SDMS DOCID#1140553

REMEDIAL INVESTIGATION REPORT
FORMER ANGELES CHEMICAL COMPANY

EPA ID NUMBER CAD 063837520

Submitted To:

Department of Toxic Substances Control
Southern California Cleanup Operations Branch
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28 August 2008

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Submitted to:
Department of Toxic Substances Control
Southern California Cleanup Operations Branch
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Abