5/22/98	8/25/98	12/16/98	2/24/99	10/28/99	4/12/00	10/27/00	2/23/01
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	40	<0.4	<5	7	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo
1,1,2,2-Tetrachloroethane	--	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	--	<1	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	8.3	0.52	<5	6	<5	0.77	<0.8	0.859	0.604	0.697	0.760	0.928
1,1-Dichloroethene (1,1-DCE)	5.8	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	--	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	--	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	--	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	--	--	--	--	--	--	56.8	62.4	<100 Jo UJ-	<100 Jo
2-Butanone (MEK)	--	--	<100	<100	<10	<2	<3	<5.00	<5.00	<5.00	<5.00	<5.00
2-Hexanone	--	--	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	--	--	<100	<100	<10	<2	<3	<5.00	<10.0	<10.0	<10.0	<10.0
Benzene	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	--	<0.4	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	--	--	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	<2	<0.4	<10	<10	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	--	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	--	<0.4	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5	W5
Sample Date	8/20/91	10/3/95	4/25/96	2/12/98	5/22/98	8/25/98	12/16/98	2/24/99	10/28/99	4/12/00	10/27/00	2/23/01
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Ethylbenzene	--	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	--	--	--	--	<10	<2	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo
Methylene chloride	--	<10	<20	<10	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	--	<0.4	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	--	--	--	<5	<5	<2	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl Acetate	--	--	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00
Vinyl chloride (VC)	--	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	<10	<10	<5	<0.5	<2	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 87 of 108

Sample Location	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
Sample Date	6/24/91	8/20/91	10/2/95	4/24/96	2/12/98	5/21/98	8/24/98	12/16/98	2/25/99	10/28/99	4/12/00	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	2.3	1.7	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
1,1,2,2-Tetrachloroethane	<0.5	--	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<0.5	--	<1	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	<0.5	--	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	<0.5	--	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	<0.5	--	<0.4	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500
1,4-Dioxane	--	--	--	--	--	--	--	--	--	<50.0	<50.0	<100 UJ-
2-Butanone (MEK)	--	--	--	<100	<100	<10	<2	<3	<5.00	<5.00	<5.00	<5.00
2-Hexanone	--	--	--	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00	<5.00
Acetone	--	--	--	<100	<100	<10	<2	<3	<5.00	<10.0	<10.0	<10.0
Benzene	--	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	<0.5	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Bromomethane	<2	--	<0.4	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
Carbon disulfide	--	--	--	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<0.5	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Chloroethane	<2	<2	<0.4	<10	<10	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.5	--	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Chloromethane	<2	--	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	--	<0.5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Dichlorodifluormethane	<2	--	<0.4	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 88 of 108

Sample Location	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
Sample Date	6/24/91	8/20/91	10/2/95	4/24/96	2/12/98	5/21/98	8/24/98	12/16/98	2/25/99	10/28/99	4/12/00	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Ethylbenzene	--	--	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	<10	<2	<0.7	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<2	--	<10	<20	<10	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
n-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
Naphthalene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
o-Xylene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	--	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
Toluene	--	--	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
trans-1,2-Dichloroethene	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.5	<0.5	<0.4	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	<2	--	<0.4	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	<5	<5	<2	<0.8	<0.500	<0.500	<0.500	<0.500
Vinyl Acetate	--	--	--	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<2	--	<0.4	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500
Xylenes (total)	--	--	--	<10	<10	<5	<0.5	<2	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W6	W7	W7	W7	W7	W7	W7
Sample Date	2/23/01	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	11/16/92
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	47	60	340	120	4	67
1,1,2,2-Tetrachloroethane	<0.500	<5	--	<0.5	<5	<0.5	<5
1,1,2-Trichloroethane	<0.500	<5	--	<0.5	<5	<0.5	<5
1,1-Dichloroethane (1,1-DCA)	<0.500 Jo	43	51	91	58	5.3	50
1,1-Dichloroethene (1,1-DCE)	<0.500	44	49	120	48	4	49
1,2,3-Trichlorobenzene	<0.500	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<0.500	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<0.500	--	--	--	--	--	--
1,2-Dichlorobenzene	<0.500	<5	--	<0.5	<5	<0.5	<5
1,2-Dichloroethane	<0.500	<5	--	<0.5	<5	<0.5	<5
1,2-Dichloropropane	<0.500	11	<5	<0.5	<5	<0.5	<5
1,3,5-Trimethylbenzene	<0.500	--	--	--	--	--	--
1,4-Dichlorobenzene	<0.500	<5	--	<0.5	<5	<0.5	<5
1,4-Dioxane	<100	--	--	--	--	--	--
2-Butanone (MEK)	<5.00	--	--	--	--	--	--
2-Hexanone	<5.00	--	--	--	--	--	--
Acetone	<10.0	--	--	--	--	--	--
Benzene	<0.500	--	--	--	--	--	--
Bromodichloromethane	<0.500	<5	--	<0.5	<5	<0.5	<5
Bromomethane	<0.500	<20	--	<2	<20	<2	<20
Carbon disulfide	<5.00 Jo	--	--	--	--	--	--
Carbon tetrachloride	<0.500	<5	--	<0.5	<5	<0.5	<5
Chloroethane	<0.500	<20	<20	<2	<20	<2	<20
Chloroform	<0.500	<5	--	<0.5	<5	<0.5	<5
Chloromethane	<0.500	<20	--	<2	<20	<2	<20
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500 Jo	--	<5	<0.5	<5	0.7	<5
Dichlorodifluoromethane	<0.500	<20	--	<2	<20	<2	<20

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W6	W7	W7	W7	W7	W7	W7
Sample Date	2/23/01	6/24/91	8/20/91	2/17/92	5/18/92	8/17/92	11/16/92
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Ethylbenzene	<0.500	--	--	--	--	--	--
Hexachlorobutadiene	<0.500	--	--	--	--	--	--
Isopropylbenzene	<0.500	--	--	--	--	--	--
m,p-Xylene	<0.500	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	<0.500 Jo	--	--	--	--	--	--
Methylene chloride	<1.15 U	<20	--	<2	<20	<2	<20
n-Butylbenzene	<0.500	--	--	--	--	--	--
n-Propylbenzene	<0.500	--	--	--	--	--	--
Naphthalene	<0.500	--	--	--	--	--	--
o-Xylene	<0.500	--	--	--	--	--	--
p-Isopropyltoluene	<0.500	--	--	--	--	--	--
sec-Butylbenzene	<0.500	--	--	--	--	--	--
tert-Butylbenzene	<0.500	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.500	62	71	39	28	3.8	36
Toluene	<0.500	--	--	--	--	--	--
trans-1,2-Dichloroethene	<0.500	<5	<5	<0.5	<5	<0.5	<5
Trichloroethene (TCE)	<0.500	<5	11	<0.5	5.4	0.8	5.4
Trichlorofluoromethane	<0.500	<20	--	<2	<20	<2	<20
Trichlorotrifluoroethane (Freon 113)	<0.500	--	--	--	--	--	--
Vinyl Acetate	<5.00	--	--	--	--	--	--
Vinyl chloride (VC)	<0.500 Jo	<20	--	<2	<20	<2	<20
Xylenes (total)	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results, see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/4/95	2/20/96
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	110	78	38	31	33	44	23	5.5	41	50	11	12	14
1,1,2,2-Tetrachloroethane	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<0.4	<0.5
1,1,2-Trichloroethane	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<1	<0.5
1,1-Dichloroethane (1,1-DCA)	64	61	46	68	49	72	65	6.2	56	64	48	38	66
1,1-Dichloroethene (1,1-DCE)	46	36	48	33	35	56	30	<5	30	29	21	24	32
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<12	<5	<5	<10	1	<5	<5	<5	<2.5	<20	<1	<0.4	<1
1,2-Dichloroethane	<5	<5	<5	<10	1.2	<5	<5	<5	<2.5	<10	<0.5	0.44	<0.5
1,2-Dichloropropane	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<0.4	<0.5
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<10	<5	<5	<10	<0.5	<5	<5	<5	<3.6	<20	<1	<0.4	<1
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<0.4	<0.5
Bromomethane	<20	<20	<20	<40	<2	<20	<20	<20	<18	<71	<3.5	<0.4	<3.5
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<0.4	<0.5
Chloroethane	<20	<20	<20	<40	<2	<20	<20	<20	<7.8	<31	<1.6	<0.4	<1.6
Chloroform	<5	<5	<5	<10	1.2	<5	<5	<5	<2.5	<10	0.73	1.2	<0.5
Chloromethane	<20	<20	<20	<40	<2	<20	<20	<20	<2.5	<10	<0.5	<0.4	<0.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<10	6.8	<5	7.1	14	--	--	--	5.1	--
Dichlorodifluoromethane	<20	<20	<20	<40	<2	<20	<20	<20	<27	<110	<5.4	<0.4	<5.4
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	2/18/93	5/17/93	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/4/95	2/20/96
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	<20	<20	<20	<40	<2	<20	<20	<20	<10	<40	<2	<10	<2
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	32	25	35	35	34	54	40	<5	36	65	26	24	40
Toluene	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	<5	<5	<5	<10	<0.5	<5	<5	<5	<2.5	<10	<0.5	<0.4	<0.5
Trichloroethene (TCE)	8.6	5.3	8.6	<10	9.4	13	9.6	<5	10	<10	6.8	6.1	8.9
Trichlorofluoromethane	<20	<20	<20	<40	<2	<20	<20	<20	<25	<100	<5	<0.4	<5
Trichlorotrifluoroethane (Freon 113)	--	--	--	--	--	--	--	<10	--	--	--	--	--
Vinyl Acetate	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride (VC)	<20	<20	<20	<40	<2	<20	<20	<20	<2.7	<11	<0.54	<0.4	<0.54
Xylenes (total)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	4/19/96	5/27/97	8/26/97	2/12/98	5/21/98	8/26/98	12/16/98	2/25/99	10/28/99	4/5/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	28	15	11	9	12	16	12	14.4	13.6	12.3	14.1
1,1,2,2-Tetrachloroethane	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500 Jo
1,1-Dichloroethane (1,1-DCA)	64	57	58	46	52	47	49	49.1	48.6	55.1	53.4
1,1-Dichloroethene (1,1-DCE)	23	23	23	17	20	19	19	21.1	18.5	18.2	19.6
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	--	0.8	--	<5	--	--	--	0.702	0.748	0.674	0.702
1,2-Dichloroethane	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
1,2-Dichloropropane	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	--	<0.5	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo
1,4-Dioxane	--	--	--	--	--	--	--	--	105	126	158 J-
2-Butanone (MEK)	<100	--	<10	<100	<10	<2	<3	<5.00	<5.00	<5.00	<5.00
2-Hexanone	<50	--	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00	<5.00
Acetone	<100	--	<100	<100	<10	<2	<3	<5.00	<10.0	<10.0	<10.0 Jo
Benzene	<5	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
Bromodichloromethane	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Bromomethane	<10	<2	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500 UJ-
Carbon disulfide	<10	--	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Chloroethane	<10	<2	<10	<10	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Chloroform	<5	0.7	<5	<5	<5	0.55	<0.7	<0.500	<0.500	<0.500	<0.500 Jo
Chloromethane	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	7.6	8	6	8	6.9	8	8.19	8.43	10.3	11.8
Dichlorodifluoromethane	--	<2	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	<5	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	4/19/96	5/27/97	8/26/97	2/12/98	5/21/98	8/26/98	12/16/98	2/25/99	10/28/99	4/5/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Isopropylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo
m,p-Xylene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	--	--	--	--	<10	<2	3	3.05	2.76	3.57	3.15
Methylene chloride	<20	<2	<10	<10	<5	0.67	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
n-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	0.501	<0.500 Jo
n-Propylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo
Naphthalene	--	--	--	--	--	--	--	9.95	12.2	11.9	10.2
o-Xylene	--	--	--	--	--	--	--	0.808	0.713	0.643	0.626
p-Isopropyltoluene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo
sec-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	0.557	<0.500 Jo
tert-Butylbenzene	--	--	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo
Tetrachloroethene (PCE)	26	26	26	19	20	24	22	23.7	20.2	18.8	20.3
Toluene	<5	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo
trans-1,2-Dichloroethene	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500 Jo
Trichloroethene (TCE)	8	7.4	7	<5	5.4	6.5	5	5.89	5.52	5.52	6.07
Trichlorofluoromethane	--	<2	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	--	1.4	<5	<5	<5	2.7	2	1.46	0.905	0.824	0.881
Vinyl Acetate	<50	--	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00
Vinyl chloride (VC)	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500 Jo
Xylenes (total)	<10	--	<10	<10	<5	0.8	<2	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 95 of 108

Sample Location	W7	W7	W7	W7	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date	11/28/00	12/28/00	1/22/01	2/22/01	9/16/94	10/3/95	4/25/96	5/27/97	8/27/97	2/13/98	5/22/98	8/26/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	10.1	12.4	8.57	4.31	330	91	86	180	490	32	110	450
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<0.500	<0.500	33	<0.4	<5	<5	<30	<5	<5	<2.5
1,1,2-Trichloroethane	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<1	<1	<5	<5	<30	<5	<5	<2.5
1,1-Dichloroethane (1,1-DCA)	42.0	52.4	32.6	17.2	55	9.9	16	29	97	11	24	78
1,1-Dichloroethene (1,1-DCE)	13.0	18.6	13.7	5.78	46	14	23	31	95	6	33	72
1,2,3-Trichlorobenzene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.4	<0.4	--	<5	--	<5	--	--
1,2-Dichloroethane	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<5	<30	<5	<5	<2.5
1,2-Dichloropropane	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	<5	<5	<30	<5	<5	<2.5
1,3,5-Trimethylbenzene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	--	<5	--	<5	--	--
1,4-Dioxane	204 J-	<200 Jo UJ-	<100 Jo	<100 Jo	--	--	--	--	--	--	--	--
2-Butanone (MEK)	<10.0	<10.0	<5.00	<5.00	--	--	<100	--	<50	<100	<10	<10
2-Hexanone	<10.0	<10.0	<5.00	<5.00	--	--	<50	--	<300	<50	<10	<10
Acetone	<20.0	<20.0	<10.0 Jo	<10.0	--	--	<100	--	<500	<100	<10	<10
Benzene	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	--	--	<5	--	<30	<5	<5	<2.5
Bromodichloromethane	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	<5	<5	<30	<5	<5	<2.5
Bromomethane	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	<10	<20	<50	<10	<10	<2.5
Carbon disulfide	<10.0	<10.0	<5.00	<5.00	--	--	<10	--	<50	<10	<5	<10
Carbon tetrachloride	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	<5	<5	<30	<5	<5	<2.5
Chloroethane	<1.00	<1.00 Jo	<0.500 Jo	<0.500	<0.4	<0.4	<10	<20	<50	<10	<10	<2.5
Chloroform	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.4	2.6	<5	<5	<30	<5	<5	<2.5
Chloromethane	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	<10	<20	<50	<10	<10	<2.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	10.3	11.7	8.46	4.39	<0.5	1.9	<5	<5	<30	<5	<5	13
Dichlorodifluormethane	<1.00	<1.00	<0.500	<0.500	<0.4	2.8	--	<20	--	<10	<5	2.8
Ethylbenzene	<1.00	<1.00	<0.500	<0.500	--	--	<5	--	<30	<5	<5	<2.5
Hexachlorobutadiene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date	11/28/00	12/28/00	1/22/01	2/22/01	9/16/94	10/3/95	4/25/96	5/27/97	8/27/97	2/13/98	5/22/98	8/26/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Isopropylbenzene	<1.00	<1.00	<0.500 Jo	<0.500	--	--	--	--	--	--	--	--
m,p-Xylene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	2.89	3.10	2.35	1.12	--	--	--	--	--	--	<10	<10
Methylene chloride	<1.00 Jo	<1.00 Jo	<0.500	<0.500 Jo	<10	<10	<20	<20	<50	<10	<5	<2.5
n-Butylbenzene	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	--	--	--	--	--	--	--	--
n-Propylbenzene	<1.00	<1.00	<0.500	<0.500	--	--	--	--	--	--	--	--
Naphthalene	7.08	8.55	5.90	3.47	--	--	--	--	--	--	--	--
o-Xylene	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	--	--	--	--	--	--	--	--
p-Isopropyltoluene	<1.00	<1.00	<0.500 Jo	<0.500	--	--	--	--	--	--	--	--
sec-Butylbenzene	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	--	--	--	--	--	--	--	--
tert-Butylbenzene	<1.00	<1.00	<0.500 Jo	<0.500	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	14.2	16.8	14.3	6.30	8	8.5	10	21	88	7	17	92
Toluene	<1.00	<1.00 Jo	<0.500	<0.500	--	--	<5	--	<30	<5	<5	<2.5
trans-1,2-Dichloroethene	<1.00	<1.00 Jo	<0.500 Jo	<0.500	<0.4	<0.4	<5	<5	<30	<5	<5	<2.5
Trichloroethene (TCE)	4.78	5.64	4.06	2.05	<0.4	2.8	<5	8	40	<5	6.5	39
Trichlorofluoromethane	<1.00	<1.00	<0.500	<0.500	<0.4	<0.4	--	<20	--	<5	<5	<2.5
Trichlorotrifluoroethane (Freon 113)	<1.00 Jo	<1.00 Jo	0.778	<0.500 Jo	--	--	--	170	410	220	440	330
Vinyl Acetate	<10.0	<10.0	<5.00	<5.00	--	--	<50	--	<300	<50	<10	<10
Vinyl chloride (VC)	<1.00 Jo	<1.00 Jo	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<10	<20	<50	<10	<10	<2.5
Xylenes (total)	--	--	--	--	--	--	<10	--	<50	<10	<5	<2.5

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8A	W8A	W8A	W8A	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	12/18/98	2/24/99	10/27/99	4/5/00	10/18/00	2/21/01	9/16/94	9/28/95	4/18/96	5/27/97	8/26/97	2/12/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	270	128	571	279	472	211	<0.4	<0.4	<5	<0.5	<5	<5
1,1,2,2-Tetrachloroethane	<0.9	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
1,1,2-Trichloroethane	<0.9	<2.50	<10.0	<2.50	<10.0	<5.00	<1	<1	<5	<0.5	<5	<5
1,1-Dichloroethane (1,1-DCA)	53	28.0	109	63.9	115	55.4	<0.4	<0.4	<5	<0.5	<5	<5
1,1-Dichloroethene (1,1-DCE)	49	21.4	101	52.9	131	44.6	<0.4	<0.4	<5	<0.5	<5	<5
1,2,3-Trichlorobenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
1,2-Dichlorobenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	--	<0.5	--	<5
1,2-Dichloroethane	<0.8	<2.50	<10.0	<2.50	<10.0 Jo	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
1,2-Dichloropropane	<0.8	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
1,3,5-Trimethylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
1,4-Dichlorobenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	--	<0.5	--	<5
1,4-Dioxane	--	--	<1000	<250	<2000 UJ-	<1000	--	--	--	--	--	--
2-Butanone (MEK)	<3	<25.0	<100	<25.0	<100	<50.0	--	--	<100	--	<10	<100
2-Hexanone	<4	<25.0	<100	<25.0	<100	<50.0	--	--	<50	--	<50	<50
Acetone	<3	<25.0	302	<50.0	<200	<100	--	--	<100	--	<100	<100
Benzene	<0.8	<2.50	<10.0	<2.50	<10.0 Jo	<5.00 Jo	--	--	<5	--	<5	<5
Bromodichloromethane	<0.7	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
Bromomethane	<0.9	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<10	<2	<10	<10
Carbon disulfide	<0.7	<25.0	<100	<25.0	<100	<50.0	--	--	<10	--	<10	<10
Carbon tetrachloride	<0.7	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
Chloroethane	<0.7	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<10	<2	<10	<10
Chloroform	1	<2.50	<10.0	<2.50	<10.0	<5.00 Jo	<0.4	<0.4	<5	<0.5	<5	<5
Chloromethane	<0.6	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<10	<2	<10	<10
cis-1,2-Dichloroethene (cis-1,2-DCE)	8	3.52	20.6	11.1	25.2	11.5	<0.5	<0.5	<5	<0.5	<5	<5
Dichlorodifluoromethane	<0.7	<2.50	<10.0	<2.50	<10.0 Jo	<5.00	<0.4	<0.4	--	<2	--	<10
Ethylbenzene	<0.6	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	<5	--	<5	<5
Hexachlorobutadiene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8A	W8A	W8A	W8A	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	12/18/98	2/24/99	10/27/99	4/5/00	10/18/00	2/21/01	9/16/94	9/28/95	4/18/96	5/27/97	8/26/97	2/12/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Isopropylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
m,p-Xylene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	2	<2.50	<10.0	3.18	<10.0 Jo	<5.00 Jo	--	--	--	--	--	--
Methylene chloride	<0.8	<2.50	<10.0	<2.50	<10.0	5.90	<10	<10	<20	<2	<10	<10
n-Butylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
n-Propylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
Naphthalene	--	<2.50	<10.0	<2.50	<10.0 Jo	<5.00	--	--	--	--	--	--
o-Xylene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
p-Isopropyltoluene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
sec-Butylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
tert-Butylbenzene	--	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	--	--	--	--
Tetrachloroethene (PCE)	73	28.6	120	55.8	221	64.1	<0.4	<0.4	<5	<0.5	<5	<5
Toluene	<0.8	<2.50	<10.0	<2.50	<10.0	<5.00	--	--	<5	--	<5	<5
trans-1,2-Dichloroethene	<0.7	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<5	<0.5	<5	<5
Trichloroethene (TCE)	28	9.40	59.1	24.1	92.2	28.4	<0.4	<0.4	<5	<0.5	<5	<5
Trichlorofluoromethane	<0.8	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	--	<2	--	<5
Trichlorotrifluoroethane (Freon 113)	280	279	253	359	775	210	--	--	--	<0.5	<5	<5
Vinyl Acetate	<0.7	<50.0	<100	<25.0	<100	<50.0	--	--	<50	--	<50	<50
Vinyl chloride (VC)	<0.6	<2.50	<10.0	<2.50	<10.0	<5.00	<0.4	<0.4	<10	<2	<10	<10
Xylenes (total)	<2	--	--	--	--	--	--	--	<10	--	<10	<10

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8B	W8B	W8B	W8B	W8B	W8B	W8B	W8C	W8C	W8C	W8C
Sample Date	5/20/98	8/24/98	12/17/98	2/24/99	10/27/99	4/5/00	10/18/00	2/21/01	9/16/94	9/27/95	4/25/96	5/27/97
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<0.5
1,1,2,2-Tetrachloroethane	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
1,1,2-Trichloroethane	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<1	<1	<5	<0.5
1,1-Dichloroethane (1,1-DCA)	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<0.5
1,1-Dichloroethene (1,1-DCE)	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<0.5
1,2,3-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
1,2-Dichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	--	<0.5
1,2-Dichloroethane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
1,2-Dichloropropane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
1,3,5-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
1,4-Dichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	--	<0.5
1,4-Dioxane	--	--	--	--	<50.0	<50.0	<100 Jo UJ-	<100 Jo	--	--	--	--
2-Butanone (MEK)	<10	<2	<3	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<100	--
2-Hexanone	<10	<2	<4	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<50	--
Acetone	<10	<2	<3	<5.00	<10.0	<10.0	<10.0	<10.0	--	--	<100	--
Benzene	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	<5	--
Bromodichloromethane	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
Bromomethane	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<10	<2
Carbon disulfide	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<10	--
Carbon tetrachloride	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
Chloroethane	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<10	<2
Chloroform	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
Chloromethane	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<10	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	<0.5	<5	<0.5
Dichlorodifluormethane	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	--	<2
Ethylbenzene	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	<5	--
Hexachlorobutadiene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8B	W8B	W8B	W8B	W8B	W8B	W8B	W8C	W8C	W8C	W8C
Sample Date	5/20/98	8/24/98	12/17/98	2/24/99	10/27/99	4/5/00	10/18/00	2/21/01	9/16/94	9/27/95	4/25/96	5/27/97
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Isopropylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
m,p-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
Methyl tert-butyl ether (MTBE)	<10	<2	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	--	--	--	--
Methylene chloride	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<10	<10	<20	<2
n-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
n-Propylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
Naphthalene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
o-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
p-Isopropyltoluene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
sec-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
tert-Butylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	--	--
Tetrachloroethene (PCE)	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<0.5
Toluene	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--	<5	--
trans-1,2-Dichloroethene	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<5	<0.5
Trichloroethene (TCE)	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	<0.4	<0.4	<5	<0.5
Trichlorofluoromethane	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	--	<2
Trichlorotrifluoroethane (Freon 113)	<5	<2	<0.8	<0.500	<0.500	<0.500	<0.500 Jo	<0.500 Jo	--	--	--	<0.5
Vinyl Acetate	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	--	--	<50	--
Vinyl chloride (VC)	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4	<10	<2
Xylenes (total)	<5	<0.5	<2	--	--	--	--	--	--	--	<10	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W9A	W9A
Sample Date	8/26/97	2/12/98	5/20/98	8/24/98	12/16/98	2/24/99	10/27/99	4/5/00	10/19/00	2/21/01	9/15/94	10/3/95
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	51	34
1,1,2,2-Tetrachloroethane	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
1,1,2-Trichloroethane	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<1	<1
1,1-Dichloroethane (1,1-DCA)	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	5.2	4.6
1,1-Dichloroethene (1,1-DCE)	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	28	17
1,2,3-Trichlorobenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
1,2-Dichlorobenzene	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
1,2-Dichloroethane	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
1,2-Dichloropropane	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
1,3,5-Trimethylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
1,4-Dichlorobenzene	--	<5	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
1,4-Dioxane	--	--	--	--	--	--	<50.0	<50.0	<100 UJ-	<100	--	--
2-Butanone (MEK)	<10	<100	<10	<2	<3	<5.00	<5.00	<5.00	<5.00	<5.00	--	--
2-Hexanone	<50	<50	<10	<2	<4	<5.00	<5.00	<5.00	<5.00	<5.00	--	--
Acetone	<100	<100	<10	<2	<3	<5.00	<10.0	<10.0	<10.0	<10.0	--	--
Benzene	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Bromodichloromethane	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500 Jo	<0.500	<0.4	<0.4
Bromomethane	<10	<10	<10	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Carbon disulfide	<10	<10	<5	<2	<0.7	<5.00	<5.00	<5.00	<5.00	<5.00	--	--
Carbon tetrachloride	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Chloroethane	<10	<10	<10	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Chloroform	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	1.7	1.3
Chloromethane	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.5	7.3
Dichlorodifluoromethane	--	<10	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Ethylbenzene	<5	<5	<5	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Hexachlorobutadiene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W9A	W9A
Sample Date	8/26/97	2/12/98	5/20/98	8/24/98	12/16/98	2/24/99	10/27/99	4/5/00	10/19/00	2/21/01	9/15/94	10/3/95
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
Isopropylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
m,p-Xylene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Methyl tert-butyl ether (MTBE)	--	--	<10	<2	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Methylene chloride	<10	<10	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500 Jo	<10	<10
n-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
n-Propylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Naphthalene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
o-Xylene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
p-Isopropyltoluene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
sec-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
tert-Butylbenzene	--	--	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Tetrachloroethene (PCE)	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	1.6	1.5
Toluene	<5	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
trans-1,2-Dichloroethene	<5	<5	<5	<0.5	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Trichloroethene (TCE)	<5	<5	<5	<0.5	<0.9	<0.500	<0.500	<0.500	<0.500	<0.500	160	160
Trichlorofluoromethane	--	<5	<5	<0.5	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	0.74
Trichlorotrifluoroethane (Freon 113)	<5	<5	<5	<2	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
Vinyl Acetate	<50	<50	<10	<2	<0.7	<10.0	<5.00	<5.00	<5.00	<5.00	--	--
Vinyl chloride (VC)	<10	<10	<10	<0.5	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.4	<0.4
Xylenes (total)	<10	<10	<5	<0.5	<2	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 103 of 108

Sample Location	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A
Sample Date	4/19/96	5/27/97	8/26/97	2/13/98	5/22/98	8/25/98	12/18/98	2/24/99	10/27/99	4/4/00	10/19/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	28	22	28	24	29	31	24	31.4	27.8	31.3	23.2
1,1,2,2-Tetrachloroethane	<5	<3	<5	<5	<5	<0.5	<0.9	<1.00	<2.50	<2.50	<2.50
1,1,2-Trichloroethane	<5	<3	<5	<5	<5	<0.5	<0.9	<1.00	<2.50	<2.50	<2.50
1,1-Dichloroethane (1,1-DCA)	<5	4	6	6	7.2	6.7	7	9.05	8.16	10.6	8.13
1,1-Dichloroethene (1,1-DCE)	15	13	19	19	19	16	15	21.2	16.5	21.5	19.1
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
1,2-Dichlorobenzene	--	<3	--	<5	--	--	--	<1.00	<2.50	<2.50	<2.50
1,2-Dichloroethane	<5	<3	<5	<5	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50
1,2-Dichloropropane	<5	<3	<5	<5	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
1,4-Dichlorobenzene	--	<3	--	<5	--	--	--	<1.00	<2.50	<2.50	<2.50
1,4-Dioxane	--	--	--	--	--	--	--	--	<250	<250	<500 UJ-
2-Butanone (MEK)	<100	--	<10	<100	<10	<2	<3	<10.0	<25.0	<25.0	<25.0
2-Hexanone	<50	--	<50	<50	<10	<2	<4	<10.0	<25.0	<25.0	<25.0
Acetone	<100	--	<100	<100	<10	<2	<3	<10.0	<50.0	<50.0	<50.0
Benzene	<5	--	<5	<5	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50 Jo
Bromodichloromethane	<5	<3	<5	<5	<5	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50
Bromomethane	<10	<10	<10	<10	<10	<0.5	<0.9	<1.00	<2.50	<2.50	<2.50
Carbon disulfide	<10	--	<10	<10	<5	<2	<0.7	<10.0	<25.0	<25.0	<25.0
Carbon tetrachloride	<5	<3	<5	<5	<5	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50
Chloroethane	<10	<10	<10	<10	<10	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50
Chloroform	<5	<3	<5	<5	<5	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50 Jo
Chloromethane	<10	<10	<10	<10	<10	<0.5	<0.6	<1.00	<2.50	<2.50	<2.50
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5	3	<5	<5	<5	4.5	4	4.58	5.83	6.84	8.65
Dichlorodifluoromethane	--	<10	--	<10	<5	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50
Ethylbenzene	<5	--	<5	<5	<5	<0.5	<0.6	<1.00	<2.50	<2.50	<2.50
Hexachlorobutadiene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 104 of 108

Sample Location	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A	W9A
Sample Date	4/19/96	5/27/97	8/26/97	2/13/98	5/22/98	8/25/98	12/18/98	2/24/99	10/27/99	4/4/00	10/19/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Isopropylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
m,p-Xylene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
Methyl tert-butyl ether (MTBE)	--	--	--	--	<10	<2	<0.7	<1.00	<2.50	<2.50	<2.50
Methylene chloride	<20	<10	<10	<10	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50
n-Butylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
n-Propylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
Naphthalene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
o-Xylene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
p-Isopropyltoluene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
sec-Butylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
tert-Butylbenzene	--	--	--	--	--	--	--	<1.00	<2.50	<2.50	<2.50
Tetrachloroethene (PCE)	<5	<3	<5	<5	<5	1.3	1	1.11	<2.50	<2.50	<2.50 Jo
Toluene	<5	--	<5	<5	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50
trans-1,2-Dichloroethene	<5	<3	<5	<5	<5	<0.5	<0.7	<1.00	<2.50	<2.50	<2.50
Trichloroethene (TCE)	130	120	130	110	100	130	130	130	138	145	124
Trichlorofluoromethane	--	<10	--	<5	<5	<0.5	<0.8	<1.00	<2.50	<2.50	<2.50
Trichlorotrifluoroethane (Freon 113)	--	37	57	53	140	60	66	68.3	59.2	88.5	76.0
Vinyl Acetate	<50	--	<50	<50	<10	<2	<0.7	<20.0	<25.0	<25.0	<25.0
Vinyl chloride (VC)	<10	<10	<10	<10	<10	<0.5	<0.6	<1.00	<2.50	<2.50	<2.50
Xylenes (total)	<10	--	<10	<10	<5	<0.5	<2	--	--	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 105 of 108

Sample Location	W9A	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B
Sample Date	2/21/01	9/15/94	9/28/95	4/18/96	5/27/97	8/26/97	2/12/98	5/19/98	8/24/98	12/17/98	2/24/99	10/27/99
Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	30.4	0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
1,1,2,2-Tetrachloroethane	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1,2-Trichloroethane	<10.0	<1	<1	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	14.5	0.7	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	22.9	1.3	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,2,3-Trichlorobenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trichlorobenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2,4-Trimethylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,2-Dichlorobenzene	<10.0	<0.4	<0.4	--	<0.5	--	<5	--	--	--	<0.500	<0.500
1,2-Dichloroethane	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,2-Dichloropropane	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
1,3,5-Trimethylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
1,4-Dichlorobenzene	<10.0	<0.4	<0.4	--	<0.5	--	<5	--	--	--	<0.500	<0.500
1,4-Dioxane	<2000	--	--	--	--	--	--	--	--	--	--	<50.0
2-Butanone (MEK)	<100	--	--	<100	--	<10	<100	<10	<2	<3	<5.00	<5.00
2-Hexanone	<100	--	--	<50	--	<50	<50	<10	<2	<4	<5.00	<5.00
Acetone	<200	--	--	<100	--	<100	<100	<10	<2	<3	<5.00	<10.0
Benzene	<10.0	--	--	<5	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
Bromodichloromethane	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Bromomethane	<10.0	<0.4	<0.4	<10	<2	<10	<10	<10	<0.5	<0.9	<0.500	<0.500
Carbon disulfide	<100	--	--	<10	--	<10	<10	<5	<2	<0.7	<5.00	<5.00
Carbon tetrachloride	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloroethane	<10.0	<0.4	<0.4	<10	<2	<10	<10	<10	<0.5	<0.7	<0.500	<0.500
Chloroform	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Chloromethane	<10.0	<0.4	<0.4	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<10.0 Jo	<0.5	<0.5	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Dichlorodifluoromethane	<10.0	<0.4	<0.4	--	<2	--	<10	<5	<0.5	<0.7	<0.500	<0.500
Ethylbenzene	<10.0	--	--	<5	--	<5	<5	<5	<0.5	<0.6	<0.500	<0.500
Hexachlorobutadiene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B	W9B
Sample Date	2/21/01	9/15/94	9/28/95	4/18/96	5/27/97	8/26/97	2/12/98	5/19/98	8/24/98	12/17/98	2/24/99	10/27/99
Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Isopropylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
m,p-Xylene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<10.0	--	--	--	--	--	--	<10	<2	<0.7	<0.500	<0.500
Methylene chloride	<10.0	<10	<10	<20	<2	<10	<10	<5	<0.5	<0.8	<0.500	<0.500
n-Butylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
n-Propylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Naphthalene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
o-Xylene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
p-Isopropyltoluene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
sec-Butylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
tert-Butylbenzene	<10.0	--	--	--	--	--	--	--	--	--	<0.500	<0.500
Tetrachloroethene (PCE)	<10.0	0.8	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
Toluene	<10.0	--	--	<5	--	<5	<5	<5	<0.5	<0.8	<0.500	<0.500
trans-1,2-Dichloroethene	<10.0	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.7	<0.500	<0.500
Trichloroethene (TCE)	105	<0.4	<0.4	<5	<0.5	<5	<5	<5	<0.5	<0.9	<0.500	<0.500
Trichlorofluoromethane	<10.0	<0.4	<0.4	--	<2	--	<5	<5	<0.5	<0.8	<0.500	<0.500
Trichlorotrifluoroethane (Freon 113)	53.1	--	--	--	<0.5	<5	<5	<5	<2	<0.8	<0.500	<0.500
Vinyl Acetate	<100	--	--	<50	--	<50	<50	<10	<2	<0.7	<10.0	<5.00
Vinyl chloride (VC)	<10.0	<0.4	<0.4	<10	<2	<10	<10	<10	<0.5	<0.6	<0.500	<0.500
Xylenes (total)	--	--	--	<10	--	<10	<10	<5	<0.5	<2	--	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	WU	WU
Sample Date	4/4/00	10/19/00	2/21/01	4/24/96	10/26/99
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	16	5.44
1,1,2,2-Tetrachloroethane	<0.500	<0.500	<0.500	<5	<0.500
1,1,2-Trichloroethane	<0.500	<0.500	<0.500	<5	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500	18	16.6
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<5	1.44
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	--	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	--	<10.0
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	--	<0.500
1,2-Dichlorobenzene	<0.500	<0.500	<0.500	--	<10.0
1,2-Dichloroethane	<0.500	<0.500	<0.500	<5	<0.500
1,2-Dichloropropane	<0.500	<0.500	<0.500	<5	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	--	<0.500
1,4-Dichlorobenzene	<0.500	<0.500	<0.500	--	<10.0
1,4-Dioxane	<50.0	<100 UJ-	<100	--	<50.0
2-Butanone (MEK)	<5.00	<5.00	<5.00	<100	<5.00
2-Hexanone	<5.00	<5.00	<5.00	<50	<5.00
Acetone	<10.0	<10.0	<10.0	<100	<10.0
Benzene	<0.500	<0.500	<0.500	<5	<0.500
Bromodichloromethane	<0.500	<0.500	<0.500	<5	<0.500
Bromomethane	<0.500	<0.500	<0.500	<10	<0.500
Carbon disulfide	<5.00	<5.00	<5.00	<10	<5.00
Carbon tetrachloride	<0.500	<0.500	<0.500	<5	<0.500
Chloroethane	<0.500	<0.500	<0.500	<10	<0.500
Chloroform	<0.500	<0.500	<0.500	<5	<0.500
Chloromethane	<0.500	<0.500	<0.500	<10	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	<5	5.30
Dichlorodifluoromethane	<0.500	<0.500	<0.500	--	<0.500
Ethylbenzene	<0.500	<0.500	<0.500	<5	<0.500
Hexachlorobutadiene	<0.500	<0.500	<0.500	--	<10.0

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	WU	WU
Sample Date	4/4/00	10/19/00	2/21/01	4/24/96	10/26/99
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone
Isopropylbenzene	<0.500	<0.500	<0.500	--	<0.500
m,p-Xylene	<0.500	<0.500	<0.500	--	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<0.500	--	<0.500
Methylene chloride	<0.500	<0.500	<0.500	<20	<0.500
n-Butylbenzene	<0.500	<0.500	<0.500	--	<0.500
n-Propylbenzene	<0.500	<0.500	<0.500	--	<0.500
Naphthalene	<0.500	<0.500	<0.500	--	<0.500
o-Xylene	<0.500	<0.500	<0.500	--	<0.500
p-Isopropyltoluene	<0.500	<0.500	<0.500	--	<0.500
sec-Butylbenzene	<0.500	<0.500	<0.500	--	<0.500
tert-Butylbenzene	<0.500	<0.500	<0.500	--	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<5	<0.500
Toluene	<0.500	<0.500	<0.500	<5	<0.500
trans-1,2-Dichloroethene	<0.500	<0.500	<0.500	<5	<0.500
Trichloroethene (TCE)	<0.500	<0.500 Jo	<0.500	<5	<0.500
Trichlorofluoromethane	<0.500	<0.500	<0.500	--	<0.500
Trichlorotrifluoroethane (Freon 113)	<0.500	<0.500	<0.500	--	<0.500
Vinyl Acetate	<5.00	<5.00	<5.00	<50	<5.00
Vinyl chloride (VC)	<0.500	<0.500	<0.500	<10	<0.500
Xylenes (total)	--	--	--	<10	--

Notes:

µg/L = micrograms per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-1a
LOW LEVEL 1,4-DIOXANE BY EPA METHOD 8270 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(µg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	B1	B2	B3	B4	B5	EW1B	W1	W10A	W11B	W14A	W15A
Sample Date	8/1/01	7/31/01	7/31/01	7/31/01	8/1/01	8/2/01	8/2/01	7/31/01	8/2/01	7/31/01	7/31/01
Zone	B-Zone	B-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	A-Zone	B-Zone	A-Zone	A-Zone
1,4-Dioxane	4.06	8.88	<2	25.6	6.20	<2	76.8	<2	<2	146	<2

Notes:

µg/L = micrograms per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

TABLE 5-3b-1a
LOW LEVEL 1,4-DIOXANE BY EPA METHOD 8270 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(µg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W16A	W17A	W17B	W18A	W19A	W2	W20A	W21A	W25A	W27A	W29A1
Sample Date	7/31/01	8/1/01	8/2/01	8/2/01	8/2/01	8/2/01	8/1/01	8/1/01	7/31/01	7/31/01	8/2/01
Zone	A-Zone	A-Zone	B-Zone	A-Zone	A-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,4-Dioxane	<2	81.4	<2	33.0	18.1	11.7	59	<2	51.2	117	2200

Notes:

µg/L = micrograms per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

TABLE 5-3b-1a
LOW LEVEL 1,4-DIOXANE BY EPA METHOD 8270 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(µg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W29B1	W29B2	W30B	W31C	W32A	W33A	W34A	W35A	W36A	W38A	W40A
Sample Date	8/2/01	8/2/01	8/2/01	8/2/01	8/1/01	8/1/01	8/1/01	8/1/01	8/1/01	8/1/01	8/2/01
Zone	B-Zone	C-Zone	B-Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
1,4-Dioxane	135	<2	<2	<2	<2	<2	<2	11.0	6.88	1400	11.7

Notes:

µg/L = micrograms per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

TABLE 5-3b-1a
LOW LEVEL 1,4-DIOXANE BY EPA METHOD 8270 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(µg/L)

Former Remco Hydraulics Facility

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Sample Location	W41A	W42A	W43A	W6	W8A	W8B	W8C	W9B
Sample Date	8/7/01	8/7/01	8/7/01	8/2/01	7/31/01	8/1/01	7/31/01	8/1/01
Zone	A-Zone	A-Zone	A-Zone	C-Zone	A-Zone	B-Zone	C-Zone	B-Zone
1,4-Dioxane	46.2	<2	<2	<2	104	61.8	<2	<2

Notes:

µg/L = micrograms per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1
Sample Date	2/12/98	2/12/98	5/20/98	8/24/98	12/17/98	12/17/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	<0.05	<0.05	<0.058	--
Motor Oil	--	--	--	<0.25	<0.29	--
Purgeable Range Organics (C6-C12)	--	--	<0.05	<0.05	--	--
TPH-diesel	<0.05	--	<0.05	<0.05	<0.058	--
TPH-gasoline	--	<0.05	<0.05	<0.05	--	<0.03

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B2	B2
Sample Date	2/24/99	10/26/99	4/4/00	10/19/00	2/21/01	2/11/98	2/11/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.0527	--	--
Motor Oil	<0.250	<0.250	<0.250	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	<0.0500	--	--
TPH-diesel	<0.0500	<0.0500	<0.0500	--	<0.0500	--	<0.05
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.05	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2
Sample Date	5/21/98	8/25/98	12/17/98	12/17/98	2/24/99	10/25/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	<0.05	<0.05	<0.055	--	--	--
Motor Oil	--	<0.25	<0.28	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	<0.05	<0.05	--	--	--	--
TPH-diesel	<0.05	<0.05	<0.055	--	<0.0500	<0.0500
TPH-gasoline	<0.05	<0.05	--	<0.03	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B3	B3	B3
Sample Date	4/4/00	10/18/00	2/21/01	2/11/98	2/11/98	5/20/98
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.0500 Jo	--	--	<0.05
Motor Oil	<0.250	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	<0.05
TPH-diesel	<0.0500	<0.0500	<0.0500 Jo	--	0.06	<0.05
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.05	--	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3
Sample Date	8/24/98	12/17/98	12/17/98	2/24/99	10/25/99	4/3/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	<0.05	<0.051	--	--	--	--
Motor Oil	<0.25	<0.26	--	<0.250	<0.250	<0.250
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	--
TPH-diesel	<0.05	<0.051	--	<0.0500	<0.0500	<0.0500
TPH-gasoline	<0.05	--	<0.03	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B4	B4	B4	B4
Sample Date	10/18/00	2/21/01	2/12/98	2/12/98	5/21/98	8/25/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.0500	--	--	<0.05	0.32
Motor Oil	--	--	--	--	--	<0.25
Purgeable Range Organics (C6-C12)	--	<0.0500	--	--	0.077	<0.05
TPH-diesel	<0.0500	<0.0500	--	<0.05	<0.05	<0.05
TPH-gasoline	<0.0500 Jo	<0.0500	<0.05	--	<0.05	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4
Sample Date	12/18/98	12/18/98	2/24/99	10/26/99	4/4/00	10/19/00	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	<0.05	--	--	--	--	--	0.108
Motor Oil	<0.25	--	<0.250	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--	<0.0500
TPH-diesel	<0.05	--	0.0773	0.0516	0.133	0.0623 Jy	<0.0500
TPH-gasoline	--	<0.03	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B5	B5	B5	B5	B5	B5
Sample Date	2/13/98	5/21/98	8/25/98	12/17/98	12/17/98	2/24/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	<0.05	<0.05	<0.052	--	--
Motor Oil	--	--	<0.25	<0.26	--	<0.250
Purgeable Range Organics (C6-C12)	--	<0.05	0.054	--	--	--
TPH-diesel	--	<0.05	<0.05	<0.052	--	<0.0500
TPH-gasoline	<0.05	<0.05	<0.05	--	0.032	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Willits, California
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Sample Location	B5	B5	B5	B5	B5	CW	EW1A
Sample Date	10/26/99	4/7/00	10/27/00	2/23/01	2/23/01	10/26/99	2/13/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	<0.114 U	--	--
Motor Oil	<0.250	<0.250	--	--	--	<0.250	--
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	--	--	--
TPH-diesel	<0.0500	<0.0500	<0.0500	--	<0.0500	0.399	--
TPH-gasoline	<0.0500	<0.0500	<0.0500 Jo	<0.0500 Jo	--	<0.0500	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A
Sample Date	2/13/98	5/22/98	8/25/98	12/17/98	12/17/98	2/25/99
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.05	0.091	<0.053	--	--
Motor Oil	--	--	<0.25	<0.26	--	<0.250
Purgeable Range Organics (C6-C12)	--	<0.05	<0.05	--	--	--
TPH-diesel	0.09	<0.05	<0.05	<0.053	--	0.217
TPH-gasoline	--	<0.05	<0.05	--	0.054	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1A	EW1B
Sample Date	10/28/99	10/28/99	4/12/00	10/27/00	2/22/01	5/22/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.287 J-	<0.05
Motor Oil	<0.250	--	<0.000	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	<0.0500 Jo	<0.05
TPH-diesel	0.317	--	0.359	0.321 NJz+	<0.0500 UJ-	<0.05
TPH-gasoline	--	<0.0500	0.0273	<0.0500 Jo	<0.0500	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	8/25/98	12/18/98	12/18/98	2/25/99	10/28/99	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	0.098	<0.054	--	--	--	--
Motor Oil	<0.25	<0.27	--	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	--
TPH-diesel	<0.05	<0.054	--	--	0.0855	--
TPH-gasoline	<0.05	--	<0.03	--	--	<0.0500

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	EW1B	EW1B	EW1B	MW-1	MW-2	MW-3	MW-4
Sample Date	4/12/00	10/27/00	2/22/01	9/11/00	9/11/00	9/11/00	9/11/00
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	0.165 J-	--	--	--	--
Motor Oil	<0.250	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	--	--
TPH-diesel	0.110	0.140 NJz+	<0.0500 UJ-	<0.0500	<0.0500 UJ-	0.0402	<0.0500
TPH-gasoline	0.0270	<0.0500	<0.0500	--	--	--	--

Notes:

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TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	OW-01	OW-03	OW-04	OW-05	OW-07	OW-09	OW-10	OW-11
Sample Date	1/17/98	1/17/98	12/18/97	12/18/97	12/18/97	12/18/97	12/19/97	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--	--	--
TPH-diesel	3.4	<0.05	<0.05	0.2	<0.05	<0.05	<0.05	<0.05
TPH-gasoline	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	OW-11	OW-11	OW-14	OW-17	OW-17	OW-17	OW-21
Sample Date	5/27/98	5/27/98	1/17/98	12/17/97	5/28/98	5/28/98	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA
Extractable Range Organics (C10-C24)	--	<0.05	--	--	--	<0.05	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	0.21	--
TPH-diesel	--	<0.05	<0.05	<0.05	<0.05	--	<0.05
TPH-gasoline	--	<0.05	--	--	<0.05	--	--

Notes:

mg/L = milligrams per liter

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	OW-21	OW-21	OW-21	OW-22	OW-23	OW-23	OW-24
Sample Date	5/27/98	5/27/98	12/14/00	12/19/97	1/17/98	3/28/01	12/18/97
Zone	NA	NA	NA	NA	NA	NA	NA
Extractable Range Organics (C10-C24)	<0.05	--	--	--	--	0.0331	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	<0.05	--	--	--	--	--
TPH-diesel	<0.05	--	<0.0500	<0.05	0.054	0.0331	<0.05
TPH-gasoline	--	<0.05	<0.0500	--	--	--	--

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	OW-25	OW-28	OW-29	OW-29	OW-29	OW-29	OW-30
Sample Date	1/17/98	12/19/97	12/17/97	5/27/98	5/28/98	12/14/00	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA
Extractable Range Organics (C10-C24)	--	--	--	<0.05	<0.05	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	<0.05	<0.05	--	--
TPH-diesel	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0500	<0.05
TPH-gasoline	--	--	--	<0.05	<0.05	<0.0500	--

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	OW-32	OW-32	OW-33	OW-33	OW-34	OW-34	OW-35
Sample Date	12/17/97	12/14/00	12/17/97	12/14/00	12/17/97	12/14/00	2/13/98
Zone	NA	NA	NA	NA	NA	NA	NA
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--	--
TPH-diesel	<0.05	<0.0500	<0.05	<0.0500 Jo	<0.05	<0.0500	--
TPH-gasoline	--	<0.0500	--	<0.0500	--	<0.0500	<0.05

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	OW-35	OW-36	P-1	P-2	P-3	P-4	P-5
Sample Date	2/13/98	12/17/97	3/27/00	3/27/00	3/27/00	3/27/00	3/27/00
Zone	NA	NA	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
Motor Oil	--	--	<0.250	0.255	<0.250	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--	--
TPH-diesel	<0.05	<0.05	0.820	0.559	0.225	<0.0500	0.281
TPH-gasoline	--	--	--	--	--	--	--

Notes:

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	P-6	TW1	TW1	TW1	TW1	TW1	TW1
Sample Date	3/27/00	9/13/00	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	5.52 J-
Motor Oil	<0.250	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--	0.856
TPH-diesel	0.275	0.200 Jy	--	12.5 NJx	8.53 NJx	3.62 NJz+	<0.0526 UJ-
TPH-gasoline	--	--	0.352	--	--	--	<0.0500

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW10	TW10	TW10	TW10	TW10	TW10	TW11
Sample Date	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	2/21/01	9/13/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	0.200	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	<0.0500	--
TPH-diesel	0.465 Jy	0.156 Jy	0.0571 Jy	0.156	<0.0500 Jo	<0.0500	0.436 Jy
TPH-gasoline	--	0.0502	--	--	--	<0.0500 Jo	--

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW11	TW11	TW11	TW11	TW11	TW2	TW2
Sample Date	10/25/00	11/28/00	12/27/00	1/22/01	2/21/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.238	--	--
Motor Oil	--	--	--	--	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.0593	--	--
TPH-diesel	0.293 Jy	0.209 Jy	0.218	<0.0500 Jo	<0.0500	0.889	0.346
TPH-gasoline	0.0919 Jy	--	--	--	<0.0500	--	--

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW2	TW2	TW2	TW2	TW2	TW3	TW3
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	<0.0526	--	--
Motor Oil	--	--	--	--	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.135	--	--
TPH-diesel	0.775 Jy	0.410	0.504 Jy	0.664 Jy	0.528 Jy	0.983	0.227
TPH-gasoline	--	--	--	--	<0.0500	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW3	TW3	TW3	TW3	TW3	TW4	TW4
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	<0.0500	--	--
Motor Oil	--	--	--	--	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.0624	--	--
TPH-diesel	0.400 NJz+	0.290	0.405 Jy	0.570 Jy	0.232 Jy	0.495	0.0733
TPH-gasoline	--	--	--	--	<0.0500	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW4	TW4	TW4	TW4	TW4	TW5	TW5
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	3.93	--	--
Motor Oil	--	--	--	--	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.638	--	--
TPH-diesel	2.13 NJz+	10.8 NJx	2.91 NJx	2.04 NJz+	<0.0500	0.307	0.228
TPH-gasoline	0.952	--	--	--	<0.250	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW5	TW5	TW5	TW5	TW5	TW6	TW6
Sample Date	10/24/00	11/27/00	12/27/00	1/22/01	2/20/01	4/10/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	6.13	--	--
Motor Oil	--	--	--	--	--	0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.194	--	--
TPH-diesel	4.16 NJz+	3.58 NJx	3.54 NJx	4.73 NJz-	<0.0500	0.402	0.103
TPH-gasoline	0.968	--	--	--	<0.0500	--	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW6	TW6	TW6	TW6	TW6	TW7	TW7
Sample Date	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01	9/13/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.112	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	<0.0500	--	--
TPH-diesel	0.153 NJz+	0.139 Jy	0.232 Jy	0.200 Jy	<0.0500	0.0566	5.82 NJz+
TPH-gasoline	<0.0500	--	--	--	<0.0500	--	1.23

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW7	TW7	TW7	TW7	TW7	TW8	TW8
Sample Date	11/28/00	12/27/00	1/22/01	2/21/01	2/21/01	9/13/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	10.4	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	0.508	--	--	--
TPH-diesel	12.9 NJz+	14.7 NJx	3.95 NJz+	--	<0.0500	0.513 Jy	0.115 NJx
TPH-gasoline	--	--	--	<0.0500	--	--	<0.0500 Jo

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	TW8	TW8	TW8	TW8	TW9	TW9	TW9
Sample Date	11/28/00	12/27/00	1/22/01	2/21/01	9/13/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	0.0731 J	--	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	--	--	--
TPH-diesel	0.0758 Jy	<0.0833 Jo	<0.0500 Jo	<0.0500	0.215 J-	0.263	0.147 Jy
TPH-gasoline	--	--	--	<0.0500	--	<0.0500 Jo NJz+	--

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	TW9	TW9	TW9	W1	W1	W1
Sample Date	12/27/00	1/22/01	2/21/01	2/13/98	2/13/98	5/22/98
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	0.186	--	--	<0.05
Motor Oil	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	<0.05
TPH-diesel	0.105 Jy	<0.0500 Jo	<0.0500	--	0.11	<0.05
TPH-gasoline	--	--	<0.0500	<0.05	--	<0.05

Notes:

mg/L = milligrams per liter

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-- = not analyzed

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W1	W1	W1	W1	W1	W1
Sample Date	8/26/98	12/18/98	12/18/98	2/25/99	10/28/99	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	0.093	<0.055	--	--	--	--
Motor Oil	<0.25	<0.27	--	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	--
TPH-diesel	<0.05	<0.055	--	0.0860	0.0864	--
TPH-gasoline	<0.05	--	<0.03	<0.0500	--	<0.0500

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W1	W1	W1	W10A	W10A	W10A	W10A
Sample Date	4/12/00	10/27/00	2/22/01	4/7/00	7/13/00	7/13/00	10/19/00
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.127 U	--	--	--	--
Motor Oil	<0.250	--	--	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	--	--
TPH-diesel	0.0834	--	<0.0500	--	<0.0500 Jo	--	<0.0500
TPH-gasoline	<0.0500	<0.0500	<0.0500	--	--	<0.0500	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

TPH = Total Petroleum Hydrocarbons

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W10A	W11A	W11A	W11A	W11A	W11A	W11B
Sample Date	2/20/01	4/11/00	7/13/00	7/13/00	10/26/00	2/22/01	10/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone
Extractable Range Organics (C10-C24)	<0.0500	--	--	--	--	0.629 J-	--
Motor Oil	--	<0.250	--	<0.250	--	--	--
Purgeable Range Organics (C6-C12)	<0.0500	--	--	--	--	<0.0500 Jo	--
TPH-diesel	0.0620	--	--	0.661	0.643 NJz+	<0.0500 UJ-	--
TPH-gasoline	<0.0500	--	<0.0500	--	<0.0500 Jo	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TPH = Total Petroleum Hydrocarbons

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W11B	W11B	W12A	W12A	W12A	W12A	W12A
Sample Date	2/22/01	5/3/01	4/10/00	7/14/00	10/27/00	2/23/01	2/23/01
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	0.116 J-	0.081	--	--	--	--	<0.0500 Jo
Motor Oil	--	<0.250	<0.250	<0.250	--	--	--
Purgeable Range Organics (C6-C12)	<0.0500	<0.0500	--	--	--	<0.0500	--
TPH-diesel	<0.0500 UJ-	<0.0500	--	0.0470	<0.0500 Jo	--	<0.0500 Jo
TPH-gasoline	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500	--

Notes:

mg/L = milligrams per liter

< = less than

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W13A	W13A	W13A	W14A	W14A	W14A	W14A
Sample Date	10/26/00	2/21/01	5/3/01	4/11/00	7/12/00	10/19/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	0.160 J+	0.19	--	--	--	0.172
Motor Oil	--	--	<0.250	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	<0.0500	<0.0500	--	--	--	0.221
TPH-diesel	0.0894 Jy	<0.0500 UJ+	<0.0500	0.123	0.0655	0.0583 Jy	<0.0500
TPH-gasoline	<0.0500	<0.0500	<0.0500	0.258	--	--	<0.0500

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W15A	W15A	W15A	W15A	W15A	W16A	W16A
Sample Date	4/6/00	7/12/00	7/12/00	10/18/00	2/20/01	4/6/00	7/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.0815	--	--
Motor Oil	<0.250	0.554	--	--	--	<0.250	--
Purgeable Range Organics (C6-C12)	--	--	--	--	<0.0500	--	--
TPH-diesel	0.149	0.615	--	0.572 NJz	<0.0500	0.0633	--
TPH-gasoline	<0.0500	--	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W16A	W16A	W16A	W17A	W17A	W17A	W17A
Sample Date	7/12/00	10/18/00	2/20/01	4/6/00	7/12/00	10/24/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.0500	--	--	--	0.275
Motor Oil	<0.250	--	--	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500 Jo	--	--	--	<0.0500
TPH-diesel	<0.0500	<0.0500	0.0567	0.0715	0.178	<0.0599 U	<0.0556
TPH-gasoline	--	<0.0500	<0.0500 Jo	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W17B	W17B	W17B	W18A
Sample Date	10/24/00	2/22/01	5/3/01	4/6/00
Zone	B-Zone	B-Zone	B-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.0500 Jo	<0.0500 Jo	--
Motor Oil	--	--	<0.250	--
Purgeable Range Organics (C6-C12)	--	<0.0500	<0.0500	--
TPH-diesel	--	<0.0500 Jo	<0.0500 Jo	0.0730
TPH-gasoline	<0.0500	<0.0500	<0.0500	0.0731

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W18A	W18A	W18A	W18A	W19A	W19A
Sample Date	7/12/00	10/24/00	10/24/00	2/22/01	4/6/00	7/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	<0.0500 Jo J-	--	--
Motor Oil	<0.250	--	--	--	--	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	0.0545	--	--
TPH-diesel	0.0393	--	<0.0500	<0.0500 UJ-	0.237	0.164
TPH-gasoline	--	<0.0500 Jo	--	<0.0500	<0.0500	<0.0500

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W19A	W19A	W19A	W2	W2	W2
Sample Date	10/24/00	10/24/00	2/22/01	2/13/98	2/13/98	5/21/98
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	<0.0500 UJ-	--	--	<0.05
Motor Oil	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	<0.05
TPH-diesel	--	0.123 Jy	0.201 J-	--	<0.05	<0.05
TPH-gasoline	<0.0500	--	<0.0500	<0.05	--	<0.05

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W2	W2	W2	W2	W2	W2
Sample Date	8/25/98	12/17/98	12/17/98	2/25/99	10/28/99	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	<0.05	<0.052	--	--	--	--
Motor Oil	<0.25	<0.26	--	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	--
TPH-diesel	<0.05	<0.052	--	0.0715	0.0591	--
TPH-gasoline	<0.05	--	<0.03	<0.0500	--	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W2	W2	W2	W20A	W20A	W20A	W20A
Sample Date	4/11/00	10/27/00	2/22/01	4/6/00	7/12/00	10/17/00	2/20/01
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.0873 U	--	--	--	<0.0500
Motor Oil	<0.250	--	--	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	--	--	0.149
TPH-diesel	0.0982	--	<0.0500	0.161	0.0946	0.0574 Jy	0.0607
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	--	--	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W21A	W21A	W21A	W21A	W21A	W21A
Sample Date	10/28/99	2/2/00	4/5/00	7/13/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	--
Motor Oil	<0.250	<0.250	0.271	<0.250 Jo	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--
TPH-diesel	--	0.172	0.732	0.319	0.308 NJz+	0.255 Jy
TPH-gasoline	--	<0.100	0.0753	--	--	--

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W21A	W21A	W21A	W22A	W22A	W22A	W22A
Sample Date	12/28/00	1/22/01	2/22/01	10/28/99	2/2/00	4/12/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	0.239 J-	--	--	--	--
Motor Oil	--	--	--	<0.250	<0.250	<0.250	<0.250
Purgeable Range Organics (C6-C12)	--	--	0.0655	--	--	--	--
TPH-diesel	0.342	0.290 Jy	<0.0500 UJ-	0.288	0.235	0.192	0.321
TPH-gasoline	--	--	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W22A	W22A	W22A	W22A	W22A	W23A	W23A
Sample Date	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	10/17/00	2/19/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.209	--	<0.0526
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	<0.0500	--	<0.0500
TPH-diesel	0.427 Jy	0.166 Jy	0.498	0.273 Jy	<0.0500	<0.0500 Jo	0.0576 Jy
TPH-gasoline	<0.0500 Jo	--	--	--	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W23A	W24A	W24A	W24A	W24A	W24A
Sample Date	5/3/01	10/28/99	2/2/00	4/12/00	7/14/00	9/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	0.137	--	--	--	--	--
Motor Oil	<0.250	<0.250	0.520	0.297	0.357	--
Purgeable Range Organics (C6-C12)	<0.0500	--	--	--	--	--
TPH-diesel	<0.0500	0.201	0.301	0.111	0.434	1.15 NJx
TPH-gasoline	<0.0500 Jo	<0.0500	0.0748	0.113	--	--

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W24A	W24A	W24A	W24A	W24A	W25A
Sample Date	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01	4/7/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	0.113	--
Motor Oil	--	--	--	--	--	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	--	0.0786	--
TPH-diesel	0.171 Jy	0.0742 Jy	0.351	0.157 Jy	<0.0500	0.658
TPH-gasoline	--	--	--	--	<0.0500	1.94

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	W25A	W25A	W25A	W26A	W26A	W26A
Sample Date	7/13/00	10/19/00	2/22/01	4/11/00	7/13/00	10/26/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.683 U	--	--	--
Motor Oil	<0.250 Jo	--	--	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	--	--	1.25	--	--	--
TPH-diesel	0.500	0.174 Jy	<0.0526	0.322	0.429	0.734 NJz+
TPH-gasoline	--	--	<0.0500	0.144	--	--

Notes:

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Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W26A	W27A	W27A	W27A	W27A	W27A
Sample Date	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	0.278	--	--	--	--	0.513 J-
Motor Oil	--	<0.250	<0.250	--	--	--
Purgeable Range Organics (C6-C12)	0.331	--	--	--	<0.0500 Jo	--
TPH-diesel	<0.0500	--	0.531	0.291 Jy	--	<0.0500 R
TPH-gasoline	<0.0500	--	--	--	<0.0500	--

Notes:

mg/L = milligrams per liter

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-- = not analyzed

Bold values indicate a detection.

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W28A	W28A	W28A	W28A	W29A	W29A
Sample Date	4/11/00	7/14/00	10/26/00	2/21/01	4/7/00	7/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	0.0534	--	--
Motor Oil	<0.250	<0.250	--	--	<0.250	<0.250 UJ-
Purgeable Range Organics (C6-C12)	--	--	--	0.279	--	--
TPH-diesel	--	0.136	0.184 Jy	<0.0500	0.202	0.162 J-
TPH-gasoline	--	--	--	<0.100	1.30	--

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W29A	W29A1	W29A1	W29B1	W29B1	W29B2	W29B2
Sample Date	10/17/00	2/2/01	2/22/01	2/2/01	2/23/01	2/2/01	2/23/01
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	--	--	0.0840 R	--	--	--	--
Motor Oil	--	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	0.748	--	0.0582	--	<0.0500
TPH-diesel	0.261 Jy	0.166 Jy	<0.0500 R	<0.0500 Jo	--	<0.0500	--
TPH-gasoline	--	--	<0.0500	--	<0.0500	--	<0.0500

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W3	W3	W3	W3	W3	W3
Sample Date	2/12/98	2/12/98	5/22/98	8/26/98	12/17/98	12/17/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	--	--	<0.05	0.074	--	<0.053
Motor Oil	--	--	--	<0.25	--	<0.26
Purgeable Range Organics (C6-C12)	--	--	<0.05	<0.05	--	--
TPH-diesel	--	<0.05	<0.05	<0.05	--	<0.053
TPH-gasoline	<0.05	--	<0.05	<0.05	<0.03	--

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W3	W3	W3	W3	W3	W3	W30B
Sample Date	2/25/99	10/28/99	10/28/99	4/11/00	11/8/00	2/22/01	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	0.378 J-	--
Motor Oil	<0.250	<0.250	--	0.169	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	<0.0500 Jo	--
TPH-diesel	0.130	0.0906	--	0.12	0.0613 Jy	<0.0500 UJ-	--
TPH-gasoline	<0.0500	--	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W30B	W30B	W31B	W31B	W31B	W31B	W31C
Sample Date	2/23/01	5/3/01	9/22/00	10/27/00	2/22/01	5/3/01	9/22/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone
Extractable Range Organics (C10-C24)	0.138	<0.0500	--	--	0.112 J-	0.0963	--
Motor Oil	--	<0.250	<0.250 Jo	--	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	<0.0500	<0.0500	--	--	<0.0500	<0.0500	--
TPH-diesel	<0.0500	<0.0500	0.216 NJx	--	<0.0500 UJ-	<0.0500	0.559 NJx
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W31C	W31C	W31C	W32A	W32A	W32A	W33A
Sample Date	10/27/00	2/23/01	5/3/01	9/21/00	10/17/00	2/20/01	9/21/00
Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	0.0837	0.147	--	--	<0.0500	--
Motor Oil	--	--	<0.250	<0.250	--	--	<0.250
Purgeable Range Organics (C6-C12)	--	<0.0500	<0.0500	--	--	<0.0500	--
TPH-diesel	--	<0.0500	<0.0500	<0.0500 Jo	<0.0500	<0.0500	<0.0500
TPH-gasoline	<0.0500	<0.0500	<0.0500	--	<0.0500	<0.0500	<0.0500

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W33A	W33A	W34A	W34A	W34A	W35A
Sample Date	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.0500 Jo	--	--	<0.0500 Jo	--
Motor Oil	--	--	<0.250 UJ-	--	--	<0.250
Purgeable Range Organics (C6-C12)	--	<0.0500	--	--	<0.0500	--
TPH-diesel	<0.0500	<0.0500 Jo	<0.0500 Jo J-y	<0.0500	<0.0500 Jo	<0.0500
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W35A	W35A	W36A	W36A	W36A	W37A	W37A
Sample Date	10/17/00	2/20/01	9/21/00	10/17/00	2/21/01	9/13/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.0500 Jo	--	--	<0.0500 Jo	--	--
Motor Oil	--	--	<0.250	--	--	--	--
Purgeable Range Organics (C6-C12)	--	<0.0500	--	--	<0.0500	--	--
TPH-diesel	<0.0500	<0.0500 Jo	<0.0500	<0.0500	<0.0500 Jo	0.173 Jy	0.487 Jy
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	--	0.0748

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W37A	W37A	W37A	W37A	W38A	W38A	W38A
Sample Date	11/28/00	12/28/00	1/22/01	2/21/01	9/22/00	10/26/00	2/19/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	0.127	--	--	<0.0500
Motor Oil	--	--	--	--	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	--	--	3.01
TPH-diesel	0.594 NJz+	0.691 Jy+	0.422 Jy	<0.0500	<0.0500	<0.0500	0.0548 Jy
TPH-gasoline	--	--	--	<0.0500 Jo	<0.0500 Jo	<0.0500 Jo	<0.500

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W38A	W39A	W39A	W4	W4	W4
Sample Date	5/3/01	2/2/01	2/22/01	2/12/98	2/12/98	5/21/98
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	0.178	--	<0.0512 U	--	--	<0.05
Motor Oil	<0.250	--	--	--	--	--
Purgeable Range Organics (C6-C12)	0.515	--	<0.0500	--	--	<0.05
TPH-diesel	<0.0500	0.0590 Jy	<0.0500	--	<0.05	<0.05
TPH-gasoline	<0.500	--	<0.0500	<0.05	--	<0.05

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W4	W4	W4	W4	W4	W4
Sample Date	8/25/98	12/17/98	12/17/98	2/24/99	10/28/99	10/28/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	0.054	<0.051	--	--	--	--
Motor Oil	<0.25	<0.25	--	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	<0.05	--	--	--	--	--
TPH-diesel	<0.05	<0.051	--	0.0628	<0.0500	--
TPH-gasoline	<0.05	--	<0.03	<0.0500	--	<0.0500

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W4	W4	W4	W40A	W40A	W41A	W41A
Sample Date	4/12/00	10/27/00	2/22/01	2/2/01	2/22/01	2/2/01	2/21/01
Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	0.271 J-	--	<0.0832 U	--	<0.162 U
Motor Oil	<0.250	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	<0.0500	--	<0.0500	--	0.0822
TPH-diesel	<0.0500	--	<0.0500 UJ-	<0.0500	<0.0500	0.0544	<0.0500
TPH-gasoline	<0.0500	<0.0500	<0.0500	--	<0.0500	--	<0.0500

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W42A	W42A	W43A	W43A	W5	W5
Sample Date	2/2/01	2/21/01	2/2/01	2/21/01	2/12/98	2/12/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	--	<0.0902 U	--	<0.0883 U	--	--
Motor Oil	--	--	--	--	--	--
Purgeable Range Organics (C6-C12)	--	0.0786	--	<0.0500	--	--
TPH-diesel	<0.0500	<0.0500	<0.0500 Jo	<0.0500	--	<0.05
TPH-gasoline	--	<0.0500	--	<0.0500	<0.05	--

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TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W5	W5	W5	W5	W5	W5
Sample Date	5/22/98	8/25/98	12/16/98	12/16/98	2/24/99	10/28/99
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	<0.05	0.11	0.058	--	--	--
Motor Oil	--	<0.25	<0.25	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	<0.05	<0.05	--	--	--	--
TPH-diesel	<0.05	<0.05	<0.05	--	0.115	0.0941
TPH-gasoline	<0.05	<0.05	--	<0.03	<0.0500	--

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W5	W5	W5	W5	W6	W6
Sample Date	10/28/99	4/12/00	10/27/00	2/23/01	2/12/98	2/12/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	--	--	--	0.175	--	--
Motor Oil	--	<0.250	--	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	--	--
TPH-diesel	--	0.124	0.112 NJz+	<0.0500	0.08	--
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	--	<0.05

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W6	W6	W6	W6	W6	W6
Sample Date	5/21/98	8/24/98	12/16/98	12/16/98	2/25/99	10/28/99
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	<0.05	<0.05	<0.05	--	--	--
Motor Oil	--	<0.25	<0.25	--	<0.250	<0.250
Purgeable Range Organics (C6-C12)	<0.05	<0.05	--	--	--	--
TPH-diesel	<0.05	<0.05	<0.05	--	0.117	0.0660
TPH-gasoline	<0.05	<0.05	--	<0.03	<0.0500	--

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W6	W6	W6	W6	W7	W7
Sample Date	10/28/99	4/12/00	10/27/00	2/23/01	5/21/98	8/26/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	0.158	0.088	0.28
Motor Oil	--	<0.250	--	--	--	<0.25
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	0.065	0.15
TPH-diesel	--	0.126	0.0664 Jy	<0.0500	<0.05	--
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.05	--

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W7	W7	W7	W7	W7	W7
Sample Date	12/18/98	12/18/98	2/25/99	10/28/99	4/5/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	0.14	--	--	--	--	--
Motor Oil	<0.26	--	<0.250	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--
TPH-diesel	<0.052	--	0.343	--	0.686	0.331 NJz+
TPH-gasoline	--	0.087	0.0792	--	0.0786	0.106 Jy

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W7	W7	W7	W7	W8A	W8A
Sample Date	11/28/00	12/28/00	1/22/01	2/22/01	5/22/98	8/26/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	<0.202 U	<0.05	0.051
Motor Oil	--	--	--	--	--	<0.25
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	0.084	--
TPH-diesel	0.312 NJx	0.524	0.369 Jy	<0.0526	--	--
TPH-gasoline	--	--	--	0.0519	--	--

Notes:

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TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
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Sample Location	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date	8/26/98	12/18/98	12/18/98	2/24/99	10/27/99	4/5/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	<0.051	--	--	--	--
Motor Oil	--	<0.25	--	<0.250	<0.250	<0.250
Purgeable Range Organics (C6-C12)	0.29	--	--	--	--	--
TPH-diesel	--	<0.051	--	--	--	0.210
TPH-gasoline	--	--	0.033	--	--	0.150

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8B	W8B	W8B	W8B
Sample Date	10/18/00	2/21/01	2/12/98	2/12/98	5/20/98	8/24/98
Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	<0.116 U	--	--	<0.05	0.053
Motor Oil	--	--	--	--	--	<0.25
Purgeable Range Organics (C6-C12)	--	0.102	--	--	<0.05	<0.05
TPH-diesel	0.111 NJz+	<0.0500	<0.05	--	<0.05	<0.05
TPH-gasoline	--	<0.0500	--	<0.05	<0.05	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	12/17/98	12/17/98	2/24/99	10/27/99	4/5/00	10/18/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	<0.053	--	--	--	--	--
Motor Oil	<0.26	--	<0.250	<0.250	<0.250	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	--
TPH-diesel	<0.053	--	<0.0500	<0.0500	0.0512	--
TPH-gasoline	--	<0.03	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8C	W8C	W8C	W8C	W8C
Sample Date	2/21/01	2/12/98	2/12/98	5/20/98	8/24/98	12/16/98
Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	<0.164 U	--	--	<0.05	0.15	<0.05
Motor Oil	--	--	--	--	<0.25	<0.25
Purgeable Range Organics (C6-C12)	<0.0500	--	--	<0.05	<0.05	--
TPH-diesel	<0.0500	--	<0.05	<0.05	<0.05	<0.05
TPH-gasoline	<0.0500	<0.05	--	<0.05	<0.05	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C
Sample Date	12/16/98	2/24/99	10/27/99	4/5/00	10/19/00	2/21/01
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	--	<0.178 U
Motor Oil	--	<0.250	<0.250	<0.250	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	--	<0.0500
TPH-diesel	--	0.110	<0.0500	0.105	0.0631 Jy	<0.0500
TPH-gasoline	<0.03	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9A	W9A	W9A	W9A
Sample Date	2/13/98	2/13/98	5/22/98	8/25/98	12/18/98	12/18/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	<0.05	<0.05	<0.05	--
Motor Oil	--	--	--	<0.25	<0.25	--
Purgeable Range Organics (C6-C12)	--	--	0.099	0.074	--	--
TPH-diesel	--	<0.05	<0.05	<0.05	<0.05	--
TPH-gasoline	<0.05	--	<0.05	<0.05	--	0.042

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9A	W9A	W9A	W9B
Sample Date	2/24/99	10/27/99	4/4/00	10/19/00	2/21/01	2/12/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	--	--	--	<0.0896 U	--
Motor Oil	<0.250	<0.250	<0.250	--	--	--
Purgeable Range Organics (C6-C12)	--	--	--	--	0.0636	--
TPH-diesel	--	<0.0500	--	<0.0500 Jo	<0.0500	--
TPH-gasoline	--	0.0762	--	--	<0.0500	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	W9B	W9B	W9B
Sample Date	2/12/98	5/19/98	8/24/98	12/17/98	12/17/98	2/24/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Extractable Range Organics (C10-C24)	--	<0.05	<0.05	<0.05	--	--
Motor Oil	--	--	<0.25	<0.25	--	<0.250
Purgeable Range Organics (C6-C12)	--	<0.05	<0.05	--	--	--
TPH-diesel	<0.05	<0.05	<0.05	<0.05	--	<0.0500
TPH-gasoline	--	<0.05	<0.05	--	<0.03	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	W9B	WU
Sample Date	10/27/99	4/4/00	10/19/00	2/21/01	10/26/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone
Extractable Range Organics (C10-C24)	--	--	--	<0.0673 U	--
Motor Oil	<0.250	<0.250	--	--	<0.250
Purgeable Range Organics (C6-C12)	--	--	--	<0.0500	--
TPH-diesel	<0.0500	<0.0500	--	<0.0500	0.112
TPH-gasoline	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	3/10/82	9/20/82	2/5/91	2/5/91	5/1/91	8/1/91	2/17/92	2/17/92	5/18/92
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.0034	--	--	--	0.005	0.04	--	0.19	0.1
Hexavalent Chromium	<0.002	--	--	0.06	<0.005	--	0.03	--	<0.01
Total Chromium	--	<0.05	0.9	--	--	--	<0.01	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1
Sample Date	8/17/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	0.05	<0.01	0.12	0.03	0.07	0.05
Hexavalent Chromium	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/2/95
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.03	0.04	0.04	0.08	0.0655	0.0487	0.0404	<0.02
Hexavalent Chromium	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.005
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1	B1
Sample Date	2/20/96	4/19/96	8/26/97	8/26/97	2/12/98	5/20/98	5/20/98	5/20/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.0105	0.01	<0.01	--	<0.005	--	<0.001	--
Hexavalent Chromium	<0.01	<0.01	--	<0.02	<0.005	--	--	<0.005
Total Chromium	--	--	--	--	0.0064	0.0017	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B1	B1	B1
Sample Date	8/24/98	8/24/98	8/24/98	12/17/98	12/17/98	12/17/98	2/24/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	<0.001	--	--	--	0.0011	<0.0100
Hexavalent Chromium	--	--	<0.005	<0.005	--	--	<0.00500
Total Chromium	0.0046	--	--	--	0.0076	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B1	B2	B2	B2	B2
Sample Date	10/26/99	4/4/00	10/19/00	2/21/01	3/9/82	9/20/82	2/6/91	2/6/91
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500 Jo	0.0047	--	--	<0.01
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.002	--	<0.01	--
Total Chromium	--	--	--	--	--	<0.05	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2	B2
Sample Date	5/18/92	8/17/92	8/17/92	10/3/95	4/18/96	2/11/98	5/21/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.06	0.08	--	<0.02	<0.01	<0.005	--
Hexavalent Chromium	<0.01	--	<0.01	<0.05	<0.01	<0.005	--
Total Chromium	--	--	--	--	--	<0.005	0.0017

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2	B2
Sample Date	5/21/98	5/21/98	8/25/98	8/25/98	8/25/98	12/17/98	12/17/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.001	--	--	0.0048	--	--	--
Hexavalent Chromium	--	<0.005	--	--	<0.005	<0.005	--
Total Chromium	--	--	0.0068	--	--	--	0.0077

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B2	B2	B2	B2	B2	B2	B3	B3
Sample Date	12/17/98	2/24/99	10/25/99	4/4/00	10/18/00	2/21/01	3/9/82	9/20/82
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.001	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	0.015	--
Hexavalent Chromium	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0029	--
Total Chromium	--	--	--	--	--	--	--	<0.05

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3	B3	B3
Sample Date	2/6/91	2/6/91	5/18/92	8/17/92	8/17/92	10/2/95	4/18/96	2/11/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	<0.01	0.06	0.06	--	<0.02	<0.01	<0.005
Hexavalent Chromium	<0.01	--	<0.01	--	<0.01	<0.005	<0.01	<0.005
Total Chromium	--	--	--	--	--	--	--	<0.005

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3	B3
Sample Date	5/20/98	5/20/98	5/20/98	8/24/98	8/24/98	8/24/98	12/17/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	<0.001	--	--	<0.001	--	--
Hexavalent Chromium	--	--	<0.005	--	--	<0.005	<0.005
Total Chromium	0.0015	--	--	0.0043	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B3	B3	B3	B3	B3	B3	B3
Sample Date	12/17/98	12/17/98	2/24/99	10/25/99	4/3/00	10/18/00	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	0.001	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	--	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	0.002	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	3/10/82	9/20/82	2/6/91	2/6/91	5/1/91	2/17/92	2/17/92	5/18/92
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.0055	--	--	<0.01	<0.005	--	<0.01	0.03
Hexavalent Chromium	<0.002	--	<0.01	--	<0.005	<0.01	--	0.02
Total Chromium	--	<0.05	--	--	--	<0.01	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4
Sample Date	8/17/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	0.12	0.13	0.15	0.3	0.14	0.1
Hexavalent Chromium	<0.01	--	0.07	<0.01	0.32	0.054	0.07
Total Chromium	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95	8/15/95	10/3/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.06	0.05	0.06	0.05	0.0726	0.061	0.035	<0.02
Hexavalent Chromium	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005
Total Chromium	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4	B4
Sample Date	2/20/96	4/19/96	8/26/97	8/26/97	2/12/98	5/21/98	5/21/98	5/21/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.007	<0.01	--	<0.01	0.0095	--	--	0.0044
Hexavalent Chromium	<0.01	<0.01	<0.02	--	0.006	0.0093	--	--
Total Chromium	--	--	--	--	0.0083	--	0.0043	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B4	B4	B4
Sample Date	8/25/98	8/25/98	8/25/98	12/18/98	12/18/98	12/18/98	2/24/99
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.0024	--	--	--	--	0.0039	<0.0100
Hexavalent Chromium	--	<0.005	--	<0.005	--	--	<0.00500
Total Chromium	--	--	0.006	--	0.0052	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B4	B4	B4	B5	B5	B5	B5
Sample Date	10/26/99	4/4/00	10/19/00	2/21/01	9/20/82	2/6/91	2/6/91	10/4/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	0.00619	--	<0.01	--	<0.02
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	--	--	<0.01	<0.5
Total Chromium	--	--	--	--	<0.05	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B5	B5	B5	B5	B5	B5	B5
Sample Date	4/24/96	2/13/98	5/21/98	5/21/98	5/21/98	8/25/98	8/25/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.01	<0.005	--	<0.001	--	--	--
Hexavalent Chromium	<0.01	<0.005	--	--	<0.005	<0.005	--
Total Chromium	--	0.14	0.035	--	--	--	0.056

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B5	B5	B5	B5	B5	B5	B5
Sample Date	8/25/98	12/17/98	12/17/98	12/17/98	2/24/99	10/26/99	4/7/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.0021	<0.001	--	--	<0.0100	<0.00500	<0.00500
Hexavalent Chromium	--	--	--	<0.005	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	0.027	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	B5	B5	CW	EW1A	EW1A	EW1A	EW1A
Sample Date	10/27/00	2/23/01	10/26/99	1/22/97	1/22/97	2/13/98	5/22/98
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500 Jo	<0.00500	0.03	--	0.28	--
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	--	0.03	0.26	--
Total Chromium	--	--	--	--	--	0.43	0.37

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A
Sample Date	5/22/98	5/22/98	8/25/98	8/25/98	8/25/98	12/17/98	12/17/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.36	--	--	0.34	--	--	--
Hexavalent Chromium	--	0.2	--	--	0.34	0.47	--
Total Chromium	--	--	0.45	--	--	--	0.65

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1A	EW1A	EW1A	EW1A	EW1A	EW1A
Sample Date	12/17/98	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.41	0.41	0.405	0.191	0.173	0.213
Hexavalent Chromium	--	--	0.287	0.0200	0.0717	--
Total Chromium	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	EW1A	EW1A	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	10/27/00	2/22/01	1/22/97	1/22/97	8/27/97	8/27/97	2/13/98
Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.182	0.194	130	--	--	130	120
Hexavalent Chromium	0.0972	0.178	--	120	110	--	130
Total Chromium	--	--	--	--	--	--	130

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	5/22/98	5/22/98	5/22/98	8/25/98	8/25/98	8/25/98	12/18/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	70.6	--	--	108	--	--
Hexavalent Chromium	--	--	69	--	--	96	70
Total Chromium	72.8	--	--	161	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B	EW1B
Sample Date	12/18/98	12/18/98	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	63.4	74.7	63.7	71.0	74.8	68.5
Hexavalent Chromium	--	--	78.2	77.7	83.3	73.4	65.2
Total Chromium	66.4	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	MW-1	MW-2	MW-3	MW-4	OW-01	OW-03	OW-04	OW-05
Sample Date	9/11/00	9/11/00	9/11/00	9/11/00	1/17/98	1/17/98	12/18/97	12/18/97
Zone	A-Zone	A-Zone	A-Zone	A-Zone	NA	NA	NA	NA
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.01	<0.01	<0.01	<0.01
Hexavalent Chromium	<0.00500 UJ-	<0.00500 UJ-	<0.00500 UJ-	<0.00500 UJ-	<0.02	<0.02	<0.02	<0.02
Total Chromium	--	--	--	--	<0.01	<0.01	<0.01	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
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Sample Location	OW-07	OW-09	OW-10	OW-11	OW-11	OW-11	OW-11	OW-14
Sample Date	12/18/97	12/18/97	12/19/97	12/17/97	5/27/98	5/27/98	5/27/98	1/17/98
Zone	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Chromium	<0.01	<0.01	<0.01	<0.01	0.0011	--	--	<0.01
Hexavalent Chromium	<0.02	<0.02	<0.02	<0.02	--	<0.005	--	<0.02
Total Chromium	<0.01	<0.01	<0.01	0.013	--	--	0.0025	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-17	OW-17	OW-17	OW-17	OW-21	OW-21	OW-21
Sample Date	12/17/97	5/28/98	5/28/98	5/28/98	12/17/97	5/27/98	5/27/98
Zone	NA	NA	NA	NA	NA	NA	NA
Dissolved Chromium	<0.01	--	0.0016	--	<0.01	<0.001	--
Hexavalent Chromium	<0.02	--	--	<0.005	<0.02	--	--
Total Chromium	<0.01	0.0067	--	--	<0.01	--	0.0018

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-21	OW-21	OW-22	OW-22	OW-22	OW-23	OW-23	OW-24
Sample Date	5/27/98	12/14/00	12/19/97	11/9/99	11/9/99	1/17/98	3/28/01	12/18/97
Zone	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Chromium	--	<0.00500	<0.01	--	--	<0.01	<0.00500	<0.01
Hexavalent Chromium	<0.005	<0.00500	<0.02	<0.00500	--	<0.02	<0.00500	<0.02
Total Chromium	--	--	<0.01	--	<0.0100	<0.01	--	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-25	OW-28	OW-29	OW-29	OW-29	OW-29	OW-29
Sample Date	1/17/98	12/19/97	12/17/97	5/27/98	5/27/98	5/27/98	5/28/98
Zone	NA	NA	NA	NA	NA	NA	NA
Dissolved Chromium	<0.01	<0.01	<0.01	--	<0.001	--	--
Hexavalent Chromium	<0.02	<0.02	<0.02	--	--	<0.005	--
Total Chromium	<0.01	<0.01	<0.01	0.0018	--	--	0.0035

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-29	OW-29	OW-29	OW-30	OW-32	OW-32	OW-33	OW-33
Sample Date	5/28/98	5/28/98	12/14/00	12/17/97	12/17/97	12/14/00	12/17/97	12/14/00
Zone	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Chromium	0.0013	--	<0.00500	<0.01	<0.01	<0.00500	<0.01	<0.00500
Hexavalent Chromium	--	<0.005	<0.00500	<0.02	<0.02	<0.00500	<0.02	<0.00500
Total Chromium	--	--	--	<0.01	<0.01	--	<0.01	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-34	OW-34	OW-35	OW-36	P-1	P-2	P-3	P-4
Sample Date	12/17/97	12/14/00	2/13/98	12/17/97	3/27/00	3/27/00	3/27/00	3/27/00
Zone	NA	NA	NA	NA	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.01	<0.00500	<0.005	<0.01	0.00750	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.02	<0.00500	<0.005	<0.02	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	<0.01	--	0.0084	<0.01	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	P-5	P-6	TW1	TW1
Sample Date	3/27/00	3/27/00	9/13/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	0.799	--
Hexavalent Chromium	<0.00500	<0.00500	0.697	0.561
Total Chromium	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW1	TW1	TW1	TW1	TW10	TW10	TW10
Sample Date	11/27/00	12/27/00	1/22/01	2/20/01	9/13/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.0420	0.0517	0.0113	0.0145	327	117	125
Hexavalent Chromium	<0.00500	<0.00500	0.0131	<0.00500	317	366 J-	78.0 J-
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW10	TW10	TW10	TW11	TW11	TW11	TW11
Sample Date	12/27/00	1/22/01	2/21/01	9/13/00	10/25/00	11/28/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	154	138	138	425	0.123	30.9	64.9
Hexavalent Chromium	91.7	120	105	392	0.222 J-	36.9 J-	41.4
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW11	TW11	TW2	TW2	TW2	TW2	TW2
Sample Date	1/22/01	2/21/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	94.1	153	136	85.0 J-	--	89.2	83.3
Hexavalent Chromium	86.2	112	148	--	53.3	83.5	52.4
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW2	TW2	TW3	TW3	TW3	TW3	TW3
Sample Date	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	69.4	84.1	266	279 J-	266	294	304
Hexavalent Chromium	49.7	61.5	296	--	218 J-	277	254
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW3	TW3	TW4	TW4	TW4	TW4	TW4
Sample Date	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	302	286	5.25	5.10 J-	--	0.0422	0.123
Hexavalent Chromium	246	190	4.60	--	<0.00500	<0.00500 Jo	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW4	TW4	TW5	TW5	TW5	TW5	TW5
Sample Date	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/27/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.0214	0.0365	59.2	80.3 J-	--	9.82	3.90
Hexavalent Chromium	0.0250	<0.00500	64.4	--	<0.0500 R	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	TW5	TW5	TW6	TW6	TW6	TW6	TW6
Sample Date	1/22/01	2/20/01	4/10/00	7/14/00	10/24/00	11/28/00	12/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	2.16	1.66	31.4	3.86	--	5.14	10.5
Hexavalent Chromium	<0.500 Jo	<0.400	43.6	--	0.196	6.98 J-	10.7
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	TW6	TW6	TW7	TW7	TW7	TW7	TW7
Sample Date	1/22/01	2/21/01	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	7.80	6.11	7.58	--	0.710	7.10	0.543
Hexavalent Chromium	9.75	6.70	8.46	<0.0500	<0.00500 UJ-	<0.00500	0.0167
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	TW7	TW8	TW8	TW8	TW8	TW8	TW8
Sample Date	2/21/01	9/13/00	10/24/00	11/28/00	12/27/00	1/22/01	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.522	0.211	0.00793	0.135	0.0786	0.00955	<0.00500 Jo
Hexavalent Chromium	<0.200	10.2	<0.0500 Jo	<0.00500 UJ-	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	TW9	TW9	TW9	TW9	TW9	TW9	W1
Sample Date	9/13/00	10/25/00	11/28/00	12/27/00	1/22/01	2/21/01	9/18/90
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone
Dissolved Chromium	245	0.0180	0.0141	0.0360	0.0638	0.0105	--
Hexavalent Chromium	226	<0.00500 UJ-	0.0359 J-	<0.00500	<0.00500	<0.00500	890
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	9/18/90	2/3/91	2/3/91	5/1/91	8/1/91	2/17/92	2/17/92	5/18/92
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	--	--	270	380	400	--	380
Hexavalent Chromium	--	680	--	82	380	--	520	400
Total Chromium	960	--	720	--	--	--	410	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W1	W1	W1	W1	W1	W1	W1
Sample Date	8/17/92	8/17/92	11/16/92	2/18/93	5/17/93	8/11/93	11/16/93
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	310	--	340	320	230	280	160
Hexavalent Chromium	--	390	360	340	190	270	240
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W1	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	2/16/94	5/18/94	8/10/94	10/20/94	11/16/94	2/16/95	5/16/95	8/15/95	10/3/95
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	210	480	230	--	120	273	228	182	190
Hexavalent Chromium	230	290	450	190	96	230	265	212	210
Total Chromium	--	--	--	190	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W1	W1	W1	W1	W1	W1	W1	W1
Sample Date	2/20/96	4/18/96	5/27/97	8/26/97	8/26/97	2/13/98	5/22/98	5/22/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	84.9	190	76	--	150	97	--	152
Hexavalent Chromium	94.2	210	61	50	--	88	--	--
Total Chromium	--	--	--	--	--	100	39.5	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W1	W1	W1	W1	W1	W1	W1
Sample Date	5/22/98	8/26/98	8/26/98	8/26/98	12/18/98	12/18/98	12/18/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	--	35.1	--	--	--	29.6
Hexavalent Chromium	82	--	--	17	25	--	--
Total Chromium	--	27.4	--	--	--	27.6	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W1	W1	W1	W1	W1	W10A	W10A
Sample Date	2/25/99	10/28/99	4/12/00	10/27/00	2/22/01	4/7/00	7/13/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone
Dissolved Chromium	68.2	<0.00500	34.2	8.63	58.4	<0.00500	<0.00500
Hexavalent Chromium	65.5	<0.00500	40.2	8.53	54.2	<0.00500	<0.00500 Jo
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W10A	W10A	W11A	W11A	W11A	W11A	W11B
Sample Date	10/19/00	2/20/01	4/11/00	7/13/00	10/26/00	2/22/01	10/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone
Dissolved Chromium	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	0.0195	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W11B	W11B	W12A	W12A	W12A	W12A	W12A
Sample Date	2/22/01	5/3/01	4/10/00	7/14/00	10/27/00	10/27/00	2/23/01
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	--	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	--	--	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W13A	W13A	W13A	W14A	W14A	W14A	W14A
Sample Date	10/26/00	2/21/01	5/3/01	4/11/00	7/12/00	10/19/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500 Jo	<0.00500	0.166	0.248	0.209	0.0964
Hexavalent Chromium	0.00580	<0.00500	<0.00500	0.0378	0.237	0.391	0.125
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W15A	W15A	W15A	W15A	W16A	W16A	W16A
Sample Date	4/6/00	7/12/00	10/18/00	2/20/01	4/6/00	7/12/00	10/18/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500 Jo	<0.00500 Jo	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W16A	W17A	W17A	W17A	W17A	W17B	W17B
Sample Date	2/20/01	4/6/00	7/12/00	10/24/00	2/22/01	10/24/00	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone
Dissolved Chromium	0.0122	<0.00500	<0.00500	<0.00500 Jo	<0.00500	0.00670	<0.00500
Hexavalent Chromium	<0.00500 Jo	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W17B	W18A	W18A	W18A	W18A	W19A	W19A
Sample Date	5/3/01	4/6/00	7/12/00	10/24/00	2/22/01	4/6/00	7/12/00
Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W19A	W19A	W2	W2	W2	W2	W2	W2
Sample Date	10/24/00	2/22/01	9/18/90	9/18/90	2/4/91	2/4/91	5/1/91	2/17/92
Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.00500	<0.00500	--	--	--	0.09	0.005	0.26
Hexavalent Chromium	<0.00500	<0.00500	0.02	--	0.11	--	<0.005	--
Total Chromium	--	--	--	0.024	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W2	W2	W2	W2	W2	W2	W2
Sample Date	2/17/92	10/2/95	4/18/96	2/13/98	5/21/98	5/21/98	5/21/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	<0.02	0.02	0.0097	--	0.0012	--
Hexavalent Chromium	<0.01	<0.5	<0.01	<0.005	--	--	<0.005
Total Chromium	<0.01	--	--	2.8	1	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W2	W2	W2	W2	W2	W2	W2
Sample Date	8/25/98	8/25/98	8/25/98	12/17/98	12/17/98	12/17/98	2/25/99
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	0.0015	--	--	--	0.0021	<0.0100
Hexavalent Chromium	--	--	<0.005	<0.005	--	--	<0.00500
Total Chromium	0.66	--	--	--	1.2	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W2	W2	W2	W2	W20A	W20A	W20A
Sample Date	10/28/99	4/11/00	10/27/00	2/22/01	4/6/00	7/12/00	10/17/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	22.7	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	26.2	<0.00500	<0.00500	<0.00500	0.00980	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W20A	W21A	W21A	W21A	W21A	W21A	W21A
Sample Date	2/20/01	10/28/99	10/28/99	2/2/00	4/5/00	7/13/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	242	--	159	200	228	269
Hexavalent Chromium	<0.00500	249	--	132	209	214 J+	393 J-
Total Chromium	--	--	231	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W21A	W21A	W21A	W21A	W22A	W22A	W22A
Sample Date	11/28/00	12/28/00	1/22/01	2/22/01	10/28/99	10/28/99	2/2/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	223	219	216	186	108	--	43.9
Hexavalent Chromium	192 J-	183 J-	172	189	113	--	56.1
Total Chromium	--	--	--	--	--	96.5	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W22A	W22A	W22A	W22A	W22A	W22A	W22A
Sample Date	4/12/00	7/14/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	104	111 J-	43.9	93.0	72.1	61.4	19.5
Hexavalent Chromium	123	--	230 J-	99.0 J-	55.1 J-	26.8	3.59
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W23A	W23A	W23A	W24A	W24A	W24A	W24A
Sample Date	10/17/00	2/19/01	5/3/01	10/28/99	10/28/99	2/2/00	4/12/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	181	--	266	230
Hexavalent Chromium	<0.00500	<0.00500 R	<0.00500	146	--	308	264
Total Chromium	--	--	--	--	204	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W24A	W24A	W24A	W24A	W24A	W24A	W24A
Sample Date	7/14/00	9/25/00	10/25/00	11/28/00	12/28/00	1/22/01	2/21/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	221 J-	13.1	<0.00500 Jo	0.0592	0.224	54.5	58.3
Hexavalent Chromium	--	0.0853 J-	<0.00500 UJ-	0.0515 J-	0.0323 J-	31.4	51.5
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W25A	W25A	W25A	W25A	W26A	W26A	W26A
Sample Date	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00	7/13/00	10/26/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500 Jo	0.00835
Hexavalent Chromium	<0.00500	0.00500 J+	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W26A	W27A	W27A	W27A	W27A	W28A	W28A
Sample Date	2/21/01	4/7/00	7/13/00	10/19/00	2/22/01	4/11/00	7/14/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	0.00500 J+	<0.00500	<0.00500	<0.00500	--
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W28A	W28A	W29A	W29A	W29A	W29A1	W29A1
Sample Date	10/26/00	2/21/01	4/7/00	7/12/00	10/17/00	2/2/01	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	0.00686
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.0200 Jo	<0.00500	<0.00500	0.00580
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Date	W29B1	W29B1	W29B2	W29B2	W3	W3	W3
Sample Date	2/2/01	2/23/01	2/2/01	2/23/01	9/21/90	9/21/90	2/5/91
Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	<0.0100	<0.00500	<0.0100	<0.00500	--	--	1.9
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	900	--	--
Total Chromium	--	--	--	--	--	850	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Date	W3	W3	W3	W3
Sample Date	2/5/91	5/1/91	2/17/92	2/17/92
Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	0.19	0.06	--
Hexavalent Chromium	2.4	0.0048	--	<0.01
Total Chromium	--	--	--	0.19

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W3	W3	W3	W3	W3	W3	W3
Sample Date	10/4/95	4/19/96	2/12/98	5/22/98	5/22/98	5/22/98	8/26/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	<0.02	0.03	38	--	39.3	--	--
Hexavalent Chromium	<0.5	<0.01	34	--	--	38	34
Total Chromium	--	--	40	40.6	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W3	W3	W3	W3	W3	W3
Sample Date	8/26/98	8/26/98	12/17/98	12/17/98	12/17/98	2/25/99
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	38.6	11.8	--	--	48.8
Hexavalent Chromium	--	--	--	--	12	50.3
Total Chromium	35.2	--	--	14.2	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W3	W3	W3	W3	W30B	W30B	W30B
Sample Date	10/28/99	4/11/00	11/8/00	2/22/01	10/27/00	2/23/01	5/3/01
Zone	C-Zone	C-Zone	C-Zone	C-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	19.3	1.51	17.6	16.0	<0.00500	<0.00500	<0.00500
Hexavalent Chromium	19.9	1.70	18.3	16.5	<0.00500	<0.00500	<0.00100
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W31B	W31B	W31B	W31B	W31C	W31C	W31C
Sample Date	9/22/00	10/27/00	2/22/01	5/3/01	9/22/00	10/27/00	2/23/01
Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	7.21	1.44	7.33	7.05	<0.00500	<0.00500	0.0165
Hexavalent Chromium	4.80	1.30	7.34	6.41	<0.00500	<0.00500 Jo	0.0103
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W31C	W32A	W32A	W32A	W33A	W33A	W33A
Sample Date	5/3/01	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500 Jo
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W34A	W34A	W34A	W35A	W35A	W35A	W36A
Sample Date	9/21/00	10/17/00	2/20/01	9/21/00	10/17/00	2/20/01	9/21/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500
Hexavalent Chromium	<0.00500	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W36A	W36A	W37A	W37A	W37A	W37A	W37A
Sample Date	10/17/00	2/21/01	9/13/00	10/25/00	11/28/00	12/28/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	95.7	87.1	82.8	78.1	78.4
Hexavalent Chromium	<0.00500	<0.00500	89.9	227 J-	98.1 J-	60.6 J-	61.5
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W37A	W38A	W38A	W38A	W38A	W39A	W39A
Sample Date	2/21/01	9/22/00	10/26/00	2/19/01	5/3/01	2/2/01	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	22.5	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500
Hexavalent Chromium	4.42	<0.00500	<0.00500	<0.00500 R	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W4	W4	W4	W4	W4	W4	W4	W4
Sample Date	9/18/90	9/18/90	2/3/91	2/3/91	5/1/91	2/17/92	2/17/92	10/2/95
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	--	--	--	0.065	--	0.19	<0.02
Hexavalent Chromium	<0.01	--	<0.01	--	<0.005	<0.01	--	<0.05
Total Chromium	--	<0.01	--	<0.01	--	<0.01	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W4	W4	W4	W4	W4	W4	W4
Sample Date	4/19/96	2/12/98	5/21/98	5/21/98	5/21/98	8/25/98	8/25/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.01	0.016	--	0.014	--	--	0.018
Hexavalent Chromium	<0.01	<0.005	--	--	<0.005	--	--
Total Chromium	--	3.6	7.5	--	--	4.6	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W4	W4	W4	W4	W4	W4	W4
Sample Date	8/25/98	12/17/98	12/17/98	12/17/98	2/24/99	10/28/99	4/12/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	--	0.01	--	<0.0100	<0.00500	0.0171
Hexavalent Chromium	<0.005	--	--	<0.005	<0.00500	<0.00500	<0.00500
Total Chromium	--	0.89	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W4	W4	W40A	W40A	W41A	W41A	W42A
Sample Date	10/27/00	2/22/01	2/2/01	2/22/01	2/2/01	2/21/01	2/2/01
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.00618	0.0156	0.0605 J+	<0.00500	4.75	6.14	<0.0100
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500	4.50	5.42	<0.00500
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W42A	W43A	W43A	W5	W5	W5	W5	W5
Sample Date	2/21/01	2/2/01	2/21/01	9/20/90	9/20/90	2/3/91	2/3/91	10/3/95
Zone	A-Zone	A-Zone	A-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	<0.00500	<0.0100	<0.00500 Jo	--	--	--	--	<0.02
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	5.2	--	11	--	<0.5
Total Chromium	--	--	--	--	6.2	--	13	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W5	W5	W5	W5	W5	W5
Sample Date	4/25/96	2/12/98	5/22/98	5/22/98	5/22/98	8/25/98	8/25/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	<0.01	59	--	2.2	--	--	2.9
Hexavalent Chromium	<0.01	54	--	--	2	--	--
Total Chromium	--	67	2.4	--	--	2.8	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W5	W5	W5	W5	W5	W5
Sample Date	8/25/98	12/16/98	12/16/98	12/16/98	2/24/99	10/28/99	4/12/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	--	--	0.92	1.20	0.260	<0.00500
Hexavalent Chromium	2.3	0.85	--	--	1.12	0.202	<0.00500
Total Chromium	--	--	1.4	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W5	W5	W6	W6	W6	W6	W6	W6
Sample Date	10/27/00	2/23/01	10/4/90	10/4/90	2/4/91	10/2/95	4/24/96	2/12/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	<0.00500 Jo	0.0788	--	--	--	<0.02	0.01	2.1
Hexavalent Chromium	<0.00500	0.0305	--	<0.01	<0.01	<0.5	<0.01	1.9
Total Chromium	--	--	<0.01	--	<0.01	--	--	2.8

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W6	W6	W6	W6	W6	W6
Sample Date	5/21/98	5/21/98	5/21/98	8/24/98	8/24/98	8/24/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	0.22	--	--	0.0088	--
Hexavalent Chromium	--	--	0.34	--	--	<0.005
Total Chromium	1.4	--	--	0.28	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
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Sample Location	W6	W6	W6	W6	W6	W6	W6
Sample Date	12/16/98	12/16/98	12/16/98	2/25/99	10/28/99	4/12/00	10/27/00
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	0.7	--	1.03	0.0272	3.77	0.0244
Hexavalent Chromium	--	--	0.89	0.934	0.00644	<0.00500	<0.00500
Total Chromium	1.8	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W6	W7	W7	W7	W7	W7	W7	W7
Sample Date	2/23/01	9/20/90	9/20/90	2/4/91	2/4/91	5/1/91	8/1/91	2/17/92
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.0231	--	--	--	120	100	110	--
Hexavalent Chromium	<0.00500	--	66	62	--	51	130	41
Total Chromium	--	71	--	--	--	--	--	33

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7
Sample Date	2/17/92	5/18/92	8/17/92	8/17/92	11/16/92	2/18/93	5/17/93
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	30	820	--	140	120	62	58
Hexavalent Chromium	--	100	180	--	120	62	83
Total Chromium	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	8/11/93	11/16/93	2/16/94	5/18/94	8/10/94	11/16/94	2/16/95	5/16/95
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	130	140	110	120	120	85	101	87.1
Hexavalent Chromium	120	160	110	200	130	140	99	117
Total Chromium	--	--	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date	8/15/95	10/4/95	2/20/96	4/19/96	5/27/97	8/26/97	8/26/97	2/12/98	5/21/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	83.6	130	91.8	76	79	88	--	61	--
Hexavalent Chromium	86.7	130	101	80	65	--	61	53	69
Total Chromium	--	--	--	--	--	--	--	68	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7
Sample Date	5/21/98	5/21/98	8/26/98	8/26/98	8/26/98	12/18/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	73.1	--	--	72.6	--	--
Hexavalent Chromium	--	--	--	--	64	77
Total Chromium	--	74.4	94.8	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W7
Sample Date	12/18/98	12/18/98	2/25/99	10/28/99	4/5/00	10/25/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	95	75.0	96.3	73.8	39.1	75.8
Hexavalent Chromium	--	--	79.7	94.9	77.0	227 J-	81.7 J-
Total Chromium	90.3	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W8A	W8A	W8A	W8A	W8A
Sample Date	12/28/00	1/22/01	2/22/01	9/16/94	10/3/95	4/25/96	5/27/97	8/27/97
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	73.4	67.6	6.92	--	<0.02	<0.01	<0.01	--
Hexavalent Chromium	53.3 J-	57.9	6.34	<0.005	<0.05	<0.01	<0.02	<0.02
Total Chromium	--	--	--	<0.02	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date	8/27/97	2/13/98	5/22/98	5/22/98	5/22/98	8/26/98	8/26/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.01	<0.005	--	--	<0.001	--	0.015
Hexavalent Chromium	--	<0.005	--	<0.005	--	--	--
Total Chromium	--	0.023	0.0022	--	--	0.0025	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date	8/26/98	12/18/98	12/18/98	12/18/98	2/24/99	10/27/99	4/5/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	--	--	<0.001	<0.0100	<0.00500	<0.00500
Hexavalent Chromium	<0.005	<0.005	--	--	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	0.0057	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8A	W8A	W8B	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	10/18/00	2/21/01	9/16/94	9/28/95	4/18/96	5/27/97	8/26/97	8/26/97	2/12/98
Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.00500	<0.00500	--	<0.02	<0.01	<0.01	<0.01	--	<0.005
Hexavalent Chromium	<0.00500	<0.00500	<0.005	<0.005	<0.01	<0.02	--	<0.02	<0.005
Total Chromium	--	--	<0.02	--	--	--	--	--	0.006

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	5/20/98	5/20/98	5/20/98	8/24/98	8/24/98	8/24/98	12/17/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	<0.001	--	--	--	0.0015	--
Hexavalent Chromium	--	--	<0.005	--	<0.005	--	<0.005
Total Chromium	0.0015	--	--	0.0018	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8B	W8B	W8B	W8B	W8B	W8B	W8B
Sample Date	12/17/98	12/17/98	2/24/99	10/27/99	4/5/00	10/18/00	2/21/01
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	0.002	<0.0100	<0.00500	<0.00500	<0.00500	0.00524
Hexavalent Chromium	--	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	0.0022	--	--	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C	W8C	W8C
Sample Date	9/16/94	9/28/95	4/25/96	5/27/97	8/26/97	8/26/97	2/12/98	5/20/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	--	<0.02	<0.01	<0.01	<0.01	--	<0.005	--
Hexavalent Chromium	<0.005	<0.005	<0.01	<0.02	--	<0.02	<0.005	--
Total Chromium	0.26	--	--	--	--	--	0.016	0.0062

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C	W8C
Sample Date	5/20/98	5/20/98	8/24/98	8/24/98	8/24/98	12/16/98	12/16/98
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone
Dissolved Chromium	0.001	--	--	0.0014	--	--	0.0013
Hexavalent Chromium	--	<0.005	--	--	<0.005	<0.005	--
Total Chromium	--	--	0.0078	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W8C	W8C	W8C	W8C	W8C	W8C	W9A	W9A
Sample Date	12/16/98	2/24/99	10/27/99	4/5/00	10/19/00	2/21/01	9/15/94	10/3/95
Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	C-Zone	A-Zone	A-Zone
Dissolved Chromium	--	<0.0100	<0.00500	0.0142	<0.00500	<0.00500	--	<0.02
Hexavalent Chromium	--	0.00960	<0.00500	<0.00500	<0.00500	<0.00500	0.14	<0.05
Total Chromium	0.0066	--	--	--	--	--	0.15	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9A	W9A	W9A	W9A	W9A
Sample Date	4/19/96	8/27/97	8/27/97	2/13/98	5/22/98	5/22/98	5/22/98
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	0.17	0.017	--	0.056	0.066	--	--
Hexavalent Chromium	0.12	--	<0.02	0.048	--	0.062	--
Total Chromium	--	--	--	0.062	--	--	0.1

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9A	W9A	W9A	W9A	W9A
Sample Date	8/25/98	8/25/98	8/25/98	12/18/98	12/18/98	12/18/98	2/24/99
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Chromium	--	0.046	--	--	--	0.048	0.0675
Hexavalent Chromium	--	--	0.03	0.044	--	--	0.0694
Total Chromium	0.058	--	--	--	0.057	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9A	W9A	W9B	W9B	W9B	W9B
Sample Date	10/27/99	4/4/00	10/19/00	2/21/01	9/15/94	9/28/95	4/18/96	8/26/97
Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	<0.00500	0.00620	<0.00500 Jo	0.0741	--	<0.02	<0.01	<0.01
Hexavalent Chromium	<0.00500	0.00790	<0.00500	0.0707	<0.005	<0.005	<0.01	--
Total Chromium	--	--	--	--	0.04	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	W9B	W9B	W9B	W9B
Sample Date	8/26/97	2/12/98	5/19/98	5/19/98	5/19/98	8/24/98	8/24/98
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	--	<0.005	--	--	<0.001	--	--
Hexavalent Chromium	<0.02	<0.005	<0.005	--	--	<0.005	--
Total Chromium	--	<0.005	--	0.0012	--	--	0.0012

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	W9B	W9B	W9B	W9B	W9B
Sample Date	8/24/98	12/17/98	12/17/98	12/17/98	2/24/99	10/27/99	4/4/00
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone
Dissolved Chromium	0.0021	--	--	<0.001	<0.0100	<0.00500	<0.00500
Hexavalent Chromium	--	<0.005	--	--	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	0.006	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3
CHROMIUM DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9B	W9B	WU	WU
Sample Date	10/19/00	2/21/01	4/24/96	10/26/99
Zone	B-Zone	B-Zone	A-Zone	A-Zone
Dissolved Chromium	<0.00500	<0.00500	<0.01	--
Hexavalent Chromium	<0.00500	<0.00500 Jo	<0.01	<0.00500
Total Chromium	--	--	--	--

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	B1	B2	B3	B4	B5	EW1B	W10A	W11A
Sample Date	8/1/01	7/31/01	7/31/01	7/31/01	8/1/01	8/2/01	7/31/01	7/31/01
Zone	B-Zone	B-Zone	A-Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone
Hexavalent Chromium	<0.00100	<0.00100	0.000140	0.000160	<0.00100	<0.00100	0.000330	<0.00100

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W11B	W12A	W13A	W13A	W16A	W17A	W17B	W17B
Sample Date	5/3/01	7/31/01	7/31/01	5/3/01	7/31/01	8/1/01	8/2/01	5/3/01
Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone
Hexavalent Chromium	<0.00500	<0.00100	0.000470	<0.00500	<0.00100	<0.00100	<0.00100	<0.0100

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W18A	W19A	W20A	W23A	W23A	W25A	W26A	W28A
Sample Date	8/2/01	8/2/01	8/1/01	8/2/01	5/3/01	7/31/01	8/1/01	8/7/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Hexavalent Chromium	0.000140	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	0.000450

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W29A1	W29B1	W30B	W30B	W31B	W31B	W31C	W31C
Sample Date	8/2/01	8/2/01	8/2/01	5/3/01	8/2/01	5/3/01	8/2/01	5/3/01
Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone
Hexavalent Chromium	<0.00100	<0.00100	<0.00100	<0.0100	2.50	6.41	<0.00100	<0.00500

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W32A	W33A	W34A	W35A	W36A	W38A	W38A	W41A
Sample Date	8/1/01	8/1/01	8/1/01	8/1/01	8/1/01	8/1/01	5/3/01	8/7/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Hexavalent Chromium	0.000170	<0.00100	<0.00100	0.000230	<0.00100	<0.00100	<0.00500	4.10

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-3a
LOW LEVEL HEXAVALENT CHROMIUM BY EPA METHOD 7199 IN GROUNDWATER SAMPLES FROM MONITORING WELLS COLLECTED
JULY 31, 2001 THROUGH AUGUST 7, 2001

(mg/L)

Former Remco Hydraulics Facility

Willits, California

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Sample Location	W6	W8A	W8B	W8C	W9B
Sample Date	8/2/01	7/31/01	8/1/01	7/31/01	8/1/01
Zone	C-Zone	A-Zone	B-Zone	C-Zone	B-Zone
Hexavalent Chromium	0.000240	<0.00100	<0.00100	<0.00100	<0.00100

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

April 2002

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B1	B2	B2	B2	B3	B3	B3	B4	B4
Sample Date	3/10/82	4/19/96	2/21/01	3/9/82	4/18/96	2/21/01	3/9/82	4/18/96	2/21/01	3/10/82	4/19/96
Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	--	--	--	--	--	--	--	--	--	--
Dissolved Arsenic	--	--	0.00963	--	--	0.0257	--	--	<0.00500 Jo	--	--
Dissolved Beryllium	--	--	--	--	--	--	--	--	--	--	--
Dissolved Cadmium	0.0011	<0.005	--	0.00085	<0.005	--	0.0071	<0.005	--	0.00056	<0.005
Dissolved Copper	--	<0.01	--	--	<0.01	--	--	<0.01	--	--	<0.01
Dissolved Iron	--	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	--	<0.04	--	--	<0.04	--	--	<0.04	--	--	<0.04
Dissolved Manganese	--	--	--	--	--	--	--	--	--	--	--
Dissolved Mercury	--	--	--	--	--	--	--	--	--	--	--
Dissolved Nickel	--	<0.01	--	--	<0.01	--	--	<0.01	--	--	<0.01
Dissolved Selenium	--	--	--	--	--	--	--	--	--	--	--
Dissolved Silver	--	--	--	--	--	--	--	--	--	--	--
Dissolved Thallium	--	--	--	--	--	--	--	--	--	--	--
Dissolved Zinc	0.021	<0.01	--	0.058	0.02	--	0.071	0.01	--	0.042	0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B4	B5	B5	CW	EW1A	EW1B	TW1	TW1	TW1	TW1	TW2
Sample Date	2/21/01	4/24/96	2/23/01	10/26/99	2/22/01	2/22/01	9/13/00	11/27/00	1/22/01	2/20/01	11/27/00
Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	--	<0.0600	<0.0600	<0.0600	0.641	--	--	--	<0.0600	--
Dissolved Arsenic	<0.00500 Jo	--	0.0417	<0.00500	<0.00500	<0.00500	--	--	--	0.0143	--
Dissolved Beryllium	--	--	<0.00100	<0.00100	<0.00100	0.00205	--	--	--	<0.00100 Jo	--
Dissolved Cadmium	--	<0.005	<0.00100	<0.000500	<0.000500	<0.000500	--	--	--	<0.000500	--
Dissolved Copper	--	<0.01	<0.0100	0.0196	<0.0100	0.00669	--	--	--	<0.0100 Jo	--
Dissolved Iron	--	--	--	--	--	--	<0.300	16.8	13.2	--	<3.00
Dissolved Lead	--	<0.04	<0.00500	<0.00500	<0.00500	<0.00500	--	--	--	0.00500 Jo U.	--
Dissolved Manganese	--	--	--	--	--	--	0.401	9.90	10.2	--	0.201
Dissolved Mercury	--	--	<0.000200	<0.000200	<0.000200 Jo	0.0000260	--	--	--	<0.000200 Jo	--
Dissolved Nickel	--	<0.01	<0.0300	<0.0300	<0.0300	<0.0300	--	--	--	0.253	--
Dissolved Selenium	--	--	<0.00500 UJ-	<0.00500	<0.00500	<0.00500	--	--	--	<0.00500 UJ-	--
Dissolved Silver	--	--	<0.00700	<0.00700	<0.00700	0.00332	--	--	--	<0.00700 Jo	--
Dissolved Thallium	--	--	<0.00500	<0.00500	<0.00500	<0.0100	--	--	--	<0.00500 UJ-	--
Dissolved Zinc	--	<0.01	<0.0200	0.0320	<0.0200	0.0221	--	--	--	0.0545	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW2	TW2	TW3	TW3	TW3	TW3	TW4	TW4	TW4	TW5	TW5
Sample Date	1/22/01	2/20/01	10/24/00	11/27/00	1/22/01	2/20/01	11/27/00	1/22/01	2/20/01	11/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	0.693	2.04	--	--	2.68	--	--	<0.0600 Jo	--	--
Dissolved Arsenic	--	<0.00500 Jo	<0.00500	--	--	<0.00500 Jo	--	--	0.0253	--	--
Dissolved Beryllium	--	0.00242	0.00748	--	--	0.00881	--	--	<0.00100 Jo	--	--
Dissolved Cadmium	--	<0.000500	<0.000500	--	--	<0.000500	--	--	0.000588	--	--
Dissolved Copper	--	<0.0100	<0.0500	--	--	<0.0100 Jo	--	--	0.0163	--	--
Dissolved Iron	<0.400	--	--	<6.00	<0.400	--	10.2	15.6	--	102	44.5
Dissolved Lead	--	<0.00500 UJ-	<0.00500 Jo	--	--	0.00500 Jo U.	--	--	0.00500 Jo U.	--	--
Dissolved Manganese	0.874	--	--	<0.200 Jo	0.112	--	6.86	8.87	--	9.84	41.9
Dissolved Mercury	--	<0.000200 Jo	<0.000200	--	--	<0.000200 Jo	--	--	<0.000200 Jo	--	--
Dissolved Nickel	--	0.0355	<0.150	--	--	0.0301	--	--	0.134	--	--
Dissolved Selenium	--	0.00500 Jo U.	<0.00500	--	--	0.00500 Jo U.	--	--	0.00500 Jo U.	--	--
Dissolved Silver	--	<0.00700 Jo	<0.0350	--	--	<0.00700 Jo	--	--	<0.00700 Jo	--	--
Dissolved Thallium	--	<0.00500 UJ-	<0.00500	--	--	<0.00500 UJ-	--	--	<0.00500 UJ-	--	--
Dissolved Zinc	--	0.0503	<0.100	--	--	<0.0200 Jo	--	--	<0.0200	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW5	TW6	TW6	TW6	TW7	TW7	TW7	TW7	TW8	TW8	TW8
Sample Date	2/20/01	11/28/00	1/22/01	2/21/01	9/13/00	11/28/00	1/22/01	2/21/01	9/13/00	11/28/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	<0.0600	--	--	0.0813	--	--	--	<0.0600 Jo	--	--	--
Dissolved Arsenic	0.203	--	--	<0.00500 Jo	--	--	--	0.0153	--	--	--
Dissolved Beryllium	<0.00100 Jo	--	--	<0.00100 Jo	--	--	--	<0.00100 Jo	--	--	--
Dissolved Cadmium	<0.000500	--	--	0.00331	--	--	--	<0.000500	--	--	--
Dissolved Copper	<0.0100	--	--	<0.0100	--	--	--	<0.0100	--	--	--
Dissolved Iron	--	<0.300	0.230	--	<0.300	33.4	16.3	--	<0.300	<0.300 Jo	1.40
Dissolved Lead	0.00500 Jo U:	--	--	<0.00500	--	--	--	<0.00500	--	--	--
Dissolved Manganese	--	2.55	2.06	--	2.44	13.1	11.2	--	3.55	4.28	10.9
Dissolved Mercury	<0.000200 Jo	--	--	<0.000200	--	--	--	<0.000200 Jo	--	--	--
Dissolved Nickel	0.165	--	--	<0.0300 Jo	--	--	--	0.149	--	--	--
Dissolved Selenium	0.00500 Jo U:	--	--	<0.00500	--	--	--	<0.00500	--	--	--
Dissolved Silver	<0.00700 Jo	--	--	<0.00700 Jo	--	--	--	<0.00700 Jo	--	--	--
Dissolved Thallium	<0.00500 UJ-	--	--	<0.00500	--	--	--	<0.00500	--	--	--
Dissolved Zinc	0.0239	--	--	<0.0200	--	--	--	0.0230	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW8	TW9	TW9	TW9	TW9	TW10	TW10	TW10	TW10	TW11	TW11
Sample Date	2/21/01	9/13/00	11/28/00	1/22/01	2/21/01	9/13/00	11/28/00	1/22/01	2/21/01	9/13/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	<0.0600 Jo	--	--	--	<0.0600	--	--	--	1.15	--	--
Dissolved Arsenic	0.116	--	--	--	0.0336	--	--	--	0.0166	--	--
Dissolved Beryllium	<0.00100 Jo	--	--	--	<0.00100 Jo	--	--	--	0.00410	--	--
Dissolved Cadmium	<0.000500	--	--	--	<0.000500	--	--	--	<0.000500	--	--
Dissolved Copper	<0.0100	--	--	--	<0.0100	--	--	--	<0.0100 Jo	--	--
Dissolved Iron	--	<0.300	<0.300	<0.200	--	<0.300	<6.00	<0.400	--	<0.300	<0.300
Dissolved Lead	<0.00500	--	--	--	<0.00500	--	--	--	<0.00500	--	--
Dissolved Manganese	--	0.720	0.473	1.13	--	0.233	0.337	0.508	--	0.212	0.0460
Dissolved Mercury	<0.000200 Jo	--	--	--	<0.000200	--	--	--	<0.000200 Jo	--	--
Dissolved Nickel	<0.0300 Jo	--	--	--	<0.0300	--	--	--	<0.0300	--	--
Dissolved Selenium	<0.00500 UJ-	--	--	--	<0.00500	--	--	--	<0.00500	--	--
Dissolved Silver	<0.00700 Jo	--	--	--	<0.00700	--	--	--	<0.00700 Jo	--	--
Dissolved Thallium	<0.00500	--	--	--	<0.00500	--	--	--	<0.00500	--	--
Dissolved Zinc	<0.0200	--	--	--	<0.0200	--	--	--	<0.0200 Jo	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW11	TW11	W1	W1	W2	W2	W3	W3	W4	W4	W5
Sample Date	1/22/01	2/21/01	4/18/96	2/22/01	4/18/96	2/22/01	4/19/96	2/22/01	4/19/96	2/22/01	4/25/96
Zone	A-Zone	A-Zone	B-Zone	B-Zone	B-Zone	B-Zone	C-Zone	C-Zone	B-Zone	B-Zone	C-Zone
Dissolved Antimony	--	1.24	--	0.592	--	<0.0600	--	0.152	--	<0.0600	--
Dissolved Arsenic	--	0.00741	--	0.00577	--	0.0358	--	<0.00500 Jo	--	0.0148	--
Dissolved Beryllium	--	0.00427	--	0.00198	--	<0.00100	--	<0.00100 Jo	--	<0.00100	--
Dissolved Cadmium	--	<0.000500	<0.005	<0.000500	<0.005	<0.000500	<0.005	<0.000500	<0.005	<0.000500	<0.005
Dissolved Copper	--	<0.0100	<0.01	<0.0100 Jo	<0.01	<0.0100	<0.01	<0.0100 Jo	<0.01	<0.0100	<0.01
Dissolved Iron	0.416	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	--	<0.00500	<0.04	<0.00500 Jo	<0.04	<0.00500	<0.04	<0.00500	<0.04	<0.00500	<0.04
Dissolved Manganese	1.12	--	--	--	--	--	--	--	--	--	--
Dissolved Mercury	--	<0.000200 Jo	--	<0.000200 Jo	--	<0.000200 Jo	--	<0.000200 Jo	--	<0.000200 Jo	--
Dissolved Nickel	--	<0.0300	0.01	<0.0300	<0.01	<0.0300	<0.01	<0.0300	<0.01	<0.0300	<0.01
Dissolved Selenium	--	<0.00500	--	<0.00500	--	<0.00500	--	<0.00500	--	<0.00500	--
Dissolved Silver	--	<0.00700 Jo	--	<0.00700 Jo	--	<0.00700 Jo	--	<0.00700 Jo	--	<0.00700 Jo	--
Dissolved Thallium	--	<0.00500	--	<0.00500	--	<0.00500	--	<0.00500	--	<0.00500	--
Dissolved Zinc	--	<0.0200	0.05	<0.0200 Jo	0.02	<0.0200	<0.01	<0.0200	<0.01	<0.0200	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W6	W7	W7	W7	W7	W8A	W8A	W8B	W8B	W8C	W8C
Sample Date	4/24/96	4/19/96	11/28/00	1/22/01	2/22/01	4/25/96	2/21/01	4/18/96	2/21/01	4/25/96	2/21/01
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	C-Zone	C-Zone
Dissolved Antimony	--	--	--	--	<0.0600 Jo	--	<0.0600	--	<0.0600	--	<0.0600
Dissolved Arsenic	--	--	--	--	<0.00500 Jo	--	<0.00500 UJ-	--	0.0390 J-	--	0.00616 J-
Dissolved Beryllium	--	--	--	--	<0.00100 Jo	--	<0.00100	--	<0.00100	--	<0.00100
Dissolved Cadmium	<0.005	<0.005	--	--	0.00487	<0.005	0.000534	<0.005	<0.000500	<0.005	<0.000500
Dissolved Copper	<0.01	<0.01	--	--	<0.0100 Jo	<0.01	<0.0100	<0.01	<0.0100	<0.01	<0.0100
Dissolved Iron	--	--	<6.00	<0.600	--	--	--	--	--	--	--
Dissolved Lead	<0.04	<0.04	--	--	<0.00500	<0.04	<0.00500	<0.04	<0.00500	<0.04	<0.00500
Dissolved Manganese	--	--	<0.200 Jo	0.0400	--	--	--	--	--	--	--
Dissolved Mercury	--	--	--	--	<0.000200 Jo	--	<0.000200 Jo	--	<0.000200	--	<0.000200 Jo
Dissolved Nickel	<0.01	0.01	--	--	<0.0300	<0.01	<0.0300	<0.01	<0.0300	<0.01	<0.0300
Dissolved Selenium	--	--	--	--	<0.00500	--	<0.00500 UJ-	--	<0.00500 UJ-	--	<0.00500 UJ-
Dissolved Silver	--	--	--	--	<0.00700	--	<0.00700	--	<0.00700	--	<0.00700
Dissolved Thallium	--	--	--	--	<0.00500	--	<0.00500 Jo	--	<0.00500	--	<0.00500 Jo
Dissolved Zinc	0.01	0.02	--	--	0.383	<0.01	0.0409	0.01	<0.0200	<0.01	<0.0200

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W9A	W9A	W9B	W9B	W10A	W11A	W11B	W11B	W12A	W12A	W13A
Sample Date	4/19/96	2/21/01	4/18/96	2/21/01	2/20/01	2/22/01	2/22/01	5/3/01	10/27/00	2/23/01	2/21/01
Zone	A-Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	<0.0600	--	<0.0600	<0.0600	<0.0600	<0.0600	--	<0.0600	<0.0600	<0.0600
Dissolved Arsenic	--	0.00500 Jo U.	--	0.00566 J-	<0.00500 Jo	0.0424	0.0430	0.0419	0.00911 J-	0.00902	<0.00500 Jo
Dissolved Beryllium	--	<0.00100	--	<0.00100	<0.00100	<0.00100 Jo	<0.00100	--	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo
Dissolved Cadmium	<0.005	<0.000500	<0.005	<0.000500	<0.000500	<0.000500	<0.000500	--	0.000779	<0.00100	<0.000500
Dissolved Copper	<0.01	<0.0100	<0.01	<0.0100	<0.0100	<0.0100	<0.0100	--	<0.0100	<0.0100	<0.0100
Dissolved Iron	--	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	0.05	<0.00500	<0.04	<0.00500	<0.00500 Jo	<0.00500	<0.00500	--	<0.00500	<0.00500 Jo	<0.00500
Dissolved Manganese	--	--	--	--	--	--	--	--	--	--	--
Dissolved Mercury	--	<0.000200	--	<0.000200 Jo	<0.000200	<0.000200 Jo	<0.000200	--	<0.000200	<0.000200	<0.000200
Dissolved Nickel	0.01	<0.0300 Jo	<0.01	<0.0300	<0.0300	<0.0300	<0.0300	--	<0.0300	<0.0300	<0.0300
Dissolved Selenium	--	<0.00500 UJ-	--	<0.00500 UJ-	<0.00500	<0.00500	<0.00500	--	0.00500 Jo U.	<0.00500 UJ-	<0.00500
Dissolved Silver	--	<0.00700	--	<0.00700	<0.00700	<0.00700 Jo	<0.00700 Jo	--	<0.00700	<0.00700	<0.00700
Dissolved Thallium	--	<0.00500	--	<0.00500	<0.00500	<0.00500	<0.00500	--	0.00500 Jo U.	<0.00500	<0.00500
Dissolved Zinc	0.04	0.0213	0.06	<0.0200	<0.0200 Jo	<0.0200	<0.0200	--	<0.0200	<0.0200	<0.0200

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W13A	W14A	W15A	W16A	W17A	W17B	W17B	W18A	W19A	W20A	W21A
Sample Date	5/3/01	2/22/01	2/20/01	2/20/01	2/22/01	2/22/01	5/3/01	2/22/01	2/22/01	2/20/01	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	--	<0.0600	<0.0600	<0.0600	2.25
Dissolved Arsenic	<0.00500 Jo	<0.00500 Jo	0.0615	<0.00500 Jo	0.0318	<0.00500 Jo	0.0972	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo
Dissolved Beryllium	--	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100	<0.00100 Jo	--	<0.00100	<0.00100	<0.00100 Jo	0.00740
Dissolved Cadmium	--	<0.00100	<0.000500	<0.000500	<0.00100	<0.00100	--	<0.000500	<0.000500	<0.000500	<0.000500
Dissolved Copper	--	<0.0100	<0.0100 Jo	<0.0100	<0.0100	<0.0100	--	<0.0100	<0.0100	<0.0100	<0.0200
Dissolved Iron	--	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	--	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	--	<0.00500	<0.00500	<0.00500	<0.00500 UJ-
Dissolved Manganese	--	--	--	--	--	--	--	--	--	--	--
Dissolved Mercury	--	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	--	<0.000200 Jo	<0.000200 Jo	<0.000200	<0.000200
Dissolved Nickel	--	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	--	<0.0300	<0.0300 Jo	<0.0300	<0.0600 Jo
Dissolved Selenium	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500	0.00500 Jo U
Dissolved Silver	--	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	--	<0.00700	<0.00700	<0.00700	<0.0140 Jo
Dissolved Thallium	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500	<0.00500
Dissolved Zinc	--	<0.0200	0.0325	<0.0200	<0.0200	<0.0200	--	<0.0200	<0.0200	<0.0200	<0.0400 Jo

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W21A	W21A	W21A	W22A	W22A	W22A	W23A	W23A	W23A	W24A	W24A
Sample Date	11/28/00	1/22/01	2/22/01	11/28/00	1/22/01	2/21/01	10/17/00	2/19/01	5/3/01	11/28/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	--	1.71	--	--	0.180	<0.0600	<0.0600	--	--	--
Dissolved Arsenic	--	--	<0.00500 Jo	--	--	0.0151	0.0213	0.0114	<0.00500 Jo	--	--
Dissolved Beryllium	--	--	0.00538	--	--	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	--	--	--
Dissolved Cadmium	--	--	<0.000500	--	--	<0.000500	<0.000500	<0.000500	--	--	--
Dissolved Copper	--	--	<0.0100 Jo	--	--	<0.0100	<0.0100	<0.0100	--	--	--
Dissolved Iron	<6.00	<0.400	--	<3.00	<0.200	--	--	--	--	<0.300	<0.200
Dissolved Lead	--	--	<0.00500	--	--	<0.00500	<0.00500 Jo	<0.00500	--	--	--
Dissolved Manganese	0.678	0.0317	--	0.758	2.58	--	--	--	--	<0.0100 Jo	0.625
Dissolved Mercury	--	--	<0.000200 Jo	--	--	<0.000200 Jo	<0.000200	<0.000200 Jo	--	--	--
Dissolved Nickel	--	--	<0.0300 Jo	--	--	<0.0300	<0.0300	<0.0300	--	--	--
Dissolved Selenium	--	--	<0.00500	--	--	<0.00500	<0.00500	<0.00500	--	--	--
Dissolved Silver	--	--	<0.00700 Jo	--	--	<0.00700 Jo	<0.00700 Jo	<0.00700	--	--	--
Dissolved Thallium	--	--	<0.0100	--	--	<0.00500	<0.00500 Jo	<0.00500	--	--	--
Dissolved Zinc	--	--	0.0259	--	--	0.186	<0.0200	0.0204	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W24A	W25A	W26A	W27A	W28A	W29A1	W29B1	W29B2	W30B	W31B	W31B
Sample Date	2/21/01	2/22/01	2/21/01	2/22/01	2/21/01	2/22/01	2/23/01	2/23/01	5/3/01	2/22/01	5/3/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	C-Zone	B-Zone	B-Zone	B-Zone
Dissolved Antimony	0.547	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	--	0.0638	--
Dissolved Arsenic	0.0463	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500	0.00880	0.00728	0.0353	0.0255	0.0273
Dissolved Beryllium	0.00202	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100	<0.00100 Jo	<0.00100	--	<0.00100 Jo	--
Dissolved Cadmium	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	--	<0.000500	--
Dissolved Copper	<0.0100 Jo	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	<0.0100	--
Dissolved Iron	--	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500	--
Dissolved Manganese	--	--	--	--	--	--	--	--	--	--	--
Dissolved Mercury	<0.000200 Jo	<0.000200 Jo	<0.000200	<0.000200	<0.000200	<0.000200 Jo	<0.000200	<0.000200 Jo	--	<0.000200 Jo	--
Dissolved Nickel	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	--	<0.0300	--
Dissolved Selenium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500	--
Dissolved Silver	0.00746	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	--	<0.00700 Jo	--
Dissolved Thallium	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 Jo	<0.00500	--	<0.00500	--
Dissolved Zinc	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	--	<0.0200	--

Notes:

mg/L = milligrams per liter

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-- = not analyzed

Bold values indicate a detection.

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Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W31C	W32A	W33A	W34A	W35A	W36A	W37A	W37A	W37A	W37A	W37A
Sample Date	5/3/01	2/20/01	2/20/01	2/20/01	2/20/01	2/21/01	9/13/00	10/25/00	11/28/00	1/22/01	2/21/01
Zone	C-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	--	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	--	0.780	--	--	0.194
Dissolved Arsenic	0.0100	<0.00500 Jo	<0.00500 Jo	<0.00500	<0.00500	0.00280	--	<0.00500 Jo	--	--	<0.00500 Jo
Dissolved Beryllium	--	<0.00100 Jo	<0.00100 Jo	<0.00100	<0.00100 Jo	0.000327	--	0.00275	--	--	<0.00100 Jo
Dissolved Cadmium	--	<0.000500	<0.000500	<0.000500	<0.000500	0.0204	--	<0.000500	--	--	<0.000500
Dissolved Copper	--	<0.0100	<0.0100	<0.0100	<0.0100	0.00710	--	<0.0200	--	--	<0.0100
Dissolved Iron	--	--	--	--	--	--	<0.300	--	<6.00	<0.400	--
Dissolved Lead	--	<0.00500	<0.00500 Jo	<0.00500	<0.00500	0.00147	--	0.00500 Jo U.	--	--	<0.00500
Dissolved Manganese	--	--	--	--	--	--	0.936	--	0.830	0.789	--
Dissolved Mercury	--	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	--	<0.000200	--	--	<0.000200
Dissolved Nickel	--	<0.0300	<0.0300	<0.0300	<0.0300 Jo	<0.0300	--	<0.0600 Jo	--	--	<0.0300 Jo
Dissolved Selenium	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	0.00500 Jo U.	--	--	<0.00500
Dissolved Silver	--	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	--	<0.0140	--	--	<0.00700
Dissolved Thallium	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500 UJ-	--	--	<0.00500
Dissolved Zinc	--	<0.0200	<0.0200	<0.0200	<0.0200	0.0152	--	<0.0400	--	--	<0.0200

Notes:

mg/L = milligrams per liter

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Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-4
DISSOLVED METALS DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W38A	W38A	W38A	W39A	W40A	W41A	W42A	W43A	WU
Sample Date	10/26/00	2/19/01	5/3/01	2/22/01	2/22/01	2/21/01	2/21/01	2/21/01	4/24/96
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Dissolved Antimony	<0.0600	<0.0600	--	<0.0600	<0.0600 Jo	0.0673	<0.0600	<0.0600	--
Dissolved Arsenic	0.0120	0.00695	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	<0.00500 Jo	0.167	0.00500 Jo UJ	--
Dissolved Beryllium	<0.00100	<0.00100 Jo	--	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100 Jo	<0.00100	--
Dissolved Cadmium	<0.000500	<0.000500	--	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.005
Dissolved Copper	<0.0100	<0.0100	--	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.01
Dissolved Iron	--	--	--	--	--	--	--	--	--
Dissolved Lead	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.04
Dissolved Manganese	--	--	--	--	--	--	--	--	--
Dissolved Mercury	<0.000200	<0.000200 Jo	--	<0.000200	<0.000200 Jo	<0.000200	<0.000200 Jo	<0.000200 Jo	--
Dissolved Nickel	<0.0300	<0.0300	--	<0.0300	<0.0300	<0.0300 Jo	<0.0300	<0.0300	<0.01
Dissolved Selenium	<0.00500	<0.00500	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500 UJ-	--
Dissolved Silver	<0.00700	<0.00700 Jo	--	<0.00700 Jo	<0.00700	<0.00700 Jo	<0.00700	<0.00700 Jo	--
Dissolved Thallium	<0.00500	<0.00500	--	<0.00500	<0.00500 Jo	<0.00500	<0.00500	<0.00500	--
Dissolved Zinc	<0.0200	<0.0200 Jo	--	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results and for total metal results, see Appendix 5-1.

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	B1	B1	B4	B4	EW1A	EW1A	EW1A	EW1B	EW1B	OW-01	OW-03	OW-04	OW-05	OW-07
Sample Date	5/18/94	8/10/94	5/18/94	8/10/94	1/22/97	1/22/97	11/28/00	1/22/97	1/22/97	1/17/98	1/17/98	12/18/97	12/18/97	12/18/97
Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	NA	NA	NA	NA	NA
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Alkalinity, Carbonate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Alkalinity, Total (mg/L)	--	--	--	--	300	--	--	90	--	--	--	--	--	--
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (mg/L)	--	--	--	--	--	--	<0.0100	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	64	--	--	2	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	--	--	--	--	<0.5	--	--	<0.5	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units)	6.6	7	6.5	7	--	--	--	--	--	6.3	6.4	6.5	6.8	6.7
pH (pH Units) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solids, total dissolved (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	12	--	--	49	--	--	--	--	--	--
Sulfide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-09	OW-10	OW-11	OW-14	OW-17	OW-21	OW-22	OW-23	OW-24	OW-25	OW-28	OW-29	OW-30	OW-32
Sample Date	12/18/97	12/19/97	12/17/97	1/17/98	12/17/97	12/17/97	12/19/97	1/17/98	12/18/97	1/17/98	12/19/97	12/17/97	12/17/97	12/17/97
Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Alkalinity, Carbonate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Alkalinity, Total (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness, Total (as CaCO ₃) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units)	6.5	6.9	6.4	6.4	6.9	6.9	6.4	6.3	6.4	6.5	7	6.3	6.6	6.6
pH (pH Units) *	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solids, total dissolved (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	OW-33	OW-34	OW-36	TW1	TW1	TW1	TW1	TW1	TW1	TW1	TW1	TW1	TW2
Sample Date	12/17/97	12/17/97	12/17/97	9/13/00	9/13/00	10/24/00	11/27/00	11/27/00	12/27/00	1/22/01	1/22/01	2/20/01	4/10/00
Zone	NA	NA	NA	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	530	940	--	1100	--	1080	--	--	482
Alkalinity, Carbonate (mg/L)	--	--	--	--	<20.0	<20.0	--	<20.0	--	<20.0	--	--	<20.0
Alkalinity, Total (mg/L)	--	--	--	--	530	940	--	1100	--	1080	--	--	482
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	56.8	177	--	163	--	124	--	--	146
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	--	--	738	--	653	524	--	1227	1761	--	1880	--
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	60.9	--	--	151	--	--	--	157	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	1460	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	<0.00250 Jo	--	--	14.9	--	--	--	4.81	--	--
Dissolved Sodium (mg/L)	--	--	--	42.1	--	--	62.7	--	--	--	65.4	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	--	--	<1.00	<1.00	--	<1.00	--	<1.00 Jo	--	--	0.120
Nitrate (mg/L)	--	--	--	--	<1.00 Jo R	--	--	--	--	<1.00	--	--	0.536
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	<1.00	--	<1.00	--	--	--	--	<1.00
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	--	--	167	--	-41	-104	--	--	3	--	0	--
pH (pH Units)	6.9	6.4	6.4	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	--	--	--	6.6	--	6.4	5.6	--	5.8	5.9	--	6	--
Solids, total dissolved (mg/L)	--	--	--	--	514	3400	--	3470	--	2480	--	--	1160
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	14.1	74.2	--	6.73	--	<5.00 Jo	--	--	52.2
Sulfide (mg/L)	--	--	--	--	--	--	--	7.76	--	0.961	--	--	3.15
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW2	TW2	TW2	TW2	TW2	TW2	TW2	TW2	TW3	TW3	TW3	TW3	TW3
Sample Date	9/13/00	10/24/00	11/27/00	11/27/00	12/27/00	1/22/01	1/22/01	2/22/01	4/10/00	9/13/00	10/24/00	11/27/00	11/27/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	430	--	386	--	--	328	--	448	--	400	388	--
Alkalinity, Carbonate (mg/L)	--	<20.0	--	<20.0	--	--	<20.0	--	<20.0	--	<20.0	<20.0	--
Alkalinity, Total (mg/L)	--	430	--	386	--	--	328	--	448	--	400	388	--
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	162	--	154	--	--	183	--	200	--	185	177	--
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	1047	1304	700	--	761	1209	--	1147	--	1215	1685	1892	--
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	72.3	--	--	90.5	--	--	--	--	--	--	78.7
Dissolved Organic Carbon (mg/L)	--	8.64	--	--	--	--	--	--	--	--	8.05	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	<25.0	--	--	<50.0	--	--	--	--	--	--	<50.0
Dissolved Sodium (mg/L)	--	--	75.8	--	--	77.1	--	--	--	--	--	--	108
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	<1.00	--	<1.00	--	--	<1.00	--	0.250	--	<1.00	<1.00	--
Nitrate (mg/L)	--	--	--	--	--	--	<1.00	--	0.123	--	--	--	--
Nitrate-Nitrogen (mg/L)	--	<1.00	--	<1.00 Jo	--	--	--	--	<1.00	--	<1.00 Jo	<1.00	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	230	-467	-6	--	--	81	--	47	--	232	171	237	--
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	6.5	6.4	6.3	--	6.4	6.5	--	6.6	--	6.2	6.6	6.2	--
Solids, total dissolved (mg/L)	--	992	--	1000	--	--	1220	--	1720	--	1520	1530	--
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	49.7	--	62.8	--	--	212	--	90.1	--	98.0	96.1	--
Sulfide (mg/L)	--	--	--	14.6	--	--	<0.500	--	3.46	--	--	1.59	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW3	TW3	TW3	TW3	TW3	TW4	TW4	TW4	TW4	TW4	TW4	TW4	TW4
Sample Date	12/27/00	12/28/00	1/22/01	1/22/01	2/20/01	4/10/00	9/13/00	10/24/00	11/27/00	11/27/00	12/27/00	1/22/01	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	--	--	378	--	594	--	892	998	--	--	--	976
Alkalinity, Carbonate (mg/L)	--	--	--	<20.0	--	<20.0	--	<20.0	<20.0	--	--	--	<20.0
Alkalinity, Total (mg/L)	--	--	--	378	--	594	--	892	998	--	--	--	976
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	188	--	80.6	--	83.8	96.4	--	--	--	108
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	915	--	1238	--	1399	--	660	1610	>2000	--	1010	1724	--
Cyanide (mg/L)	<0.0100	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	85.1	--	--	--	--	--	--	104	--	110	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	--	425	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	<125	--	--	--	--	--	--	<2.50	--	<2.50	--
Dissolved Sodium (mg/L)	--	--	109	--	--	--	--	--	--	54.9	--	58.6	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	--	<1.00	--	0.130	--	<1.00	<1.00	--	--	--	<1.00 Jo
Nitrate (mg/L)	--	--	--	<1.00	--	<0.0500	--	--	--	--	--	--	<1.00
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	<1.00	--	<1.00	<1.00	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	--	156	--	103	--	184	-50	-93	--	--	21	--
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	6.3	--	6.4	--	6.4	--	6.7	6.1	6	--	6	6.2	--
Solids, total dissolved (mg/L)	--	--	--	1500	--	780	--	1760	1940	--	--	--	1580
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	102	--	22.0	--	15.8	<5.00 Jo	--	--	--	<5.00 Jo
Sulfide (mg/L)	--	--	--	<0.500	--	5.19	--	--	6.54	--	--	--	1.23
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW4	TW5	TW5	TW5	TW5	TW5	TW5	TW5	TW5	TW5	TW6	TW6	TW6
Sample Date	2/20/01	4/10/00	9/13/00	10/24/00	11/27/00	11/27/00	12/27/00	1/22/01	1/22/01	2/20/01	4/10/00	9/13/00	10/24/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	364	--	1720	1920	--	--	1570	--	--	267	--	170
Alkalinity, Carbonate (mg/L)	--	<20.0	--	<20.0	<20.0	--	--	<20.0	--	--	<20.0	--	<20.0
Alkalinity, Total (mg/L)	--	364	--	1720	1920	--	--	1570	--	--	267	--	170
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	156	--	495	340	--	--	271	--	--	100	--	61.3
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	1677	--	1050	355	>2000	--	1527	1722	--	1314	--	432	862
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	--	--	99.8	--	--	256	--	--	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	2670	--	--	--	--	--	--	--	--	6.26
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	96.6	--	--	13.7	--	--	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	98.3	--	--	77.5	--	--	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	0.210	--	<1.00	<1.00	--	--	<1.00	--	--	0.0730	--	<1.00
Nitrate (mg/L)	--	0.181	--	--	--	--	--	<1.00	--	--	<0.0500	--	--
Nitrate-Nitrogen (mg/L)	--	<0.400	--	<1.00	<1.00	--	--	--	--	--	0.414	--	<1.00 Jo
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	74	--	187	-380	-39	--	--	12	--	-105	--	181	-101
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	6.2	--	6.7	5.8	5.7	--	5.8	6	--	6	--	6.6	7.1
Solids, total dissolved (mg/L)	--	1040	--	6650	5530	--	--	3730	--	--	745	--	458
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	39.8	--	155	33.9	--	--	7.57	--	--	41.9	--	24.6
Sulfide (mg/L)	--	5.33	--	--	8.39	--	--	<0.500	--	--	7.83	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW6	TW6	TW6	TW6	TW6	TW6	TW7	TW7	TW7	TW7	TW7	TW7	TW7
Sample Date	11/28/00	11/28/00	12/27/00	1/22/01	1/22/01	2/21/01	9/13/00	9/13/00	10/24/00	11/28/00	11/28/00	12/27/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	142	--	--	--	238	--	474	--	1650	--	644	--	--
Alkalinity, Carbonate (mg/L)	<20.0	--	--	--	<20.0	--	<20.0	--	<20.0	--	<20.0	--	--
Alkalinity, Total (mg/L)	142	--	--	--	238	--	474	--	1650	--	644	--	--
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	37.5	--	--	--	63.2	--	89.3	--	397	--	133	--	--
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	1137	--	--	824	--	1002	371	--	547	>2000	--	--	1297
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	56.0	--	46.2	--	--	--	59.5	--	137	--	--	106
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	--	--	3450	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	<2.50	--	<2.50	--	--	--	2.56	--	<12.5	--	--	<0.00250 Jo
Dissolved Sodium (mg/L)	--	37.9	--	32.1	--	--	--	46.1	--	46.0	--	--	41.5
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	<1.00	--	--	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--	--
Nitrate (mg/L)	--	--	--	--	<1.00 Jo	--	<1.00	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	<1.00 Jo	--	--	--	--	--	--	--	<1.00	--	<1.00	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	97	--	98	26	--	54	157	--	463	-21	--	0	28
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	6.7	--	6.8	6.8	--	6.8	6.7	--	5.6	5.2	--	5.3	5.7
Solids, total dissolved (mg/L)	320	--	--	--	448	--	600	--	7220	--	2290	--	--
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	19.2	--	--	--	46.1	--	26.1	--	239	--	30.4	--	--
Sulfide (mg/L)	<0.500	--	--	--	<0.500	--	--	--	--	--	4.07	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW7	TW7	TW8	TW8	TW8	TW8	TW8	TW8	TW8	TW8	TW8	TW9	TW9
Sample Date	1/22/01	2/21/01	9/13/00	9/13/00	10/24/00	11/28/00	11/28/00	12/27/00	1/22/01	1/22/01	2/21/01	9/13/00	9/13/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	688	--	--	424	<20.0	304	--	--	--	286	--	--	634
Alkalinity, Carbonate (mg/L)	<20.0	--	--	<20.0	392	<20.0	--	--	--	<20.0	--	--	<20.0
Alkalinity, Total (mg/L)	688	--	--	424	402	304	--	--	--	286	--	--	634
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	129	--	--	21.7	31.1	22.4	--	--	--	17.0	--	--	53.2
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	1249	439	--	1905	1099	--	--	1138	--	1093	650	--
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	45.8	--	--	--	307	--	316	--	--	178	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	3.21	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	<0.00250 Jo	--	--	--	3.86	--	<0.00250 Jo	--	--	3.91	--
Dissolved Sodium (mg/L)	--	--	53.2	--	--	--	63.4	--	53.1	--	--	80.3	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	<1.00	--	--	<1.00	<1.00	<1.00	--	--	--	<1.00	--	--	<1.00
Nitrate (mg/L)	<1.00	--	--	<1.00 Jo R	--	--	--	--	--	<1.00 Jo	--	--	<1.00 Jo R
Nitrate-Nitrogen (mg/L)	--	--	--	--	<1.00 Jo	<1.00 Jo	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	-16	250	--	-420	-235	--	-161	-106	--	117	256	--
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	--	5.4	7.2	--	11.5	8.0	--	7	6.9	--	6.6	6.9	--
Solids, total dissolved (mg/L)	1560	--	--	352	1270	1910	--	--	--	1640	--	--	1300
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	10.6	--	--	26.2	204	104	--	--	--	784	--	--	107
Sulfide (mg/L)	2.94	--	--	--	--	17.2	--	--	--	3.35	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW9	TW9	TW9	TW9	TW9	TW9	TW9	TW9	TW10	TW10	TW10	TW10	TW10
Sample Date	10/25/00	11/28/00	11/28/00	12/27/00	12/28/00	1/22/01	1/22/01	2/21/01	9/13/00	9/13/00	10/25/00	11/28/00	11/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	160	204	--	--	--	--	148	--	--	578	490	--	428
Alkalinity, Carbonate (mg/L)	48.0	<20.0	--	--	--	--	<20.0	--	--	<20.0	<20.0	--	<20.0
Alkalinity, Total (mg/L)	208	204	--	--	--	--	148	--	--	578	490	--	428
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	55.9	49.5	--	--	--	--	50.6	--	--	67.4	63.6	--	61.6
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	1122	1507	--	--	--	966	--	1434	863	--	1160	901	--
Cyanide (mg/L)	--	--	--	--	<0.0100	--	--	--	--	--	--	0.0112	--
Dissolved Calcium (mg/L)	--	--	218	--	--	184	--	--	107	--	--	--	--
Dissolved Organic Carbon (mg/L)	52.4	--	--	--	--	--	--	--	--	--	5.79	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	2.68	--	--	<0.00250 Jo	--	--	3.18	--	--	--	--
Dissolved Sodium (mg/L)	--	--	48.4	--	--	49.5	--	--	125	--	--	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	<1.00	<1.00	--	--	--	--	<1.00	--	--	<1.00	<1.00	--	<1.00
Nitrate (mg/L)	--	--	--	--	--	--	<1.00	--	--	<1.00 Jo R	--	--	--
Nitrate-Nitrogen (mg/L)	<1.00 Jo	<1.00 Jo	--	--	--	--	--	--	--	--	<1.00 Jo	--	<1.00 Jo
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	-5	-278	--	-205	--	-131	--	-158	275	--	176	114	--
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	8.7	8.6	--	8	--	8.1	--	7.1	6.4	--	7.9	6.6	--
Solids, total dissolved (mg/L)	1000	864	--	--	--	--	1080	--	--	254	1210	--	996
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	73.4	177	--	--	--	--	433	--	--	112	102	--	117
Sulfide (mg/L)	7.65	47.1	--	--	--	--	19.5	--	--	--	<0.500 R	--	5.37
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW10	TW10	TW10	TW10	TW10	TW10	TW11	TW11	TW11	TW11	TW11	TW11	TW11
Sample Date	11/28/00	12/27/00	12/28/00	1/22/01	1/22/01	2/21/01	9/13/00	9/13/00	10/25/00	11/28/00	11/28/00	12/27/00	12/28/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	412	--	532	--	158	352	--	--	--
Alkalinity, Carbonate (mg/L)	--	--	--	--	<20.0	--	<20.0	--	<20.0	<20.0	--	--	--
Alkalinity, Total (mg/L)	--	--	--	--	412	--	532	--	162	352	--	--	--
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	46.1	--	73.4	--	103	100	--	--	--
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	--	--	980	--	1194	1304	--	1036	1017	--	--	--
Cyanide (mg/L)	--	--	<0.0100	--	--	--	--	--	--	--	--	--	<0.0100
Dissolved Calcium (mg/L)	72.5	--	--	87.4	--	--	--	112	--	--	107	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	--	--	25.3	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	<50.0	--	--	<125	--	--	--	<0.00250 Jo	--	--	<0.00250 Jo	--	--
Dissolved Sodium (mg/L)	91.0	--	--	93.0	--	--	--	68.9	--	--	69.1	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	--	--	<1.00	--	<1.00	--	<1.00 Jo	<1.00	--	--	--
Nitrate (mg/L)	--	--	--	--	<1.00 Jo	--	<1.00 Jo R	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	--	--	--	<1.00 Jo	<1.00	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	62	--	-14	--	-12	208	--	150	-147	--	-161	--
pH (pH Units)	--	--	--	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	--	6.6	--	7.2	--	6.3	6.4	--	8.5	8.3	--	7.9	--
Solids, total dissolved (mg/L)	--	--	--	--	1240	--	8480	--	748	1030	--	--	--
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	214	--	108	--	106	276	--	--	--
Sulfide (mg/L)	--	--	--	--	<0.500	--	--	--	7.88	16.4	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	TW11	TW11	TW11	W1	W1	W12A	W21A	W21A	W21A	W21A	W21A	W21A	W21A	W21A
Sample Date	1/22/01	1/22/01	2/21/01	5/18/94	8/10/94	11/28/00	10/28/99	10/28/99	9/13/00	10/25/00	11/28/00	11/28/00	12/28/00	1/22/01
Zone	A-Zone	A-Zone	A-Zone	B-Zone	B-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	424	--	--	--	--	--	--	--	370	328	--	--	328
Alkalinity, Carbonate (mg/L)	--	<20.0	--	--	--	--	--	--	--	<20.0	<20.0	--	--	<20.0
Alkalinity, Total (mg/L)	--	424	--	--	--	--	354	--	--	370	328	--	--	328
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	182	--	--	--	--	--	--	--
Chloride (mg/L)	--	91.5	--	--	--	--	--	--	132	148	129	--	--	122
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	935	--	1287	--	--	--	1700	--	928	1603	1156	--	--	460
Cyanide (mg/L)	--	--	--	--	--	<0.0100	--	--	--	--	--	--	<0.0100	--
Dissolved Calcium (mg/L)	166	--	--	--	--	--	--	--	--	--	--	78.4	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	26.5	--	--	7.79	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	5.75	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	<125	--	--	--	--	--	--	--	--	--	--	<50.0	--	--
Dissolved Sodium (mg/L)	69.6	--	--	--	--	--	--	--	--	--	--	64.0	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	<1.00	--	--	--	--	--	0.0890	--	<1.00	<1.00	--	--	<1.00
Nitrate (mg/L)	--	<1.00	--	--	--	--	--	--	--	--	--	--	--	<1.00 Jo
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	--	<1.00	--	--	<1.00	<1.00 Jo	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	510	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	-2	--	-62	--	--	--	510	--	191	221	179	--	178	167
pH (pH Units)	--	--	--	5.7	5.9	--	--	--	--	--	--	--	--	--
pH (pH Units) *	7.9	--	7.1	--	--	--	6.57	--	6.1	6.5	6.5	--	6.5	6.5
Solids, total dissolved (mg/L)	--	1750	--	--	--	--	--	--	758	1380	1170	--	--	1140
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	1700	--	--	--	--	--	--	--
Sulfate (mg/L)	--	611	--	--	--	--	22.2	--	--	112	106	--	--	107
Sulfide (mg/L)	--	<0.500	--	--	--	--	--	--	--	3.06	3.35	--	--	<0.500
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
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Willits, California
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Sample Location	W21A	W21A	W22A	W22A	W22A	W22A	W22A	W22A	W22A	W22A	W22A	W22A	W22A
Sample Date	1/22/01	2/22/01	10/28/99	10/28/99	9/13/00	10/25/00	11/28/00	11/28/00	11/28/00	12/28/00	1/22/01	2/21/01	1/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	304	--	256	--	--	--	--	170
Alkalinity, Carbonate (mg/L)	--	--	--	--	--	<20.0	--	<20.0	--	--	--	--	<20.0
Alkalinity, Total (mg/L)	--	--	--	288	--	304	--	256	--	--	--	--	170
Carbon dioxide, free (mg/L)	--	--	--	95.5	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	40.9	39.8	--	42.6	--	--	--	--	40.8
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	996	967	--	595	1001	1093	--	--	--	896	958	--
Cyanide (mg/L)	--	--	--	--	--	--	<0.0100	--	--	--	--	--	--
Dissolved Calcium (mg/L)	3.84	--	--	--	--	--	--	--	36.8	--	61.6	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	27.5	--	7.05	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	6.65	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	<2.50	--	--	--	--	--	--	--	<25.0	--	<0.00250 Jo	--	--
Dissolved Sodium (mg/L)	3.12	--	--	--	--	--	--	--	149	--	114	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	--	0.190	--	--	<1.00	--	<1.00	--	--	--	--	<1.00
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	<1.00
Nitrate-Nitrogen (mg/L)	--	--	--	<1.00	--	<1.00 Jo	--	<1.00	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	540	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	-32	540	--	250	216	33	--	--	-48	31	-14	--
pH (pH Units)	--	--	--	6.62	--	--	--	--	--	--	--	--	--
pH (pH Units) *	--	6.4	6.62	--	6.8	6.8	6.7	--	--	6.5	6.8	6.5	--
Solids, total dissolved (mg/L)	--	--	--	--	672	770	--	804	--	--	--	--	682
Specific Conductance (EC) (µmhos/cm)	--	--	--	967	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	--	55.2	--	70.8	--	136	--	--	--	--	267
Sulfide (mg/L)	--	--	--	--	--	5.27	--	7.22	--	--	--	--	3.48
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W23A	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W24A	W37A
Sample Date	11/28/00	10/28/99	10/28/99	9/13/00	9/25/00	10/25/00	11/28/00	11/28/00	12/28/00	1/22/01	1/22/01	2/21/01	9/13/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	248	214 J-	--	--	398	--	--	350
Alkalinity, Carbonate (mg/L)	--	--	--	--	--	<20.0	24.0 J-	--	--	<20.0	--	--	<20.0
Alkalinity, Total (mg/L)	--	--	316	--	--	248	238 J-	--	--	398	--	--	350
Carbon dioxide, free (mg/L)	--	--	55.0	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	52.1	--	53.5	63.9	--	--	59.9	--	--	215
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	1660	--	529	--	818	1452	--	--	1070	--	1033	604
Cyanide (mg/L)	<0.0100	--	--	--	--	--	--	--	<0.0100	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	--	--	--	--	108	--	--	190	--	--
Dissolved Organic Carbon (mg/L)	--	--	51.6	--	--	4.38	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	3.56	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	--	--	<2.50	--	--	<0.00250 Jo	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	--	--	53.1	--	--	63.3	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	0.120	--	--	--	<1.00	<1.00	--	--	<1.00	--	--	<1.00
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	<1.00	--	--	<2.00 Jo R
Nitrate-Nitrogen (mg/L)	--	--	23.2	--	--	<1.00 Jo	<1.00 Jo	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	549	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	549	--	290	--	113	-271	--	-149	-2	--	138	215
pH (pH Units)	--	--	7.02	--	--	--	--	--	--	--	--	--	--
pH (pH Units) *	--	7.02	--	6.5	--	8.8	9	--	7.6	7.4	--	7.1	6.3
Solids, total dissolved (mg/L)	--	--	--	1160	--	540	696 J-	--	--	1270	--	--	1030
Specific Conductance (EC) (µmhos/cm)	--	--	1660	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	--	80.9	--	689	93.2	109	--	--	380	--	--	51.8
Sulfide (mg/L)	--	--	--	--	--	8.24	154	--	--	4.25	--	--	--
Sulfite (mg/L)	--	--	--	--	2470	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	2470	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W37A	W37A	W37A	W37A	W37A	W37A	W37A	W37A	W38A	W7	W7	W7	W7
Sample Date	9/13/00	10/25/00	11/28/00	11/28/00	12/28/00	1/22/01	1/22/01	2/21/01	11/28/00	5/18/94	8/10/94	9/13/00	10/25/00
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Alkalinity, Bicarbonate (mg/L)	--	312	286	--	--	--	246	--	--	--	--	352	338
Alkalinity, Carbonate (mg/L)	--	<20.0	<20.0	--	--	--	<20.0	--	--	--	--	<20.0	<20.0
Alkalinity, Total (mg/L)	--	312	286	--	--	--	246	--	--	--	--	352	338
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	199	170	--	--	--	149	--	--	--	--	22.5	21.6
Conductivity (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (µmhos/cm) *	--	1334	1247	--	--	814	--	568	--	--	--	395	861
Cyanide (mg/L)	--	--	--	--	--	--	--	--	<0.0100	--	--	--	--
Dissolved Calcium (mg/L)	87.0	--	--	58.5	--	79.2	--	--	--	--	--	--	--
Dissolved Organic Carbon (mg/L)	--	5.87	--	--	--	--	--	--	--	--	--	--	5.63
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	2.50	--	--	<50.0	--	<50.0	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	55.2	--	--	45.8	--	51.1	--	--	--	--	--	--	--
Hardness, Total (as CaCO3) (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane (mg/L)	--	<1.00	<1.00	--	--	--	<1.00 Jo	--	--	--	--	<1.00	<1.00
Nitrate (mg/L)	--	--	--	--	--	--	<1.00 Jo	--	--	--	--	<1.00 Jo R	--
Nitrate-Nitrogen (mg/L)	--	<1.00 Jo	<1.00	--	--	--	--	--	--	--	--	--	<1.00
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	--	185	168	--	55	171	--	-40	--	--	--	228	228
pH (pH Units)	--	--	--	--	--	--	--	--	--	6.1	6.4	--	--
pH (pH Units) *	--	6.3	6.4	--	6.3	6.4	--	6.4	--	--	--	6.4	6.6
Solids, total dissolved (mg/L)	--	1000	952	--	--	--	670	--	--	--	--	<5.00	576
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	--	47.4	42.8	--	--	--	39.9	--	--	--	--	26.9	28.6
Sulfide (mg/L)	--	3.51	<0.500	--	--	--	<0.500	--	--	--	--	--	5.09
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-5
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN GROUNDWATER SAMPLES FROM MONITORING WELLS
Former Remco Hydraulics Facility
Willits, California
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Sample Location	W7	W7	W7	W7	W7	W7	W8A	W8B	W8C	W9A	W9B
Sample Date	11/28/00	11/28/00	12/28/00	1/22/01	1/22/01	2/22/01	9/16/94	9/16/94	9/16/94	9/15/94	9/15/94
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	B-Zone	C-Zone	A-Zone	B-Zone
Alkalinity, Bicarbonate (mg/L)	324	--	--	--	324	--	250	130	230	210	160
Alkalinity, Carbonate (mg/L)	<20.0	--	--	--	<20.0	--	--	--	--	--	--
Alkalinity, Total (mg/L)	324	--	--	--	324	--	<10	<10	<10	<10	<10
Carbon dioxide, free (mg/L)	--	--	--	--	--	--	--	--	--	--	--
Chloride (mg/L)	21.4	--	--	--	23.9	--	26	18	8.3	28	7.7
Conductivity (µmhos/cm)	--	--	--	--	--	--	500	260	400	450	280
Conductivity (µmhos/cm) *	912	--	142	446	--	698	--	--	--	--	--
Cyanide (mg/L)	--	--	--	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	36.2	--	35.3	--	--	--	--	--	--	--
Dissolved Organic Carbon (mg/L)	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	<50.0	--	<5.00	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	--	57.4	--	53.3	--	--	--	--	--	--	--
Hardness, Total (as CaCO ₃) (mg/L)	--	--	--	--	--	--	270	110	310	230	150
Methane (mg/L)	<1.00	--	--	--	<1.00 Jo	--	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	<1.00 Jo	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	<1.00 Jo	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv)	--	--	--	--	--	--	--	--	--	--	--
Oxidation/Reduction Potential (mv) *	138	--	--	137	--	-10	--	--	--	--	--
pH (pH Units)	--	--	--	--	--	--	7.2	7.1	6.9	6.9	7.1
pH (pH Units) *	6.6	--	6.6	6.9	--	6.6	--	--	--	--	--
Solids, total dissolved (mg/L)	604	--	--	--	484	--	370	210	310	360	260
Specific Conductance (EC) (µmhos/cm)	--	--	--	--	--	--	--	--	--	--	--
Sulfate (mg/L)	26.3	--	--	--	28.5	--	27	1.5	<1	33	2.6
Sulfide (mg/L)	<0.500	--	--	--	<0.500	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--
Sulfite (mg/L)	--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

µmhos/cm = micro ohms per cubic centimeter

mv = millivolts

< = less than

-- = not analyzed

Bold values indicate a detection.

* Field Measurement

NA = not available

Data qualifiers defined in Appendix 5-3, Table 2.

TABLE 5-3b-6
PCBs DETECTED IN GROUNDWATER SAMPLES FROM MONITORING WELLS (µg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	B4	W20A	W25A	W27A	W29A1	W29A1	W37A	W7
Sample Date	2/21/01	2/20/01	2/22/01	2/22/01	2/22/01	2/23/01	2/23/01	2/22/01
Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone	A-Zone
Aroclor 1016	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.05	2.86

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location Sample Date	C1 4/10/92	C1 10/1/92	C1 2/8/93	C1 3/16/93	C1 12/6/93	C2 12/2/92	C2 4/8/93	C2 5/25/93
1,1,1-Trichloroethane (1,1,1-TCA)	<0.5	<0.5	<0.5	<0.5	<0.5	27	3.2	65
1,1-Dichloroethane (1,1-DCA)	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	24
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	30
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<2	<40	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.5	<0.5	<0.5	<0.5	<0.5	5	0.6	50
Isopropylbenzene	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--
Methylene chloride	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	<0.5	<0.5	<0.5	<0.5	--	34	<0.5	0.6
Toluene	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	<0.5	<0.5	<0.5	<0.5	<0.5	7.5	<0.5	10

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	C2	OUTFALL	R1	R1	R1	R1	Storm Water
Sample Date	1/5/94	4/24/94	2/10/92	2/18/92	1/4/93	11/29/93	11/16/92
1,1,1-Trichloroethane (1,1,1-TCA)	46	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane (1,1-DCA)	40	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene (1,1-DCE)	35	<0.4	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--
Chloroform	<0.5	<0.4	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<2	<0.4	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	49	--	<0.5	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--
Methylene chloride	<2	<10	<2	<2	<2	<2	<2
n-Propylbenzene	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	1	3.2	<0.5	<0.5	<0.5	--	<0.5
Toluene	--	--	--	--	--	--	--
Trichloroethene (TCE)	23	<0.4	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

µg/L = micrograms per liter

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Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location Sample Date	Stormwater Runoff 1/6/92	SWD 2/13/98	SWD-1 4/24/94	SWD-1 2/26/99	SWD-1 10/27/99	SWD-1 2/3/00	SWD-1 12/14/00	SWD-2 4/24/94
1,1,1-Trichloroethane (1,1,1-TCA)	120	<5	<0.4	<0.500	<0.500	<0.500	<0.500 Jo	5.3
1,1-Dichloroethane (1,1-DCA)	12	<5	<0.4	<0.500	<0.500	<0.500	<0.500	3.4
1,1-Dichloroethene (1,1-DCE)	20	<5	<0.4	<0.500	<0.500	<0.500	<0.500	<0.4
1,2,3-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
1,2,4-Trichlorobenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
1,2,4-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
1,3,5-Trimethylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
2-Butanone (MEK)	--	<100	--	<5.00	5.55	<5.00	<5.00	--
Acetone	--	<100	--	<5.00	11.6	<10.0	<10.0 Jo	--
Chloroform	<0.5	<5	<0.4	<0.500	<0.500	<0.500	<0.500	<0.4
Chloromethane	<2	<10	<0.4	<0.500	<0.500	<0.500	<0.500	<0.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	25	<5	--	<0.500	<0.500	<0.500	<0.500	--
Isopropylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
m,p-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
Methyl tert-butyl ether (MTBE)	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo	--
Methylene chloride	<2	<10	<10	<0.500	<0.500	<0.500	<0.500 Jo	<10
n-Propylbenzene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
Naphthalene	--	--	--	<0.500	<0.500	<0.500	<0.500 Jo	--
o-Xylene	--	--	--	<0.500	<0.500	<0.500	<0.500	--
Tetrachloroethene (PCE)	48	8	<0.4	<0.500	<0.500	<0.500	4.36	<0.4
Toluene	--	<5	--	<0.500	<0.500	<0.500	<0.500	--
Trichloroethene (TCE)	19	<5	<0.4	<0.500	<0.500	<0.500	<0.500 Jo	<0.4

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location Sample Date	SWD-2 2/26/99	SWD-2 10/27/99	SWD-2 2/3/00	SWD-2 12/14/00	SWD-3 4/24/94	SWD-3 2/26/99	SWD-3 10/27/99	SWD-3 10/9/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	<0.500 Jo	3.5	<0.500	<0.500	<0.500 Jo
1,1-Dichloroethane (1,1-DCA)	0.557	<0.500	<0.500	<0.500 Jo	1.8	0.587	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.500	<0.4	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	0.720
1,3,5-Trimethylbenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500 Jo
2-Butanone (MEK)	<5.00	<5.00	<5.00	<5.00 Jo	--	<5.00	<5.00	<5.00 Jo
Acetone	<5.00	10.9	<10.0	<10.0 Jo	--	<5.00	<10.0	11.7
Chloroform	<0.500	<0.500	<0.500	<0.500	<0.4	<0.500	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.4	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.806	<0.500	<0.500	<0.500 Jo	--	0.852	<0.500	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500 Jo
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<0.500	<0.500 Jo	--	<0.500	<0.500	<0.500
Methylene chloride	<0.500	<0.500	<0.500	<0.500 Jo	<10	<0.500	<0.500	<0.500 Jo
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500 Jo
Naphthalene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500
o-Xylene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500 Jo
Tetrachloroethene (PCE)	1.65	<0.500	<0.500	1.93	1.2	1.55	<0.500	0.883
Toluene	<0.500	<0.500	<0.500	<0.500	--	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500	<0.4	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-3	SWD-3	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4
Sample Date	11/30/00	12/14/00	4/24/94	12/18/98	2/26/99	10/27/99	2/3/00	2/3/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500 Jo	<0.500 Jo	10	34	5.66	<0.500	2.67	16.9
1,1-Dichloroethane (1,1-DCA)	<0.500 Jo	<0.500 Jo	3.7	5	1.51	<0.500	<0.500	2.47
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.4	3	0.802	<0.500	<0.500	1.10
1,2,3-Trichlorobenzene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	<0.500	<0.500	--	--	<0.500	1.34	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
2-Butanone (MEK)	<5.00	<5.00	--	<3	<5.00	<5.00	<5.00	<5.00
Acetone	30.5	<10.0 Jo	--	<3	<5.00	<10.0	<10.0	10.4
Chloroform	<0.500	<0.500	<0.4	<0.7	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.4	<0.6	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500 Jo	<0.500	--	5	2.82	<0.500	0.833	4.26
Isopropylbenzene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500 Jo	--	<0.7	<0.500	<0.500	<0.500	<0.500
Methylene chloride	0.641	<0.500 Jo	<10	<0.8	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500	<0.500	--	--	<0.500	0.707	<0.500	<0.500
Naphthalene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
o-Xylene	<0.500	<0.500	--	--	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500 Jo	1.83	13	31	28.6	<0.500	4.88	26.7
Toluene	<0.500	<0.500	--	<0.8	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	0.4	5	2.41	<0.500	0.609	3.07

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-4	SWD-4	SWD-4	SWD-5	SWD-5	SWD-5	SWD-5	SWD-5
Sample Date	10/9/00	11/30/00	12/14/00	4/24/94	12/18/98	2/26/99	10/27/99	2/3/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500 Jo	1.2	33	5.28	<0.500	15.9
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500 Jo	<0.500	0.4	5	1.45	<0.500	2.35
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.4	3	0.753	<0.500	1.02
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	0.804	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	0.504	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
2-Butanone (MEK)	<5.00 Jo	<5.00	<5.00	--	<3	<5.00	<5.00	<5.00
Acetone	<10.0 Jo	<10.0 Jo	<10.0 Jo	--	<3	<5.00	<10.0	<10.0
Chloroform	<0.500	<0.500	<0.500	<0.4	<0.7	<0.500	<0.500	<0.500
Chloromethane	<0.500 Jo	<0.500	<0.500	<0.4	<0.6	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	--	5	2.99	<0.500	3.96
Isopropylbenzene	<0.500 Jo	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
m,p-Xylene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500 Jo	<0.500 Jo	--	<0.7	<0.500	<0.500	<0.500
Methylene chloride	<0.500 Jo	<0.500 Jo	<0.500	<10	<0.8	<0.500	<0.500	<0.500
n-Propylbenzene	<0.500 Jo	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
Naphthalene	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	<0.500	<0.500	<0.500
o-Xylene	<0.500 Jo	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500 Jo	<0.500 Jo	1.55	3.6	30	26.3	<0.500	25.2
Toluene	<0.500	<0.500	<0.500	--	<0.8	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.4	5	2.28	<0.500	2.95

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location Sample Date	SWD-5 10/9/00	SWD-5 11/30/00	SWD-5 12/14/00	SWD-6 4/24/94	SWD-6 12/18/98	SWD-6 2/26/99	SWD-6 2/3/00	SWD-6 12/14/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500 Jo	<0.4	<0.7	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500 Jo	<0.500	<0.4	<0.8	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.4	<0.8	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	0.687	<0.500 Jo	<0.500	--	--	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	<0.500 Jo	<0.500 Jo	<0.500	--	--	<0.500	<0.500	<0.500
2-Butanone (MEK)	<5.00 Jo	<5.00	<5.00	--	<3	<5.00	<5.00	<5.00
Acetone	<10.0 Jo	<10.0 Jo	<10.0 Jo	--	<3	<5.00	<10.0	<10.0 Jo
Chloroform	<0.500	<0.500	<0.500	<0.4	<0.7	<0.500	<0.500	<0.500
Chloromethane	<0.500	<0.500	<0.500 Jo	<0.4	<0.6	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	--	<0.7	<0.500	<0.500	<0.500
Isopropylbenzene	<0.500 Jo	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
m,p-Xylene	<0.500	<0.500	<0.500	--	--	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500 Jo	<0.500 Jo	--	<0.7	<0.500	<0.500	<0.500 Jo
Methylene chloride	<0.500 Jo	<0.500 Jo	<0.500	<10	<0.8	<0.500	<0.500	<0.500 Jo
n-Propylbenzene	<0.500 Jo	<0.500 Jo	<0.500	--	--	<0.500	<0.500	<0.500
Naphthalene	<0.500 Jo	<0.500	<0.500 Jo	--	--	<0.500	<0.500	<0.500
o-Xylene	<0.500 Jo	<0.500 Jo	<0.500	--	--	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500 Jo	0.571	1.27	<0.4	<0.9	<0.500	<0.500	<0.500
Toluene	<0.500	<0.500	<0.500	--	<0.8	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.4	<0.9	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	6/28/91	2/10/92	3/5/92	4/10/92	5/20/92	6/30/92	10/1/92	12/2/92
1,1,1-Trichloroethane (1,1,1-TCA)	4	21	67	31	20	8.6	1.4	5
1,1-Dichloroethane (1,1-DCA)	0.7	<0.5	9.7	5	3.1	1.3	<0.5	<0.5
1,1-Dichloroethene (1,1-DCE)	<0.5	<0.5	8.9	4.8	2.8	0.8	<0.5	<0.5
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<2	<2	<2	<2	<2	<2	<40	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	--	<0.5	23	12	6	3.6	<0.5	0.5
Isopropylbenzene	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--
Methylene chloride	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	0.6	9.6	38	12	7.6	5.2	<0.5	1.1
Toluene	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	<0.5	2.2	9.7	3.5	2.8	2.2	<0.5	<0.5

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	1/4/93	2/8/93	3/16/93	4/8/93	5/25/93	11/29/93	12/6/93	1/5/94
1,1,1-Trichloroethane (1,1,1-TCA)	19	54	58	2.2	19	<0.5	1.5	50
1,1-Dichloroethane (1,1-DCA)	3.8	13	14	<0.5	5.4	<0.5	<0.5	12
1,1-Dichloroethene (1,1-DCE)	<0.5	10	14	<0.5	2.3	<0.5	<0.5	8.7
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--
Chloroform	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene (cis-1,2-DCE)	3.5	20	33	<0.5	7.1	<0.5	<0.5	19
Isopropylbenzene	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--
Methylene chloride	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	3.5	31	44	<0.5	9	<0.5	<0.5	38
Toluene	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	2.1	12	14	<0.5	5.2	<0.5	<0.5	14

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
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Sample Location Sample Date	SWD-7 1/21/94	SWD-7 2/7/94	SWD-7 4/24/94	SWD-7 5/5/94	SWD-7 11/1/94	SWD-7 12/28/94	SWD-7 1/4/95	SWD-7 2/13/95	SWD-7 3/2/95
1,1,1-Trichloroethane (1,1,1-TCA)	4.3	120	2.8	34	<0.5	46	<0.6	2.2	1
1,1-Dichloroethane (1,1-DCA)	1.1	22	1.2	12	<0.5	32	0.89	2.4	1.2
1,1-Dichloroethene (1,1-DCE)	0.6	14	<0.4	10	<0.5	20	<1	<1	<1
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	--	--	--	--
Chloroform	<0.5	0.6	<0.4	0.6	<0.5	<2.5	<0.5	<0.5	<0.5
Chloromethane	<2	<2	<0.4	<2	<2	<2.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene (cis-1,2-DCE)	1.3	31	--	19	<0.5	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--
Methylene chloride	<2	<200	<10	<2	<2	<10	<2	<2	<2
n-Propylbenzene	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	3	89	5.7	30	<0.5	85	2	3.9	2
Toluene	--	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	1.3	21	<0.4	12	<0.5	21	<0.5	<0.5	0.53

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	4/6/95	5/1/95	6/14/95	11/9/95	12/1/95	1/9/96	2/20/96	3/4/96	5/6/98
1,1,1-Trichloroethane (1,1,1-TCA)	2.5	16	7	<0.6	<0.6	2.5	<3	1.4	<5.00
1,1-Dichloroethane (1,1-DCA)	2.9	15	3.9	<0.5	<0.5	1.2	<2.5	0.52	<5.00
1,1-Dichloroethene (1,1-DCE)	0.9	8.1	1.7	<1	<1	<1	<5	<1	<5.00
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	<10.00
Acetone	--	--	--	--	--	--	--	--	<10.00
Chloroform	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<5.00
Chloromethane	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<10.00
cis-1,2-Dichloroethene (cis-1,2-DCE)	--	--	--	--	--	--	--	--	<5.00
Isopropylbenzene	--	--	--	--	--	--	--	--	--
m,p-Xylene	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	--	--	--	--	--	--	--	--	--
Methylene chloride	<1	<2	<2	<2	<2	<2	<10	<2	<5.00
n-Propylbenzene	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	3.9	22	5.9	<0.5	<0.5	<0.5	<2.5	0.77	<5.00
Toluene	--	--	--	--	--	--	--	--	<5.00
Trichloroethene (TCE)	1.6	7.6	2.7	<0.5	<0.5	<0.5	<2.5	<0.5	<5.00

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	12/18/98	2/26/99	10/27/99	10/27/99	12/2/99	2/2/00	2/3/00
1,1,1-Trichloroethane (1,1,1-TCA)	18	4.12	<0.500	<0.500	6.96	9.38	1.14
1,1-Dichloroethane (1,1-DCA)	3	1.25	<0.500	<0.500	0.548	1.40	<0.500
1,1-Dichloroethene (1,1-DCE)	1	0.538	<0.500	<0.500	<0.500	0.576	<0.500
1,2,3-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	--	<0.500	0.840	0.567	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
2-Butanone (MEK)	<3	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Acetone	<3	<5.00	18.4	10.9	<10.0	<10.0	<10.0
Chloroform	<0.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	<0.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	3	3.01	<0.500	<0.500	1.06	2.34	<0.500
Isopropylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-Xylene	--	<0.500	1.04	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene chloride	<0.8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Naphthalene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	17	20.9	<0.500	<0.500	5.81	13.4	2.07
Toluene	<0.8	<0.500	1.12	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	3	2.08	<0.500	<0.500	0.733	1.59	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1a
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER SAMPLES (µg/L)
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-8	SWD-9	SWD-9
Sample Date	10/9/00	11/30/00	12/14/00	2/22/01	4/24/94	5/6/98	12/14/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	<0.500 Jo	<0.4	<5.00	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500	<0.500 Jo	<0.4	<5.00	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.500	<0.4	<5.00	<0.500
1,2,3-Trichlorobenzene	<0.500 Jo	<0.500	<0.500	<0.500	--	--	<0.500
1,2,4-Trichlorobenzene	<0.500 Jo	<0.500	<0.500	<0.500	--	--	<0.500
1,2,4-Trimethylbenzene	<0.500 Jo	<0.500 Jo	<0.500	<0.500	--	--	<0.500
1,3,5-Trimethylbenzene	<0.500	<0.500 Jo	<0.500	<0.500	--	--	<0.500
2-Butanone (MEK)	<5.00 Jo	<5.00	<5.00	<5.00	--	<10.00	<5.00
Acetone	11.3	<10.0 Jo	<10.0 Jo	<10.0 Jo	--	<10.00	<10.0
Chloroform	<0.500	<0.500	<0.500	<0.500	<0.4	<5.00	<0.500
Chloromethane	<0.500	<0.500	<0.500	<0.500	<0.4	<10.00	<0.500 Jo
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	<0.500 Jo	--	<5.00	<0.500
Isopropylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	<0.500
m,p-Xylene	<0.500	<0.500	<0.500	<0.500	--	--	<0.500
Methyl tert-butyl ether (MTBE)	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	--	--	<0.500
Methylene chloride	<0.500 Jo	<0.500 Jo	<0.500	<0.500	<10	<5.00	<0.500 Jo
n-Propylbenzene	<0.500	<0.500	<0.500	<0.500	--	--	<0.500
Naphthalene	<0.500 Jo	<0.500	<0.500	<0.500	--	--	<0.500
o-Xylene	<0.500	<0.500 Jo	<0.500	<0.500	--	--	<0.500
Tetrachloroethene (PCE)	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.500 Jo	<0.4	<5.00	<0.500
Toluene	<0.500	<0.500	<0.500	<0.500	--	<5.00	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500 Jo	<0.4	<5.00	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-1B
VOLATILE ORGANIC COMPOUNDS DETECTED IN STORM WATER INFLUENT SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	SWD-1	SWD-1	SWD-2	SWD-3	SWD-3	SWD-4	SWD-5	SWD-6	SWD-7
Sample Date	2/2/00	2/3/00	2/3/00	2/3/00	3/15/00	2/3/00	2/3/00	2/3/00	2/3/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	<0.500	284	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500	<0.500	41.8	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethene (1,1-DCE)	<0.500	<0.500	<0.500	<0.500	25.6	<0.500	<0.500	<0.500	<0.500
Acetone	<10.0	<10.0	<10.0	<10.0	<250	<10.0	11.6	<10.0	<10.0
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	<0.500	85.9	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500	1000	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500	101	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-4-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD	SWD-1	SWD-1	SWD-2	SWD-2	SWD-3	SWD-3
Sample Date	2/13/98	10/27/99	2/3/00	10/27/99	2/3/00	10/27/99	10/9/00
Extractable Range Organics (C10-C24) (mg/L)	--	--	--	--	--	--	--
Motor Oil	--	--	<0.250	--	<0.250	--	--
TPH-diesel	<0.05	0.617	<0.0500	0.495	0.0566	0.485	0.195 Jy

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-3	SWD-3	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4
Sample Date	11/30/00	12/14/00	10/27/99	2/3/00	2/3/00	10/9/00	11/30/00
Extractable Range Organics (C10-C24) (mg/L)	--	--	--	--	--	--	--
Motor Oil	--	--	--	<0.250	--	--	--
TPH-diesel	0.136 Jy	0.254 NJz+	0.0809	0.115	0.240	0.215 Jy	0.217 Jy

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-4	SWD-5	SWD-5	SWD-5	SWD-5	SWD-5	SWD-6
Sample Date	12/14/00	10/27/99	2/3/00	10/9/00	11/30/00	12/14/00	2/3/00
Extractable Range Organics (C10-C24) (mg/L)	--	--	--	--	--	--	--
Motor Oil	--	--	--	--	--	--	0.862
TPH-diesel	0.166 NJz+	0.0926	0.194	0.129 Jy	0.248 Jy	0.214 NJz+	0.196

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	5/6/98	12/18/98	10/27/99	10/27/99	2/2/00	2/3/00	10/9/00
Extractable Range Organics (C10-C24) (mg/L)	0.310	<0.052	--	--	--	--	--
Motor Oil	--	<0.26	--	--	--	<0.250	--
TPH-diesel	<0.0500	<0.052	1.76	0.311	0.208	<0.0500	0.0829 Jy

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-2a
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7
Sample Date	11/30/00	12/14/00
Extractable Range Organics (C10-C24) (mg/L)	--	--
Motor Oil	--	--
TPH-diesel	0.126 Jy	0.144 NJz+

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-2b
TOTAL PETROLEUM HYDROCARBONS DETECTED IN STORM WATER INFLUENT SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	SWD-1	SWD-1	SWD-2	SWD-3	SWD-4	SWD-5	SWD-6	SWD-7
Sample Date	2/2/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00
Motor Oil	--	<0.250	<0.250	0.272	<0.250	0.479	<0.250	<0.250
TPH-diesel	0.205	0.143	<0.500	0.0804	0.0677	0.121	0.0877	0.0517

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	C1	C2	C2	C2	CR7	CR7	OUTFALL	R1
Sample Date	12/6/93	4/8/93	5/25/93	1/5/94	12/1/95	1/9/96	4/24/94	11/29/93
Dissolved Chromium	--	--	--	--	0.0191	0.00946	--	--
Hexavalent Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01
Total Chromium	<0.01	<0.01	<0.01	<0.01	--	--	--	<0.01

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	R7W	Storm Water	Stormwater Runoff	SWD	SWD-1	SWD-1	SWD-1	SWD-1
Sample Date	12/1/95	11/16/92	1/6/92	2/13/98	4/24/94	10/27/99	10/27/99	2/2/00
Dissolved Chromium	0.0131	--	--	0.49	--	--	--	--
Hexavalent Chromium	<0.01	<0.01	0.06	0.41	<0.005	<0.00500	--	<0.00500
Total Chromium	--	0.01	<0.05	0.52	--	--	0.0223	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-1	SWD-1	SWD-1	SWD-2	SWD-2	SWD-2	SWD-2	SWD-2
Sample Date	2/3/00	12/14/00	12/15/00	4/24/94	10/27/99	10/27/99	2/3/00	12/14/00
Dissolved Chromium	--	<0.0100 Jo	--	--	--	--	--	<0.0100 Jo
Hexavalent Chromium	<0.00500	<0.00500	--	<0.005	--	<0.00500	0.00945	0.0103
Total Chromium	0.00641	--	<0.0100 Jo	--	0.0177	--	<0.00500	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-2	SWD-3	SWD-3	SWD-3	SWD-3	SWD-3	SWD-3	SWD-3
Sample Date	12/14/00	4/24/94	2/26/99	10/27/99	10/27/99	10/9/00	11/30/00	12/14/00
Dissolved Chromium	--	--	<0.0100	--	--	--	<0.0100	--
Hexavalent Chromium	--	<0.005	<0.0250	--	<0.00500	0.00940	<0.00500	--
Total Chromium	0.0188	--	--	0.0232	--	--	--	<0.0100 Jo

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-3	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4
Sample Date	12/14/00	4/24/94	12/18/98	2/26/99	10/27/99	10/27/99	2/3/00	2/3/00
Dissolved Chromium	<0.0100 Jo	--	--	0.0877	--	--	--	--
Hexavalent Chromium	<0.00500	<0.005	<0.005	<0.0500	--	0.00610	<0.00500	<0.00500
Total Chromium	--	--	--	--	0.0670	--	<0.00500	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-4	SWD-4	SWD-4	SWD-4	SWD-5	SWD-5	SWD-5	SWD-5
Sample Date	10/9/00	11/30/00	12/14/00	12/14/00	4/24/94	12/17/98	2/26/99	10/27/99
Dissolved Chromium	--	<0.0100	--	<0.0100 Jo	--	--	<0.0100	--
Hexavalent Chromium	0.0222	<0.00500	--	<0.00500	0.011	<0.005	<0.0250	0.0170
Total Chromium	--	--	0.0102	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
 Former Remco Hydraulics Facility
 Willits, California
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Sample Location	SWD-5	SWD-5	SWD-5	SWD-5	SWD-5	SWD-5	SWD-6	SWD-6
Sample Date	10/27/99	2/3/00	10/9/00	11/30/00	12/14/00	12/14/00	4/24/94	12/18/98
Dissolved Chromium	--	--	--	<0.0100	--	0.0108	--	--
Hexavalent Chromium	--	<0.00500	0.00850	<0.00500	--	<0.00500 Jo	<0.005	0.0093
Total Chromium	0.141	--	--	--	0.0110	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-6	SWD-6	SWD-6	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	2/3/00	12/14/00	12/14/00	6/28/91	2/10/92	3/5/92	4/10/92	5/20/92
Dissolved Chromium	--	<0.0100	--	--	--	--	--	--
Hexavalent Chromium	<0.00500	<0.00500	--	<0.01	0.04	<0.01	0.09	0.27
Total Chromium	0.0100	--	0.922	0.07	0.02	0.08	0.022	0.22

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	6/30/92	10/1/92	12/2/92	1/4/93	2/8/93	3/16/93	4/8/93	5/25/93
Dissolved Chromium	--	--	--	--	--	--	--	--
Hexavalent Chromium	0.04	<0.01	<0.01	<0.01	0.28	0.66	<0.01	0.42
Total Chromium	0.088	0.11	0.01	0.04	0.27	0.66	<0.01	0.49

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	11/29/93	12/6/93	1/5/94	1/21/94	2/7/94	4/24/94	5/5/94	11/1/94
Dissolved Chromium	--	--	--	--	--	--	--	--
Hexavalent Chromium	<0.01	<0.01	0.19	0.01	0.2	0.006	0.31	<0.01
Total Chromium	<0.01	<0.01	0.17	0.02	0.19	--	0.34	0.1

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	12/28/94	1/4/95	2/13/95	2/13/95	3/2/95	4/6/95	5/1/95	6/14/95	11/9/95	12/1/95
Dissolved Chromium	0.137	0.0285	--	--	--	--	--	--	--	0.00874
Hexavalent Chromium	0.128	0.0179	0.026	--	0.0251	0.0558	0.177	0.228	0.022	<0.01
Total Chromium	--	--	--	0.0377	0.0239	0.0578	0.19	0.137	0.058	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	1/9/96	2/20/96	3/4/96	5/6/98	12/18/98	12/18/98	2/26/99	10/27/99
Dissolved Chromium	0.00726	--	--	--	0.01	--	<0.0100	--
Hexavalent Chromium	<0.01	0.0161	0.095	<0.0100	--	<0.005	0.00900	0.00790
Total Chromium	--	0.0228	0.104	0.00610	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	10/27/99	10/27/99	10/27/99	12/2/99	2/2/00	2/3/00	10/9/00
Dissolved Chromium	--	--	--	--	--	--	--
Hexavalent Chromium	--	<0.00500	--	0.00880	0.00745	<0.00500	<0.00500
Total Chromium	0.0158	--	0.0214	0.0113	--	<0.00500	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-8	SWD-9	SWD-9
Sample Date	11/30/00	12/14/00	12/14/00	2/22/01	2/22/01	4/24/94	5/6/98	12/14/00
Dissolved Chromium	<0.0100	<0.0100 Jo	--	--	<0.00500	--	--	--
Hexavalent Chromium	<0.00500	<0.00500	--	--	<0.00500	<0.005	<0.0100	--
Total Chromium	--	--	<0.0100 Jo	<0.00500 Jo	--	--	0.0130	<0.0100

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3a
CHROMIUM DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-9	SWD-A-A	SWD-B-A	SWD-C-A
Sample Date	12/14/00	12/2/99	12/2/99	12/2/99
Dissolved Chromium	<0.0100	--	--	--
Hexavalent Chromium	<0.00500	<0.00500	<0.00500	<0.00500
Total Chromium	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-3b
CHROMIUM DETECTED IN STORM WATER INFLUENT SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California

Sample Location	Runoff-1	Runoff-2	SWD-1	SWD-2	SWD-3	SWD-4	SWD-5	SWD-6	SWD-7
Sample Date	12/16/97	12/16/97	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00
Total Chromium	<0.0100	0.0340	<0.00500	<0.00500	0.0193	0.0150	0.402	0.00661	<0.00500

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-4-4a
METALS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

Sample Location	SWD-3	SWD-3	SWD-3	SWD-4	SWD-4	SWD-4	SWD-5
Sample Date	10/9/00	11/30/00	12/14/00	10/9/00	11/30/00	12/14/00	10/9/00
Dissolved Arsenic	--	--	--	--	--	--	--
Dissolved Beryllium	--	--	--	--	--	--	--
Dissolved Copper	--	--	--	--	--	--	--
Dissolved Iron	--	<0.300	<0.300	--	<0.300	<0.300	--
Dissolved Manganese	--	<0.0100 Jo	<0.0100 Jo	--	0.0154	0.0126	--
Dissolved Mercury	--	--	--	--	--	--	--
Dissolved Zinc	--	--	--	--	--	--	--
Total Iron	0.806	--	--	1.69	--	--	0.617
Total Manganese	0.0449	--	--	0.0677	--	--	0.0650

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-4a
METALS DETECTED IN STORM WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-5	SWD-5	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	11/30/00	12/14/00	10/9/00	11/30/00	12/14/00	2/22/01
Dissolved Arsenic	--	--	--	--	--	<0.00500 Jo
Dissolved Beryllium	--	--	--	--	--	<0.00100 Jo
Dissolved Copper	--	--	--	--	--	<0.0100 Jo
Dissolved Iron	<0.300	<0.300	--	<0.300 Jo	<0.300	--
Dissolved Manganese	0.0171	<0.0100 Jo	--	0.0573	<0.0100 Jo	--
Dissolved Mercury	--	--	--	--	--	<0.000200 Jo
Dissolved Zinc	--	--	--	--	--	0.265
Total Iron	--	--	1.34	--	--	--
Total Manganese	--	--	0.0849	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
Page 1 of 6

Sample Location	C1	C2	R1	SWD-1	SWD-1	SWD-2	SWD-2	SWD-3
Sample Date	12/6/93	1/5/94	11/29/93	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	--
Alkalinity, Total (mg/L)	--	--	--	--	--	--	--	--
Chloride (mg/L)	--	--	--	--	--	--	--	--
Dissolved Calcium (mg/L)	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	--	--	--
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	--	--	--
pH (pH Units)	6.5	6.2	5.1	--	--	--	--	--
Solids, total dissolved (mg/L)	44	200	<5	--	--	--	--	--
Solids, total suspended (mg/L)	--	--	--	<5.00	76.0	<5.00	<5.00	24.0
Sulfate (mg/L)	--	--	--	--	--	--	--	--
Sulfide (mg/L)	--	--	--	--	--	--	--	--
Total Calcium (mg/L)	--	--	--	--	--	--	--	--
Total Organic Carbon (mg/L)	--	--	--	10.5	4.98	3.83	6.75	3.57
Total Potassium (mg/L)	--	--	--	--	--	--	--	--
Total Sodium (mg/L)	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-3	SWD-3	SWD-3	SWD-3	SWD-3	SWD-4	SWD-4
Sample Date	10/9/00	11/30/00	11/30/00	12/14/00	12/14/00	2/3/00	2/3/00
Alkalinity, Bicarbonate (mg/L)	<20.0	52.0	--	--	36.0	--	--
Alkalinity, Total (mg/L)	<20.0	52.0	--	--	36.0	--	--
Chloride (mg/L)	8.46	8.62	--	--	9.77	--	--
Dissolved Calcium (mg/L)	--	--	16.6	13.2	--	--	--
Dissolved Potassium (mg/L)	--	--	3.39	<0.00250 Jo	--	--	--
Dissolved Sodium (mg/L)	--	--	7.34	5.95	--	--	--
Nitrate (mg/L)	<1.00 Jo	--	--	--	<1.00 Jo	--	--
Nitrate-Nitrogen (mg/L)	--	<1.00 Jo	--	--	--	--	--
pH (pH Units)	--	--	--	--	--	--	--
Solids, total dissolved (mg/L)	--	--	--	--	--	--	--
Solids, total suspended (mg/L)	--	--	--	--	--	14.0	<5.00
Sulfate (mg/L)	16.3	7.85	--	--	6.52	--	--
Sulfide (mg/L)	2.72	<0.500	--	--	0.555	--	--
Total Calcium (mg/L)	4.25	--	--	--	--	--	--
Total Organic Carbon (mg/L)	--	--	--	--	--	2.32	8.28
Total Potassium (mg/L)	<0.00250 Jo	--	--	--	--	--	--
Total Sodium (mg/L)	1.38	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-4	SWD-4	SWD-4	SWD-4	SWD-4	SWD-5	SWD-5
Sample Date	10/9/00	11/30/00	11/30/00	12/14/00	12/14/00	2/3/00	10/9/00
Alkalinity, Bicarbonate (mg/L)	<20.0	36.0	--	32.0	--	--	<20.0
Alkalinity, Total (mg/L)	<20.0	36.0	--	32.0	--	--	<20.0
Chloride (mg/L)	2.34	<5.00 Jo	--	10.1	--	--	2.09
Dissolved Calcium (mg/L)	--	--	11.2	--	12.9	--	--
Dissolved Potassium (mg/L)	--	--	<0.00250 Jo	--	<0.00250 Jo	--	--
Dissolved Sodium (mg/L)	--	--	9.54	--	6.14	--	--
Nitrate (mg/L)	<1.00 Jo	--	--	<1.00 Jo	--	--	<1.00 Jo
Nitrate-Nitrogen (mg/L)	--	<1.00	--	--	--	--	--
pH (pH Units)	--	--	--	--	--	--	--
Solids, total dissolved (mg/L)	--	--	--	--	--	--	--
Solids, total suspended (mg/L)	--	--	--	--	--	18.0	--
Sulfate (mg/L)	2.81	<5.00 Jo	--	6.03	--	--	3.41
Sulfide (mg/L)	4.34	0.720	--	<0.500	--	--	6.86
Total Calcium (mg/L)	5.28	--	--	--	--	--	4.67
Total Organic Carbon (mg/L)	--	--	--	--	--	5.92	--
Total Potassium (mg/L)	<0.00250 Jo	--	--	--	--	--	<0.00250 Jo
Total Sodium (mg/L)	1.22	--	--	--	--	--	1.45

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-5	SWD-5	SWD-5	SWD-5	SWD-6	SWD-6	SWD-7
Sample Date	11/30/00	11/30/00	12/14/00	12/14/00	2/3/00	2/3/00	11/29/93
Alkalinity, Bicarbonate (mg/L)	34.0	--	30.0	--	--	--	--
Alkalinity, Total (mg/L)	34.0	--	30.0	--	--	--	--
Chloride (mg/L)	<5.00 Jo	--	12.4	--	--	--	--
Dissolved Calcium (mg/L)	--	11.5	--	12.5	--	--	--
Dissolved Potassium (mg/L)	--	<0.00250 Jo	--	<0.00250 Jo	--	--	--
Dissolved Sodium (mg/L)	--	9.99	--	6.20	--	--	--
Nitrate (mg/L)	--	--	<1.00 Jo	--	--	--	--
Nitrate-Nitrogen (mg/L)	<1.00	--	--	--	--	--	--
pH (pH Units)	--	--	--	--	--	--	6.1
Solids, total dissolved (mg/L)	--	--	--	--	--	--	10
Solids, total suspended (mg/L)	--	--	--	--	15.0	34.0	--
Sulfate (mg/L)	<5.00	--	5.33	--	--	--	--
Sulfide (mg/L)	<0.500	--	0.825	--	--	--	--
Total Calcium (mg/L)	--	--	--	--	--	--	--
Total Organic Carbon (mg/L)	--	--	--	--	4.12	4.54	--
Total Potassium (mg/L)	--	--	--	--	--	--	--
Total Sodium (mg/L)	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	12/6/93	1/5/94	1/21/94	2/7/94	5/5/94	2/3/00	2/3/00	10/9/00
Alkalinity, Bicarbonate (mg/L)	--	--	--	--	--	--	--	<20.0
Alkalinity, Total (mg/L)	--	--	--	--	--	--	--	<20.0
Chloride (mg/L)	--	--	--	--	--	--	--	1.36
Dissolved Calcium (mg/L)	--	--	--	--	--	--	--	--
Dissolved Potassium (mg/L)	--	--	--	--	--	--	--	--
Dissolved Sodium (mg/L)	--	--	--	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	--	--	<1.00 Jo
Nitrate-Nitrogen (mg/L)	--	--	--	--	--	--	--	--
pH (pH Units)	6.1	6.5	6.2	6.3	6.7	--	--	--
Solids, total dissolved (mg/L)	10	130	14	140	--	--	--	--
Solids, total suspended (mg/L)	--	--	--	--	--	<5.00	<5.00	--
Sulfate (mg/L)	--	--	--	--	--	--	--	2.64
Sulfide (mg/L)	--	--	--	--	--	--	--	6.84
Total Calcium (mg/L)	--	--	--	--	--	--	--	3.30
Total Organic Carbon (mg/L)	--	--	--	--	--	2.27	6.53	--
Total Potassium (mg/L)	--	--	--	--	--	--	--	<0.00250 Jo
Total Sodium (mg/L)	--	--	--	--	--	--	--	0.699

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5a
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER SAMPLES
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWD-7	SWD-7	SWD-7	SWD-7	SWD-7
Sample Date	11/15/00	11/30/00	11/30/00	12/14/00	12/14/00
Alkalinity, Bicarbonate (mg/L)	--	22.0	--	--	<20.0
Alkalinity, Total (mg/L)	--	22.0	--	--	<20.0
Chloride (mg/L)	--	15.1	--	--	14.7
Dissolved Calcium (mg/L)	--	--	8.26	7.15	--
Dissolved Potassium (mg/L)	--	--	<0.00250 Jo	<2.50	--
Dissolved Sodium (mg/L)	--	--	8.18	7.49	--
Nitrate (mg/L)	--	--	--	--	7.56
Nitrate-Nitrogen (mg/L)	--	<1.00 Jo	--	--	--
pH (pH Units)	--	--	--	--	--
Solids, total dissolved (mg/L)	--	--	--	--	--
Solids, total suspended (mg/L)	11.0	--	--	--	--
Sulfate (mg/L)	--	<5.00 Jo	--	--	7.71
Sulfide (mg/L)	--	0.630	--	--	0.600
Total Calcium (mg/L)	--	--	--	--	--
Total Organic Carbon (mg/L)	--	--	--	--	--
Total Potassium (mg/L)	--	--	--	--	--
Total Sodium (mg/L)	--	--	--	--	--

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-4-5b
GENERAL MINERALS DETECTED AND OTHER ANALYSES IN STORM WATER INFLUENT SAMPLES
Former Remco Hydraulics Facility
Willits, California

Sample Location	SWD-1	SWD-2	SWD-3	SWD-4	SWD-5	SWD-6	SWD-7
Sample Date	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00	2/3/00
Solids, total suspended	<5.00	<5.00	24.0	14.0	18.0	15.0	<5.00
Total Organic Carbon	10.5	3.83	3.57	2.32	5.92	4.12	2.27

Notes:

mg/L = milligrams per liter

< = less than

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-5-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SURFACE WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

Sample Location	S-09	S-10	SDD-1	SDD-2	Southwest Corner	SW-01	SW-02	SW-03
Sample Date	5/6/98	5/6/98	12/16/97	12/16/97	3/5/92	11/10/99	11/10/99	11/10/99
1,1,1-Trichloroethane (1,1,1-TCA)	<5.00	<5.00	<0.500	1.5	<0.5	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<5.00	<5.00	<0.500	0.72	<0.5	<0.500	<0.500	<0.500
Chloroform	<5.00	<5.00	<0.500	0.66	<0.5	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<5.00	<5.00	<0.500	0.86	<0.5	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	--	--	<0.500	2.7	--	<0.500	<0.500	0.638
Tetrachloroethene (PCE)	<5.00	<5.00	<0.500	0.84	<0.5	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<5.00	<5.00	<0.500	0.57	<0.5	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SURFACE WATER SAMPLES (µg/L)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 2

Sample Location	SW-04	SW-05	SW-06	SW-07	SW-08	SWBA-1	SWBA-2	SWBR-1	SWBR-2
Sample Date	11/10/99	11/10/99	11/9/99	11/9/99	11/9/99	12/16/97	12/16/97	12/16/97	12/16/97
1,1,1-Trichloroethane (1,1,1-TCA)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane (1,1-DCA)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methyl tert-butyl ether (MTBE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

Notes:

µg/L = micrograms per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix

TABLE 5-5-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 3

Sample Location	DD-3	S-09	S-10	SDD-1	SDD-2	SW-01	SW-02	SW-03
Sample Date	12/16/97	5/6/98	5/6/98	12/16/97	12/16/97	11/10/99	11/10/99	11/10/99
TPH-diesel	<0.0500	<0.0500	<0.0500	<0.0500	0.140	0.176	0.159	0.114

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 3

Sample Location	SW-04	SW-05	SW-06	SW-07	SW-08	SW-09	SW-10
Sample Date	11/10/99	11/10/99	11/9/99	11/9/99	11/9/99	11/9/99	11/9/99
TPH-diesel	0.124	0.117	<0.0500	0.0996	<0.0500	0.312	0.114

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 3 of 3

Sample Location	SW-11	SWBA-1	SWBA-2	SWBR-1	SWBR-2
Sample Date	11/9/99	12/16/97	12/16/97	12/16/97	12/16/97
TPH-diesel	0.0648	<0.050	<0.0500	<0.0500	<0.0500

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-3
TOTAL METALS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 3

Sample Location	DD-3	S-09	S-10	SDD-1	SDD-2	SW-01	SW-02	SW-03
Sample Date	12/16/97	5/6/98	5/6/98	12/16/97	12/16/97	11/10/99	11/10/99	11/10/99
Total Copper	---	---	---	---	---	0.0187	0.0230	0.0259
Total Lead	---	---	---	---	---	<0.0750	<0.0750	0.0103
Total Zinc	---	---	---	---	---	0.0376	0.171	0.203
Total Chromium	<0.0100	0.00430	0.00170	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-3
TOTAL METALS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 3

Sample Location	SW-04	SW-05	SW-06	SW-07	SW-08	SW-09	SW-10	SW-11
Sample Date	11/10/99	11/10/99	11/9/99	11/9/99	11/9/99	11/9/99	11/9/99	11/9/99
Total Copper	0.0533	0.0148	0.0206	0.0177	0.0213	0.0191	0.0242	0.0173
Total Lead	<0.0750	<0.0750	<0.0750	<0.0750	0.00477	<0.0750	<0.0750	<0.0750
Total Zinc	0.0613	0.113	0.0255	0.0376	0.0263	0.0340	0.0451	0.0511
Total Chromium	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-5-3
TOTAL METALS DETECTED IN SURFACE WATER SAMPLES (mg/L)
Former Remco Hydraulics Facility
Willits, California
Page 3 of 3

Sample Location	SWBA-2	SWBR-1	SWBR-2	WBDN	WBUP
Sample Date	12/16/97	12/16/97	12/16/97	4/22/91	4/22/91
Total Copper	---	---	---	---	---
Total Lead	<0.0100	<0.0100	<0.0100	<0.01	<0.01
Total Zinc	---	---	---	---	---
Total Chromium	---	---	---	---	---

Notes:

mg/L = milligrams per liter

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

TABLE 5-6-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SEDIMENT SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 3

Sample Location	BC-1	BC-2	BC-3	BC-4	BC-5	S-09	S-10	SB-113
Sample Date	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	5/6/98	5/6/98	12/6/00
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.00	<10.00	<25.0
Acetone	<20.0	<20.0	<20.0	<20.0	<20.0	<10.00	<10.00	<125 Jo
Methylene chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<12.5 Jo
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<12.5
Toluene	<5.00	<5.00	21.3	<5.00	<5.00	<5.00	<5.00	<12.5

Notes:

µg/kg = micrograms per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SEDIMENT SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-114	SB-115	SB-116	SB-117	SB-118	SB-119	SB-128	SDD-1	SDD-2
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0	0
2-Hexanone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 Jo	--	--
Acetone	<50.0 Jo	<50.0 Jo	<50.0 Jo	<50.0 Jo	<50.0 Jo	<50.0 Jo	<50.0 Jo	--	--
Methylene chloride	<5.00	<5.00	<5.00 Jo	<5.00	<5.00	<5.00 Jo	<5.00	<5.00	<5.00
Naphthalene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 Jo	--	--
Toluene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--

Notes:

µg/kg = micrograms per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN SEDIMENT SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SDD-6	SDD-7	SDD-8	SWBA-1	SWBA-2	SWBR-1	SWBR-2
Sample Date	11/10/99	11/10/99	11/10/99	12/16/97	12/16/97	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0	0	0	0
2-Hexanone	<10.0	<10.0	<10.0	--	--	--	--
Acetone	47.6	<20.0	<20.0	--	--	--	--
Methylene chloride	<5.00	<5.00	<5.00	<0.0050	<0.0050	<0.0050	<0.0050
Naphthalene	<5.00	<5.00	<5.00	--	--	--	--
Toluene	<5.00	<5.00	<5.00	--	--	--	--

Notes:

µg/kg = micrograms per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 4

Sample Location	BC-1	BC-2	BC-3	BC-4	BC-5	DD-1	DD-2
Sample Date	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--
TPH-diesel	<5.00	<5.00	65.8	<5.00	<5.00	<5.00	<5.00

Notes:

mg/kg = milligrams per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 4

Sample Location	DD-3	DD-4	S-09	S-10	SB-113	SB-114	SB-115
Sample Date	12/16/97	12/16/97	5/6/98	5/6/98	12/6/00	12/7/00	12/7/00
Sample Depth (feet bgs)	0	0	0	0	0	0	0
Extractable Range Organics (C10-C24)	--	--	60.00	48.00	--	--	--
TPH-diesel	5.70	5.40	<2.00	<2.00	<10.0 Jo	22.7 NJx	<5.00 Jo

Notes:

mg/kg = milligrams per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SB-116	SB-117	SB-118	SB-119	SB-128	SDD-1	SDD-2	SDD-6	SDD-7
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/7/00	12/16/97	12/16/97	11/10/99	11/10/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0	0
Extractable Range Organics (C10-C24)	--	--	--	--	--	--	--	--	--
TPH-diesel	<5.00 Jo	<5.00 Jo	12.7 Jy	<5.00 Jo	10.1 Jy	13.00	60.00	17.4	6.76

Notes:

mg/kg = milligrams per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-2
TOTAL PETROLEUM HYDROCARBONS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SDD-8	SWBA-1	SWBA-2	SWBR-1	SWBR-2
Sample Date	11/10/99	12/16/97	12/16/97	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0	0
Extractable Range Organics (C10-C24)	--	--	--	--	--
TPH-diesel	<5.00	2.6	9.30	<5.00	<5.00

Notes:

mg/kg = milligrams per kilogram

bgs = below ground surface

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-3
CHROMIUM DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	BC-1	BC-2	BC-3	BC-4	BC-5	DD-1	DD-2	DD-3
Sample Date	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	12/16/97	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0
Hexavalent Chromium	<0.200	<0.100	<0.100	<0.100	<0.100	<0.500	5.90	<5.00
Total Chromium	43.3	41.2	31.2	26.5	37.7	35.00	46.00	25.00

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-3
CHROMIUM DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 5

Sample Location	DD-4	S-01	S-02	S-03	S-04	S-05	S-06	S-07
Sample Date	12/16/97	9/20/00	9/20/00	9/20/00	9/20/00	9/20/00	9/20/00	9/20/00
Sample Depth (feet bgs)	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hexavalent Chromium	<5.00	<0.0130	<0.0130	<0.0130	<0.0130	<0.0130	<0.0130	<0.0130
Total Chromium	27.00	35.4 J+	40.6 J+	45.9 J+	54.3 J+	54.4 J+	44.1 J+	71.9 J+

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-3
CHROMIUM DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	S-08	S-09	S-10	SB-113	SB-114	SB-115	SB-116
Sample Date	9/20/00	5/6/98	5/6/98	12/6/00	12/7/00	12/7/00	12/7/00
Sample Depth (feet bgs)	0.1	0	0	0	0	0	0
Hexavalent Chromium	<0.0130	<0.0500	<0.0500	<0.0260	<0.0260 Jo	<0.0260 Jo	<0.0260 Jo
Total Chromium	41.6 J+	110.00	62.00	--	--	--	--

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-3
CHROMIUM DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 4 of 5

Sample Location	SB-117	SB-118	SB-119	SB-128	SDD-1	SDD-2	SDD-6	SDD-7	SDD-8
Sample Date	12/7/00	12/7/00	12/7/00	12/7/00	12/16/97	12/16/97	11/10/99	11/10/99	11/10/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0	0
Hexavalent Chromium	<0.0260 UJ-	<0.0260 UJ-	<0.0260 UJ-	<0.0260	<0.500	<0.500	<0.100	<0.100	<0.100
Total Chromium	--	--	--	--	47.00	25.00	29.1	26.0	26.4

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-3
CHROMIUM DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	SWBA-1	SWBA-2	SWBR-1	SWBR-2
Sample Date	12/16/97	12/16/97	12/16/97	12/16/97
Sample Depth (feet bgs)	0	0	0	0
Hexavalent Chromium	<0.500	<0.0500	<0.500	<0.500
Total Chromium	46.00	42.00	45.00	48.00

Notes:

mg/kg = milligrams per kilogram

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-4
TOTAL METALS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

Sample Location	BC-1	BC-2	BC-3	BC-4	BC-5	S-01	S-02	S-03	S-04
Sample Date	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	9/20/00	9/20/00	9/20/00	9/20/00
Sample Depth (feet bgs)	0	0	0	0	0	0.1	0.1	0.1	0.1
Total Arsenic	4.55	<10.0	<10.0	10.3	<10.0	3.04 J-	4.43 J-	2.56 J-	3.38 J-
Total Beryllium	0.480	0.526	0.473	0.460	0.527	0.424	0.474	0.330	0.397
Total Cadmium	<1.00	<1.00	<1.00	<1.00	<1.00	0.0706	0.0696	0.0751	0.0807
Total Copper	39.8	44.3	30.1	43.4	26.8	18.9	22.6	19.0	23.1
Total Lead	<7.50	9.81	18.4	8.85	<7.50	10.4	10.6	9.97	12.2
Total Mercury	0.179	0.195	<0.0500	<0.0500	<0.0500	0.0269	0.0240	0.0195	0.0252
Total Nickel	63.3	58.5	44.4	37.4	59.5	47.7 J+	57.7 J+	62.3 J+	66.2 J+
Total Selenium	<10.0	<10.0	<10.0	<10.0	<10.0	<0.397 Jo UJ-	<0.391 Jo UJ-	<0.397 UJ-	<0.321 UJ-
Total Thallium	<10.0	<10.0	<10.0	<10.0	<10.0	<0.397 Jo	<0.391 Jo	<0.397 Jo	<0.321 Jo
Total Zinc	66.7	85.7	169	74.6	53.3	67.2	77.9	70.9	81.0

Notes:

mg/kg = milligrams per kilogram

< = less than

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

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TABLE 5-6-4
TOTAL METALS DETECTED IN SEDIMENT SAMPLES (mg/kg)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 2

Sample Location	S-05	S-06	S-07	S-08	SDD-6	SDD-7	SDD-8
Sample Date	9/20/00	9/20/00	9/20/00	9/20/00	11/10/99	11/10/99	11/10/99
Sample Depth (feet bgs)	0.1	0.1	0.1	0.1	0	0	0
Total Arsenic	2.95 J-	2.76 J-	2.55 J-	1.02 J-	<10.0	<10.0	<10.0
Total Beryllium	0.439	0.480	0.409	0.425	0.491	0.395	0.464
Total Cadmium	0.123	0.0626	0.0856	<0.0338 Jo	<1.00	<1.00	<1.00
Total Copper	22.9	25.3	37.8	38.8	70.8	33.4	50.1
Total Lead	9.47	14.8	11.8	3.90	84.0	<7.50	8.56
Total Mercury	0.0192	0.0341	0.0226	0.0430	0.0816	<0.0500	<0.0500
Total Nickel	88.6 J+	57.0 J+	71.0 J+	52.6 J+	35.1	37.7	49.0
Total Selenium	<0.333 UJ-	<0.417 UJ-	<0.446 UJ-	<0.338 Jo UJ-	<10.0	<10.0	<10.0
Total Thallium	<0.333 Jo	<0.417 Jo	<0.446 Jo	<0.338	<10.0	<10.0	<10.0
Total Zinc	72.4	78.5	105	78.4	154	60.0	77.3

Notes:

mg/kg = milligrams per kilogram

< = less than

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

Data qualifiers are defined in Appendix 5-3, Table 2.

TABLE 5-6-5
PAHs DETECTED IN SEDIMENT SAMPLES (µg/kg)
Former Remco Hydraulics Facility
Willits, California

Sample Location	BC-1	BC-2	BC-3	BC-4	BC-5	SDD-6	SDD-7	SDD-8
Sample Date	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99	11/10/99
Sample Depth (feet bgs)	0	0	0	0	0	0	0	0
Fluoranthene	<68.0	<34.0	223	<34.0	<68.0	<340	<68.0	<68.0

Notes:

µg/kg = micrograms per kilogram

< = less than

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-7-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN AIR SAMPLES (ppbv)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 2

Sample Location Sample Date	AS-01 8/13/99	AS-02 8/13/99	AS-03 8/13/99	AS-04 11/9/99	AS-04 3/22/00	AS-05 11/9/99	AS-06 11/9/99	AS-07 2/23/00
1,1,1-Trichloroethane (1,1,1-TCA)	0.0155	0.00664	0.0188	<0.0210	<0.000885	<0.000830	<0.000830	<0.000800
1,1-Dichloroethane (1,1-DCA)	<0.000412	<0.000618	0.00173	<0.0150	<0.000659	<0.000610	<0.000610	<0.000590
1,1-Dichloroethene (1,1-DCE)	<0.000403	<0.000604	0.00403	<0.0150	<0.000645	<0.000600	<0.000600	<0.000580
1,2,4-Trichlorobenzene	0.000752	<0.00113	<0.00128	<0.0280	<0.00120	<0.00110	<0.00110	<0.00110
1,2,4-Trimethylbenzene	<0.000499	<0.000748	<0.000848	<0.0180	<0.000798	<0.000740	<0.000740	<0.000720
1,4-Dioxane	0.00322	0.00659	0.0201	<0.0680	<0.00289	<0.00270	0.00610	0.00430
2-Butanone (MEK)	0.00299	0.00807	<0.00251	<0.0560	0.00478	<0.00220	0.00600	<0.00220
2-Propanol	0.00184	0.00548	<0.00209	<0.0460	0.0274	<0.00190	<0.00190	0.00290
Acetone	0.0116	0.00434	0.0181	<0.0450	0.0224	0.00560	0.00930	0.0500
Benzene	<0.000325	<0.000488	<0.000553	<0.0120	0.000878	0.00140	0.00130	0.00120
Carbon disulfide	<0.00158	<0.00240	0.00272	<0.0590	<0.00250	<0.00240	0.00470	<0.00230
Carbon tetrachloride	<0.000640	<0.000960	<0.00109	<0.0240	<0.00102	<0.000950	<0.000950	<0.000920
Chloroform	<0.000495	<0.000742	<0.000841	<0.0480	0.00356	<0.000740	<0.000740	<0.000710
Chloromethane	<0.000210	0.00174	0.00130	<0.00780	0.00136	0.00190	0.00120	0.00200
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.000399	<0.000599	0.00144	<0.0150	<0.000638	<0.000600	<0.000600	<0.000580
Dichlorodifluoromethane	0.00246	0.00407	0.00347	<0.0190	0.00357	0.00290	<0.000300	0.00570
Ethanol	0.00535	0.0153	0.00859	2.50	0.191	0.00650	0.00270	0.00920
Ethylbenzene	0.000440	<0.000660	<0.000748	<0.0160	<0.000704	<0.000660	<0.000660	<0.000640
Hexane	<0.00178	<0.00271	<0.00300	<0.0670	<0.00282	<0.00270	<0.00270	<0.00260
m,p-Xylene	0.000440	0.00110	<0.000748	<0.0160	0.000748	0.000670	0.00110	<0.000640
Methyl tert-butyl ether (MTBE)	<0.00183	<0.00278	<0.00307	<0.0680	<0.00289	<0.00270	<0.00270	<0.00260
Methylene chloride	<0.000353	<0.000530	0.00349	<0.0130	<0.000565	0.000620	0.000980	0.0240
o-Xylene	<0.000440	<0.000660	<0.000748	<0.0160	<0.000704	<0.000660	<0.000660	<0.000640
Tetrachloroethene (PCE)	<0.000690	<0.00103	<0.00117	<0.0260	0.00352	<0.00100	<0.00100	<0.000990
Tetrahydrofuran	<0.00149	<0.00227	<0.00251	<0.0560	<0.00236	0.0120	0.00300	<0.00220
Toluene	0.000383	0.00651	<0.000651	0.0290	0.00222	0.00190	0.00490	0.00170
Trichlorofluoromethane	0.00217	0.00239	0.000969	<0.0210	0.00114	0.000940	0.00140	0.00710

Notes:

ppbv = parts per billion volume

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-7-1
VOLATILE ORGANIC COMPOUNDS DETECTED IN AIR SAMPLES (ppbv)
Former Remco Hydraulics Facility
Willits, California
Page 2 of 2

Sample Location	AS-08	AS-09	AS-10	AS-11	AS-12	AS-13	AS-14
Sample Date	2/23/00	3/22/00	3/22/00	3/22/00	3/22/00	3/22/00	3/22/00
1,1,1-Trichloroethane (1,1,1-TCA)	<0.000810	<0.00133	<0.00133	0.000371	<0.00144	0.000404	<0.000774
1,1-Dichloroethane (1,1-DCA)	<0.000600	<0.000989	<0.000989	<0.000906	<0.00107	<0.000948	<0.000577
1,1-Dichloroethene (1,1-DCE)	<0.000590	<0.000967	<0.000967	<0.000887	<0.00105	<0.000927	<0.000564
1,2,4-Trichlorobenzene	<0.00110	<0.00180	<0.00180	<0.00165	<0.00196	<0.00173	<0.00105
1,2,4-Trimethylbenzene	<0.000730	<0.00120	0.000649	<0.00110	<0.00130	<0.00115	<0.000699
1,4-Dioxane	0.0470	<0.00439	<0.00439	0.00732	0.00307	<0.00439	0.00322
2-Butanone (MEK)	<0.00220	0.00215	0.00538	0.00245	0.00233	0.00114	<0.00209
2-Propanol	0.00290	0.00129	0.00222	0.00212	0.000872	0.000872	<0.00174
Acetone	0.0160	0.0130	0.0289	0.0145	0.0159	0.00843	0.00843
Benzene	0.00100	0.00120	0.00163	0.00127	0.00111	0.000553	0.00107
Carbon disulfide	0.00340	<0.00379	0.00632	0.00474	0.00442	<0.00379	<0.00221
Carbon tetrachloride	<0.000930	0.000557	0.000640	0.000506	0.000582	0.000704	<0.000896
Chloroform	<0.000720	<0.00119	<0.00119	0.000218	<0.00129	<0.00114	<0.000693
Chloromethane	0.00170	0.00176	0.00357	0.00315	0.00336	0.00141	0.00132
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.000590	<0.000958	<0.000958	<0.000878	<0.00104	<0.000918	<0.000559
Dichlorodifluoromethane	0.00410	0.00367	0.00372	0.00397	0.00342	0.00377	0.00357
Ethanol	0.00640	0.0141	0.0117	0.00783	0.00535	0.00325	0.00306
Ethylbenzene	0.000660	0.000484	0.000660	<0.000968	<0.00114	<0.00101	<0.000616
Hexane	<0.00260	<0.00428	0.00121	<0.00393	<0.00464	<0.00428	<0.00250
m,p-Xylene	0.00190	0.00141	0.00189	0.000792	<0.00114	<0.00101	0.00128
Methyl tert-butyl ether (MTBE)	<0.00270	0.00183	0.00366	<0.00403	<0.00476	<0.00439	<0.00256
Methylene chloride	0.000560	0.000671	0.00141	0.00134	0.000777	0.000706	<0.000494
o-Xylene	<0.000640	0.000440	0.00114	<0.000968	<0.00114	<0.00101	<0.000616
Tetrachloroethene (PCE)	<0.00100	<0.00166	<0.00166	<0.00152	<0.00179	<0.00159	<0.000966
Tetrahydrofuran	<0.00220	<0.00359	<0.00359	<0.00329	<0.00389	<0.00359	<0.00209
Toluene	0.00320	0.00299	0.00843	0.00613	0.00103	0.00149	0.00260
Trichlorofluoromethane	0.00160	0.00108	0.00114	0.00108	0.00120	0.000912	0.000855

Notes:

ppbv = parts per billion volume

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

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TABLE 5-7-2
CHROMIUM DETECTED IN AIR SAMPLES (ppbv)
Former Remco Hydraulics Facility
Willits, California

Sample Location	AS-06	AS-07	AS-08	PB-1012-01	PB-1012-02	PB-1012-04	PEL-1	PEL-2	PEL-3*	PEL-4
Sample Date	11/9/99	2/23/00	2/23/00	10/21/99	10/21/99	10/21/99	12/18/98	12/18/98	11/12/98	11/12/98
Hexavalent Chromium	<0.000525	<0.000521	<0.000521	<0.000500	<0.00100	<0.00100	0.00918	--	0.548	--
Total Chromium	<0.0000625	--	--	--	--	--	--	0.00156	--	0.01646

Notes:

ppbv = parts per billion volume

< = less than

-- = not analyzed

Bold values indicate a detection.

For a complete summary of results see Appendix 5-1.

* This sample was accidentally dropped into a waste bin containing hazardous substances and is not considered representative of Facility conditions.

TABLE 5-8-1
METALS IN DETECTED IN WIPE SAMPLES (µg/WIPE)
Former Remco Hydraulics Facility
Willits, California
Page 1 of 3

Sample Location	BW-01	BW-02	BW-03	BW-04	BW-06	BW-07	BW-08	BW-09	BW-10	BW-11
Sample Date	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99	8/13/99
Hexavalent Chromium	270	26	190	11	1200	6200	470	320	58	24
Total Chromium	530	650	840	410	4700	12000	1100	380	410	220
Total Lead	800	810	1100	720	4000	17000	5700	1000	730	260

Notes:

µg/WIPE = micrograms per wipe

< = less than

-- = Not analyzed

Bold vaules indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

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TABLE 5-8-1
METALS IN DETECTED IN WIPE SAMPLES (µg/WIPE)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	BW-12	BW-13	BW-13	BW-14	BW-14	BW-15	BW-15	BW-16	BW-17	WS-1
Sample Date	8/13/99	8/13/99	12/14/99	8/13/99	12/14/99	8/13/99	12/14/99	2/23/00	2/23/00	12/16/97
Hexavalent Chromium	7	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30	<2.00	<1.30	--
Total Chromium	340	--	--	--	--	--	--	--	--	18.0
Total Lead	86	---	---	---	---	---	---	---	---	---

Notes:

µg/WIPE = micrograms per wipe

< = less than

-- = Not analyzed

Bold vaules indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

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TABLE 5-8-1
METALS IN DETECTED IN WIPE SAMPLES (µg/WIPE)
Former Remco Hydraulics Facility
Willits, California
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Sample Location	WS-2	WS-3	WS-4
Sample Date	12/16/97	12/16/97	12/16/97
Hexavalent Chromium	--	--	--
Total Chromium	51.0	110	20.0
Total Lead	---	---	---

Notes:

µg/WIPE = micrograms per wipe

< = less than

-- = Not analyzed

Bold vaules indicate a detection.

For a complete list of analytes, please refer to Appendix 5-1.

TABLE 6-1
SUMMARY OF CHEMICALS DETECTED AT CONCENTRATIONS ABOVE THE
PRELIMINARY SCREENING CRITERIA BY FACILITY LOCATION
Former Remco Facility
Willits, California
Page 1 of 3

	Facility Location	Media ^a	VOCs					TPH	PAHs	PCBs	Hexavalent Chromium	Other Metals
			Halogenated VOCs	Ketones	Aromatics	Ethers	Other					
Plating Department	Building 1945	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	-	-	-	-	-	-	-	-	-	-
		Deeper Soil	-	-	-	-	-	-	-	-	-	-
		A-zone GW	1,2-DCA, 1,1-DCE, 1,1-DCA, vinyl chloride	-	Benzene	1,4-dioxane	Carbon disulfide	-	-	-	Hexavalent chromium	Dissolved Sb, Be
		B-zone GW	-	-	-	-	Carbon disulfide	-	-	-	Hexavalent chromium	-
		C-zone GW	-	-	-	-	-	-	-	-	-	-
	Building 1964	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	1,1-DCE	-	-	-	-	-	-	-	Hexavalent chromium	Total Cr, Sb, Cd, Cu
		Deeper Soil	-	-	-	-	-	-	-	-	Hexavalent chromium	Total Cr, Pb
		A-zone GW	1,1,2-TCA; 1,2-DCA; PCE; TCE; cis-1,2-DCE; 1,1-DCE; 1,1-DCA; vinyl chloride	Acetone	Benzene	1,4-dioxane	carbon disulfide	-	-	-	Hexavalent chromium	Dissolved Sb, Be
		B-zone GW	1,1-DCA, 1,1-DCE, cis-1,2-DCE	-	Benzene	1,4-dioxane	-	-	-	-	Hexavalent chromium	-
		C-zone GW	1,1-DCA	-	Benzene	1,4-dioxane	-	-	-	-	Hexavalent chromium	-
	Building 1973	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	-	-	-	-	-	Diesel and motor oil	-	-	-	-
		Deeper Soil	-	-	-	-	-	Diesel	-	-	-	-
		A-zone GW	1,2-DCA, 1,1,1-TCA, 1,1-DCE; 1,1-DCA	-	Benzene, toluene	1,4-dioxane	-	Diesel (in and North of)	-	-	-	Dissolved Sb
		B-zone GW	1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, TCE	-	Benzene	1,4-dioxane	Carbon disulfide	-	-	-	Hexavalent chromium	-
		C-zone GW	1,1-DCA, 1,1-DCE, PCE, TCE	-	-	1,4-dioxane	--	-	-	-	Hexavalent chromium	-
Paint Shop / Metal Machining	Paint Booth/Metal Machining Building 1962	Surface Soil	NP	NP	NP	NP	NP	Diesel (South of Bldg at SS-32)	NP	NP	NP	Total Cr, Cd, Cu, Pb (South of Bldg at SS 32)
		Shallow Soil	-	-	-	-	-	Diesel and motor oil	-	Aroclor-1242	-	-
		Deeper Soil	-	-	-	-	-	Diesel and motor oil	-	Aroclor-1242	-	-
		A-zone GW	1,1-DCE, 1,1-DCA	-	Benzene	1,4-dioxane	Freon 113	Diesel	-	Aroclor-1016	-	-
		B-zone GW	1,1-DCA	-	-	-	-	-	-	-	-	-
		C-zone GW	-	-	-	-	-	-	-	-	-	-
	Paint Shop & Hazardous Material Storage Area Building 1967	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	-	-	-	-	-	-	-	-	-	Total Pb
		Deeper Soil	1,1-DCE	-	-	-	-	Diesel	-	-	-	Total As

TABLE 6-1
SUMMARY OF CHEMICALS DETECTED AT CONCENTRATIONS ABOVE THE
PRELIMINARY SCREENING CRITERIA BY FACILITY LOCATION
Former Remco Facility
Willits, California
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	Facility Location	Media ^a	VOCs					TPH	PAHs	PCBs	Hexavalent Chromium	Other Metals
			Halogenated VOCs	Ketones	Aromatics	Ethers	Other					
Paint Shop / Metal Machining	Paint Shop & Hazardous Material Storage Area Building 1967	A-zone GW	1,1,1-TCA, 1,1-DCE; 1,1-DCA, 1,1,2-TCA, 1,2-DCA, VC	-	-	1,4-dioxane	-	Diesel	-	-	-	-
		B-zone GW	-	-	-	-	-	-	-	-	-	-
		C-zone GW	-	-	-	-	-	-	-	-	-	-
	Paint Shop Building 1968	Surface Soil	-	-	-	-	-	-	-	-	-	-
		Shallow Soil	-	-	-	-	-	-	-	-	-	-
		Deeper Soil	-	-	-	-	-	-	-	-	-	-
		A-zone GW	-	-	-	-	-	-	-	-	-	-
		B-zone GW	-	-	-	-	-	-	-	-	-	-
		C-zone GW	-	-	-	-	-	-	-	-	-	-
	Paint Shop Building 1979	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	1,1,1-TCA, 1,1-DCE, 1,1-DCA	-	-	-	-	Diesel	-	-	-	-
		Deeper Soil	1,1-DCE	-	-	-	-	-	-	-	-	-
		A-zone GW	1,2-DCA, PCE, TCE; 1,1,1-TCA; cis-1,2-DCE; 1,1-DCE; 1,1-DCA	-	Benzene	-	-	-	-	-	-	-
		B-zone GW	1,1,1-TCA; 1,1-DCA, 1,1-DCE, cis-1,2-DCE	-	-	-	-	-	-	-	-	-
		C-zone GW	1,1-DCA, 1,1-DCE, TCE	-	-	-	-	-	-	-	-	-
	Hazardous Waste Storage Building (Building 1985, northwest corner of Facility)	Surface Soil	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
		Shallow Soil	-	-	-	-	-	-	-	-	-	-
		Deeper Soil	-	-	-	-	-	-	-	-	-	-
		A-zone GW	PCE, TCE; cis-1,2-DCE; 1,1-DCE; 1,1-DCA	-	-	-	-	-	-	-	-	-
		B-zone GW	-	-	-	-	-	-	-	-	-	-
		C-zone GW	-	-	-	-	-	-	-	-	-	-
Northern Storm Drain System	Surface Soil	NA	NA	NA	NA	NA	NA	-	-	-	-	Total Cr, Cd, Pb
		-	-	-	-	-	-	Diesel and motor oil	-	-	-	Total Cr, As
		TCE, PCE, 1,1-DCE, vinyl chloride	-	-	-	-	-	Diesel and motor oil	-	-	Hexavalent chromium	Total As
		PCE, TCE, 1,1,1-TCA; 1,1-DCE; 1,1-DCA	-	Benzene	1,4-dioxane	-	Diesel	Naphthalene	-	-	Hexavalent chromium	-
		1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, TCE,	-	-	MTBE, 1,4-dioxane	-	-	-	-	-	Hexavalent chromium	-
		1,1-DCA, TCE, 1,2-DCA, 1,1-DCE	-	-	-	-	-	-	-	-	Hexavalent chromium	-
		-	-	-	-	-	-	-	-	-	-	-

TABLE 6-1
SUMMARY OF CHEMICALS DETECTED AT CONCENTRATIONS ABOVE THE
PRELIMINARY SCREENING CRITERIA BY FACILITY LOCATION
Former Remco Facility
Willits, California
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Facility Location	Media ^a	VOCs					TPH	PAHs	PCBs	Hexavalent Chromium	Other Metals
		Halogenated VOCs	Ketones	Aromatics	Ethers	Other					
Former Diesel Fuel Line and 7,500 Gallon UST	Surface Soil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Shallow Soil	-	-	-	-	-	-	-	-	-	-
							Diesel and motor oil	Benzo(a)anthracene, indeno(1,2,3-cd) pyrene, dibenzo(a,h) anthracene, benzo(a) pyrene, benzo(b) fluoranthene, benzo (k)fluoranthene, chrysene	-	-	-
	Deeper Soil	-	-	-	-	-	Diesel and motor oil	-	-	-	-
	A-zone GW	-	-	-	-	-	Diesel and gasoline	-	-	-	-
	B-zone GW	-	-	-	1,4-dioxane	-		Naphthalene	-	-	-
	C-zone GW	-	-	-	MTBE, 1,4-dioxane	-	-		-	-	-

Acronyms:

TPH = total petroleum hydrocarbons
PAH = polynuclear aromatic hydrocarbons
PCB = polychlorinated biphenyls
DCE = dichloroethene
MTBE = methyl tert-butyl ether
TCA = trichloroethane

DCA = dichloroethane
PCE = tetrachloroethene
TCE = trichloroethene
VC = vinyl chloride
VOC = volatile organic compound

As = arsenic
Be = beryllium
Cr = chromium
Cd = cadmium
Cu = copper

Pb = lead
Sb = antimony
NA = Not Applicable
NP = surface soil not present
GW = groundwater
- = Not detected at concentrations above the preliminary screening criteria.

Notes:

- (a) Surface soil samples collected from 0 to <0.5 feet (ft) below groundwater (bgs).
Shallow soil samples collected from 0.5 to 3 ft bgs.
Deeper soil samples collected from >3 ft bgs.

TABLE 6-2
SUMMARY OF PHYSICAL AND CHEMICAL PROPERTIES FOR DETECTED ORGANIC CHEMICALS
Former Remco Hydraulics Facility
Willits, California
Page 1 of 3

Group	Compound	Soil	Ground-water	Vapor Pressure (VP) (Torr @ 20-30 °C)	Physical State ^g		Organic carbon partition coefficient, K _{oc} (cm ³ /g)		Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Pure component water solubility, S (mg/L)	Henry's Law constant, H (atm-m ³ /mol)	Molecular Weight (gm/mole)
							Minimum	Maximum					
PAHs	Anthracene		X	1.7E-05	V	S	1.45E+04	3.39E+04	3.24E-02	7.74E-06	4.34E-02	6.51E-05	178
	Benzo(a)anthracene	X		2.2E-08	NV	S	1.50E+05	8.40E+05	-	-	1.00E-02	1.00E-06	228
	Benzo(a)pyrene		X	5.6E-09	NV	S	4.79E+05	5.50E+06	-	-	3.80E-03	4.90E-07	252
	Benzo(b)fluoranthene		X	5.0E-07	NV	S	5.50E+05	1.23E+06	-	-	1.40E-02	1.22E-05	252
	Benzo(g,h,i)perylene		X	1.1E-10	NV	S	1.60E+06	3.86E+06	-	-	2.60E-04	1.44E-07	276
	Benzo(k)fluoranthene		X	9.6E-11	NV	S	5.50E+05	1.23E+06	-	-	8.00E-04	3.87E-05	252
	Chrysene		X	6.3E-07	NV	S	3.98E+05	4.00E+05	2.48E-02	6.21E-06	1.60E-03	9.46E-05	228
	Dibenz(a,h)anthracene		X	1.0E-10	NV	S	5.65E+05	3.80E+06	-	-	5.00E-04	7.30E-08	278
	Fluoranthene		X	5.0E-06	NV	S	3.80E+04	1.07E+05	-	-	2.65E-01	6.50E-06	202
	Fluorene		X	3.2E-04	V	S	3.99E+03	1.62E+04	6.10E-02	7.88E-06	1.90E+00	7.70E-05	166
	Indeno(1,2,3-cd)pyrene	X	X	1.0E-06	NV	S	1.60E+06	3.47E+06	-	-	5.30E-04	6.95E-08	276
	Naphthalene	X	X	8.2E-02	V	S	8.30E+02	2.00E+03	5.90E-02	7.50E-06	3.10E+01	4.83E-04	128
	Phenanthrene		X	9.6E-04	V	S	4.80E+03	1.40E+04	-	-	8.16E-01	3.93E-05	178
	Pyrene		X	2.5E-06	V	S	4.38E+04	1.34E+05	2.72E-02	7.24E-06	1.35E-01	1.10E-05	199
PCBs	Aroclor 1016 ^e		X	4.9E-04 to 6.7E-03	NV	S	3.30E+04	3.09E+05	-	-	3.20E-02	5.20E-04	327 (ave)
	Aroclor 1242 ^e	X		4.9E-04 to 6.7E-03	NV	S	3.30E+04	3.09E+05	-	-	3.20E-02	5.20E-04	327 (ave)
	Aroclor 1248 ^e	X		4.9E-04 to 6.7E-03	NV	S	3.30E+04	5.03E+05	-	-	3.20E-02	5.20E-04	327 (ave)
Pesticides	beta BHC ^a		X	-	NV	-	1.16E+03	3.56E+03	1.40E-02	7.34E-06	2.00E+00	1.06E-05	291
	DDD,p,p		X	1.0E-06	NV	S	4.58E+04	1.00E+06	-	-	1.60E-01	7.96E-06	331
	DDE44		X	6.5E-06	NV	S	8.64E+04	4.47E+06	-	-	4.00E-02	6.80E-05	329
	DDT,p,p		X	5.5E-06	NV	S	2.40E+05	2.63E+06	-	-	3.00E-03	3.89E-05	355
TPH	TPH-gasoline	X	X	-	NV	L	-	-	-	-	-	-	-
	TPH (middle distillates)	X	X	-	NV	L	-	-	-	-	-	-	-
	TPH (residual fuels)	X	X	-	NV	L/S	-	-	-	-	-	-	-
VOCs	1,1,1-Trichloroethane (1,1,1-TCA)	X	X	1.00E+02	V	L	1.06E+02	1.79E+02	7.80E-02	8.80E-06	1.33E+03	1.70E-02	133
	1,1,2,2-Tetrachloroethane		X	4.00E+00	V	L	7.90E+01	9.33E+01	7.10E-02	7.90E-06	2.97E+03	3.50E-04	168
	1,1,2-Trichloroethane	X	X	2.25E+01	V	L	5.01E+01	1.08E+02	7.80E-02	8.80E-06	4.42E+03	9.12E-04	133
	1,1-Dichloroethane	X	X	2.34E+02	V	L	3.16E+01	6.20E+01	7.42E-02	1.05E-05	5.06E+03	5.61E-03	99
	1,1-Dichloroethene	X	X	5.91E+02	V	L	5.89E+01	6.50E+01	9.00E-02	1.04E-05	2.25E+03	2.61E-02	97
	1,2-Dibromo-3-chloropropane ^b	X		-	NV	-	2.83E+01	1.29E+02	2.12E-02	7.00E-06	1.20E+03	1.47E-04	236.36
	1,2,3-Trichlorobenzene	X	X	-	-	-	-	-	-	-	-	-	-
	1,2,4-Trichlorobenzene		X	2.9E-01	V	S	8.64E+02	3.13E+03	3.00E-02	8.23E-06	3.00E+02	1.42E-03	180
	1,2,4-Trimethylbenzene ^b	X	X	-	V	-	3.72E+03	3.72E+03	7.50E-02	7.10E-06	5.70E+01	5.70E-03	120.19
	1,2-Dichlorobenzene	X	X	1.50E+00	V	L	2.67E+02	6.17E+02	6.90E-02	7.90E-06	1.56E+02	1.90E-03	147
	1,2-Dichloroethane	X	X	7.90E+01	V	L	1.74E+01	7.60E+01	1.04E-01	9.90E-06	8.52E+03	9.78E-04	99

TABLE 6-2
SUMMARY OF PHYSICAL AND CHEMICAL PROPERTIES FOR DETECTED ORGANIC CHEMICALS
Former Remco Hydraulics Facility
Willits, California
Page 2 of 3

Group	Compound	Soil	Ground-water	Vapor Pressure (VP) (Torr @ 20-30 °C)	Physical State ^g		Organic carbon partition coefficient, K _{oc} (cm ³ /g)		Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Pure component water solubility, S (mg/L)	Henry's Law constant, H (atm-m ³ /mol)	Molecular Weight (gm/mole)
							Minimum	Maximum					
VOCs	1,2-Dichloropropane		X	4.20E+01	V	L	4.37E+01	4.70E+01	7.82E-02	8.73E-06	2.80E+03	2.80E-03	113
	1,3,5-Trimethylbenzene ^b	X	X	-	V	-	8.19E+02	1.62E+03	7.50E-02	7.10E-06	4.80E+01	7.71E-03	120.19
	1,4-Dichlorobenzene		X	1.80E+00	V	S	2.73E+02	1.38E+03	6.90E-02	7.90E-06	7.38E+01	2.43E-03	147
	1,4-Dioxane ^c		X	3.00E+01	V	L	3.50E+00	1.11E+01	NA	NA	miscible	4.88E-06	88
	2-Butanone (Methyl ethyl ketone)	X	X	1.00E+02	V	L	1.23E+00	4.50E+00	9.00E-02	9.80E-06	2.70E+05	2.70E-05	72
	2-Hexanone (methyl-n-butyl Ketone) ^a	X	X	-	-	-	1.51E+01	1.51E+01	-	-	17500	-	-
	4-Methyl-2-pentanone (methyl Isobutyl ketone; MIBK)	X	X	1.00E+01	V	L	6.17E+00	1.34E+02	7.50E-02	7.80E-06	1.90E+04	1.40E-04	100
	Acetone	X	X	2.70E+02	V	L	5.75E-01	5.75E-01	1.24E-01	1.14E-05	1.00E+06	3.88E-05	58
	Benzene		X	9.50E+01	V	L	3.10E+01	1.00E+02	8.80E-02	9.80E-06	1.80E+03	5.56E-03	78
	Bromodichloromethane		X	5.00E+01	V	L	5.50E+01	1.00E+02	2.98E-02	1.06E-05	6.74E+03	1.60E-03	164
	Bromoform (Tribromomethane)		X	5.60E+00	NV	S	8.71E+01	1.26E+02	-	-	3.20E+03	5.32E-04	253
	Bromomethane (methyl bromide)	X	X	1.42E+03	V	G	9.00E+00	1.05E+01	7.30E-02	1.20E-05	1.50E+04	6.20E-03	95
	Carbon disulfide ^b	X	X	-	V	-	4.57E+01	4.57E+01	1.04E-01	1.00E-05	1.19E+03	3.03E-02	76
	Carbon tetrachloride		X	1.13E+02	V	L	1.23E+02	2.24E+02	7.80E-02	8.80E-06	7.93E+02	3.00E-02	154
	Chlorobenzene	X		1.18E+01	V	L	8.30E+01	5.00E+02	7.30E-02	8.70E-06	4.72E+02	3.70E-03	113
	Chloroethane	X	X	1.01E+03	V	G	1.47E+01	1.50E+01	1.00E-01	1.00E-05	5.70E+03	1.10E-02	65
	Chloroform	X	X	1.60E+02	V	L	2.80E+01	8.10E+01	1.04E-01	1.00E-05	7.92E+03	3.66E-03	119
	Chloromethane	X	X	4.30E+03	V	G	3.50E+01	3.50E+01	1.10E-01	6.50E-06	8.20E+03	2.40E-02	51
	cis-1,2-Dichloroethene	X	X	2.15E+02	V	L	3.55E+01	3.60E+01	7.36E-02	1.13E-05	3.50E+03	4.07E-03	97
	Dibromochloromethane	X	X	7.60E+01	V	S	6.31E+01	4.70E+02	9.60E-02	1.00E-05	4.00E+03	8.50E-04	199
	Dichlorodifluoromethane (Freon 12) ^b		X	-	V	-	5.80E+01	3.63E+02	8.00E-02	1.05E-05	2.80E+02	1.00E-01	120.92
	Ethylbenzene	X	X	1.00E+01	V	L	1.65E+02	3.63E+02	7.50E-02	7.80E-06	1.69E+02	7.88E-03	106
	Hexachlorobutadiene		X	1.50E-01	NV	S	2.90E+04	5.37E+04	-	-	2.00E+00	2.56E-02	261
	Isopropylbenzene (Cumene) ^b	X	X	-	V	-	2.20E+02	2.29E+03	7.50E-02	7.10E-06	6.10E+01	1.20E+00	120
	m,p-Xylene	X	X	6.00E+00	V	L	1.58E+02	4.07E+02	7.00E-02	7.80E-06	1.61E+02	7.30E-03	106
	Methyl tert-butyl ether	X	X	2.45E+02	V	L	1.12E+01	1.17E+01	8.10E-02	9.41E-05	4.80E+04	5.87E-04	98
	Methylene chloride	X	X	4.29E+02	V	L	1.00E+01	1.17E+01	1.01E-01	1.17E-05	1.30E+04	2.19E-03	85
	n-Butylbenzene ^b	X	X	-	V	-	2.83E+03	2.83E+03	7.50E-02	7.80E-06	1.38E+01	1.31E-02	134.22
	n-Propylbenzene ^b		X	-	V	-	2.83E+03	2.83E+03	7.50E-02	7.80E-06	1.38E+01	1.31E-02	MW < 200

TABLE 6-2
SUMMARY OF PHYSICAL AND CHEMICAL PROPERTIES FOR DETECTED ORGANIC CHEMICALS
Former Remco Hydraulics Facility
Willits, California
Page 3 of 3

Group	Compound	Soil	Ground-water	Vapor Pressure (VP) (Torr @ 20-30 °C)	Physical State ^g		Organic carbon partition coefficient, Koc (cm ³ /g)		Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Pure component water solubility, S (mg/L)	Henry's Law constant, H (atm-m ³ /mol)	Molecular Weight (gm/mole)
							Minimum	Maximum					
VOCs	o-Xylene	X	X	6.00E+00	V	L	2.00E+02	3.63E+02	7.00E-02	7.80E-06	1.61E+02	7.30E-03	106
	p-Isopropyltoluene	X	X	-	-	-	-	-	-	-	-	-	-
	sec-Butylbenzene ^b	X	X	-	V	-	2.15E+03	2.15E+03	7.50E-02	7.80E-06	1.70E+01	1.87E-02	134.22
	tert-Butylbenzene ^b		X	-	V	-	2.15E+03	2.15E+03	7.50E-02	7.80E-06	3.00E+01	1.26E-02	134.22
	Tetrachloroethene	X	X	1.90E+01	V	L	1.55E+02	3.73E+02	7.20E-02	8.20E-06	2.00E+02	1.84E-02	166
	Toluene	X	X	2.80E+01	V	L	9.40E+01	2.47E+02	8.70E-02	8.60E-06	5.26E+02	6.60E-03	92
	trans-1,2-Dichloroethene	X	X	3.31E+02	V	L	3.80E+01	5.25E+01	7.07E-02	1.19E-05	6.30E+03	9.39E-03	97
	Trichloroethene	X	X	7.70E+01	V	L	5.70E+01	1.66E+02	7.90E-02	9.10E-06	1.10E+03	1.03E-02	131
	Trichlorofluoromethane (Freon 11) ^b		X	-	V	-	1.58E+02	1.60E+02	8.70E-02	1.30E-05	1.10E+03	9.70E-02	137.4
	Trichlorotrifluoroethane (Freon 113) ^d	X	X	2.84E+02	V	L	1.60E+02	3.72E+02	NA	NA	1.70E+02	5.30E-01	187
	Vinyl acetate ^b		X	-	-	-	5.25E+00	5.25E+00	8.50E-02	9.20E-06	2.00E+04	5.11E-04	86
	Vinyl chloride		X	2.58E+03	V	G	1.86E+01	1.90E+01	1.06E-01	1.23E-06	2.76E+03	2.71E-02	63
	Xylenes (total) ^f	X	X	6.00E+00	V	L	1.58E+02	3.74E+02	7.00E-02	7.80E-06	1.61E+02	7.30E-03	106

Notes:

Compounds listed were detected in either soil or groundwater samples collected at the Site, as indicated.

Unless otherwise indicated, chemical properties were obtained from the following source: Region Water Quality Control Board, San Francisco Bay Region, Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater (Interim Final - August 2000).

Range of Koc values determined from (1) above reference, (2) Soil Screening Guidance: Technical Background Document EPA/540/R-95/128, Table 38, (3) Soil Screening Guidance: User's Guide EPA/540/R-96/018, Table C-1, (4) ORNL Risk Assessment Information System (A44; accessed 10/15/01), and (5) EPA Region 9 PRGs, (<http://www.epa.gov/region09/waste/sfund/prg/>; updated 11/20/00).

a Physio-chemical data for beta-BHC and 2-hexanone from Soil Screening Guidance: User's Guide EPA/540/R-96/018, Table C-1.

b Physio-chemical data from EPA Region 9 PRGs, (<http://www.epa.gov/region09/waste/sfund/prg/>; updated 11/20/00).

c Physio-chemical data for 1,4-dioxane from EPA Office of Pollution Prevention and Toxics Chemical Fact Sheet, February 1995, EPA 749-F-95-010a; minimum Koc value from Mohr, Thomas, Solvent Stabilizers White Paper, Santa Clara Valley Water District, June 14, 2001.

d Physio-chemical data for Freon 113 from EPA Office of Pollution Prevention and Toxics Chemical Fact Sheet, August 1994, EPA 749-F-94-012a.

e Physio-chemical constants for Aroclor 1016 are for polychlorinated biphenyls.

f Physio-chemicals constants for xylenes based on m-xylene.

g Physical state of chemical at ambient conditions (V - volatile, NV - nonvolatile, S - solid, L - liquid, G - gas).
Chemical considered to be "volatile" if Henry's number (atm m³/mole) >0.00001 and molecular weight <200.

TABLE 6-3
SUMMARY OF RANGE OF RETARDATION FACTORS
Former Remco Hydraulics Facility
Willits, California

Compound	Koc ¹		A-Zone Kd		B-Zone Kd		Retardation Factor ²		Retardation Factor ²	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	4.79E+05	5.50E+06	8.00E+02	9.19E+03	1.24E+03	1.42E+04	6.37E+03	7.31E+04	9.84E+03	1.13E+05
Benzo(b)fluoranthene	5.50E+05	1.23E+06	9.19E+02	2.05E+03	1.42E+03	3.17E+03	7.31E+03	1.64E+04	1.13E+04	2.53E+04
Chrysene	3.98E+05	4.00E+05	6.65E+02	6.68E+02	1.03E+03	1.03E+03	5.29E+03	5.32E+03	8.17E+03	8.22E+03
Dibenz(a,h)anthracene	5.65E+05	3.80E+06	9.44E+02	6.35E+03	1.46E+03	9.80E+03	7.51E+03	5.05E+04	1.16E+04	7.80E+04
Indeno(1,2,3-cd)pyrene	1.60E+06	3.47E+06	2.67E+03	5.79E+03	4.13E+03	8.95E+03	2.13E+04	4.61E+04	3.29E+04	7.13E+04
Naphthalene	8.30E+02	2.00E+03	1.39E+00	3.34E+00	2.14E+00	5.16E+00	1.20E+01	2.76E+01	1.80E+01	4.21E+01
Polychlorinated Biphenyls										
Aroclor 1016	3.30E+04	3.09E+05	5.51E+01	5.16E+02	8.51E+01	7.97E+02	4.40E+02	4.11E+03	6.79E+02	6.35E+03
Volatile Organic Compounds										
1,1,1-Trichloroethane	1.06E+02	1.79E+02	1.77E-01	2.99E-01	2.73E-01	4.62E-01	2.41E+00	3.38E+00	3.18E+00	4.68E+00
1,1,2,2-Tetrachloroethane	7.90E+01	9.33E+01	1.32E-01	1.56E-01	2.04E-01	2.41E-01	2.05E+00	2.24E+00	2.62E+00	2.92E+00
1,1,2-Trichloroethane	5.01E+01	1.08E+02	8.37E-02	1.80E-01	1.29E-01	2.79E-01	1.67E+00	2.44E+00	2.03E+00	3.22E+00
1,1-Dichloroethane	3.16E+01	6.20E+01	5.28E-02	1.04E-01	8.15E-02	1.60E-01	1.42E+00	1.82E+00	1.65E+00	2.27E+00
1,1-Dichloroethene	5.89E+01	6.50E+01	9.84E-02	1.09E-01	1.52E-01	1.68E-01	1.78E+00	1.86E+00	2.21E+00	2.33E+00
1,2-Dichloroethane	1.74E+01	7.60E+01	2.91E-02	1.27E-01	4.49E-02	1.96E-01	1.23E+00	2.01E+00	1.36E+00	2.56E+00
1,2-Dichloropropane	4.37E+01	4.70E+01	7.30E-02	7.85E-02	1.13E-01	1.21E-01	1.58E+00	1.62E+00	1.90E+00	1.97E+00
1,4-Dioxane	3.50E+00	1.11E+01	5.85E-03	1.85E-02	9.03E-03	2.86E-02	1.05E+00	1.15E+00	1.07E+00	1.23E+00
2-Butanone (Methyl ethyl ketone)	1.23E+00	4.50E+00	2.05E-03	7.52E-03	3.17E-03	1.16E-02	1.02E+00	1.06E+00	1.03E+00	1.09E+00
Acetone	5.75E-01	5.75E-01	9.60E-04	9.60E-04	1.48E-03	1.48E-03	1.01E+00	1.01E+00	1.01E+00	1.01E+00
Benzene	3.10E+01	1.00E+02	5.18E-02	1.67E-01	8.00E-02	2.58E-01	1.41E+00	2.33E+00	1.64E+00	3.05E+00
Bromodichloromethane	5.50E+01	1.00E+02	9.19E-02	1.67E-01	1.42E-01	2.58E-01	1.73E+00	2.33E+00	2.13E+00	3.05E+00
Bromoform	8.71E+01	1.26E+02	1.45E-01	2.10E-01	2.25E-01	3.25E-01	2.16E+00	2.67E+00	2.79E+00	3.59E+00
Carbon disulfide	4.57E+01	4.57E+01	7.63E-02	7.63E-02	1.18E-01	1.18E-01	1.61E+00	1.61E+00	1.94E+00	1.94E+00
Chloroethane	1.47E+01	1.50E+01	2.45E-02	2.51E-02	3.79E-02	3.87E-02	1.20E+00	1.20E+00	1.30E+00	1.31E+00
Chloroform	2.80E+01	8.10E+01	4.68E-02	1.35E-01	7.22E-02	2.09E-01	1.37E+00	2.08E+00	1.58E+00	2.66E+00
cis-1,2-Dichloroethene	3.55E+01	3.60E+01	5.93E-02	6.01E-02	9.16E-02	9.29E-02	1.47E+00	1.48E+00	1.73E+00	1.74E+00
Methyl tert-butyl ether	1.12E+01	1.17E+01	1.87E-02	1.95E-02	2.89E-02	3.02E-02	1.15E+00	1.16E+00	1.23E+00	1.24E+00
Methylene chloride	1.00E+01	1.17E+01	1.67E-02	1.95E-02	2.58E-02	3.02E-02	1.13E+00	1.16E+00	1.21E+00	1.24E+00
Tetrachloroethene	1.55E+02	3.73E+02	2.59E-01	6.23E-01	4.00E-01	9.62E-01	3.06E+00	5.96E+00	4.18E+00	8.66E+00
Toluene	9.40E+01	2.47E+02	1.57E-01	4.12E-01	2.43E-01	6.37E-01	2.25E+00	4.28E+00	2.93E+00	6.07E+00
Trichloroethene	5.70E+01	1.66E+02	9.52E-02	2.77E-01	1.47E-01	4.28E-01	1.76E+00	3.21E+00	2.17E+00	4.41E+00
Trichlorotrifluoroethane (Freon 113) ^b	1.60E+02	3.72E+02	2.67E-01	6.21E-01	4.13E-01	9.60E-01	3.13E+00	5.95E+00	4.29E+00	8.64E+00
Vinyl chloride	1.86E+01	1.90E+01	3.11E-02	3.17E-02	4.80E-02	4.90E-02	1.25E+00	1.25E+00	1.38E+00	1.39E+00

Notes:

Only chemicals identified as chemicals of potential concern in groundwater are listed.

¹ Koc values from sources indicated in Table 6-1. For organic compounds, Kd calculated by multiplying the Koc by the average foc (fraction organic carbon content) of 0.00167 for the A-Zone and 0.00258 for the B-Zone (Section 6.3.1.3). The foc is the total organic carbon content in milligrams per kilogram divided by 1,000,000.

² Retardation factor calculated using the following equation (Fetter 1993) and assumptions:

$$RF = 1 + (\rho_b/ne)*Kd \text{ where: bulk soil density } (\rho_b) \text{ equals } 1.99 \text{ g/cm}^3 \text{ in the A-zone and B-zone}$$

$$\text{effective porosity (ne) equals } 0.25 \text{ for the A-zone and B-zone (Section 4.5.4.2)}$$

³ The migration rate of a contaminant (Vc) calculated using the following equation (Fetter, 1993):

$$Vc = V/RF \text{ where: } V = \text{estimated seepage velocity of A-zone or B-zone groundwater as calculated in Section 4.5.4.2}$$

$$RF = \text{retardation factor (unitless)}$$

Koc = Organic Carbon/Water Distribution Coefficient
Kd = Distribution Coefficient
RF = Retardation factor
ml/gm = milliliter per gram
NA = not applicable

TABLE 7-1
WELLS PROPOSED FOR ABANDONMENT AND/OR REPLACEMENT
Former Remco Facility
Willits, California

Saturated Zone	Well Location	Well Depth (ft bgs)	Well Diameter (inches)	Borehole Depth (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Sand (ft bgs)	Bottom of Sand (ft bgs)	Comments	Proposed Action
B-Zone	B1	50.9	6	50.9	22.5	51	16.5	51	Top of filter pack too shallow, well screened across both A & B Zones	Abandon and re-install as a B-Zone well
	B2	51	6	50	20.5	50	18	50	Well screened across A, B, and C Zones	Abandon and re-install as a B-Zone well
	B5	39	6	39	19	39	16	39	Top of filter pack too shallow, well screened across both A & B Zones	Abandon and re-install as a B-Zone well; rename new well W25B
	W1	33.5	2	37	23	33	21	33.5	Filter pack extends into A-Zone. Redundant with EW-1B	Abandon
	W2	33.5	2	36.5	23	33	21	33.5	Filter pack extends into A-Zone.	Abandon

Notes:

Well locations shown on Figure 7-2

bgs = below ground surface

ft = feet

TABLE 7-2
RECOMMENDATIONS FOR FURTHER INVESTIGATION
Former Remco Facility
Willits, California

Water-Bearing Zone	Soil Boring / Monitoring Well Identification	Proposed Location	Purpose
A-Zone	W44A	Walnut Street, Southwest of the Facility Property	Upgradient, background location
	W45A	Oak Street	Downgradient sentry well to monitor the lateral extent of low level VOC detections in the A-Zone
	W46A	Oak Street	Downgradient sentry well to monitor the lateral extent of low level VOC detections in the A-Zone
B-Zone	W18B	Franklin Avenue	Downgradient monitoring point for Building 1964 Plume in B-Zone
	W19B	Franklin Avenue	Downgradient monitoring point for W29B1
	W27B	Adjacent to W27A north of Building 1973	Provide monitoring of B-Zone groundwater in area of VOC-impacted A-Zone groundwater.
	W28B	Adjacent to W28A in Building 1979	Provide monitoring of B-Zone groundwater in area of VOC-impacted A-Zone groundwater.
	SB-215	East of Highway 101	Investigate A/B-aquitard and B-Zone lithology and evaluate vertical extent of contaminants found in the A-Zone.
	SB-216	East of Highway 101	Investigate A/B-aquitard and B-Zone lithology and evaluate vertical extent of contaminants found in the A-Zone.

Note:

Well locations shown on Figure 7-2

In addition, additional lithologic evaluation is proposed to investigate the potential existence of a former stream channel immediately west of the Luna Market.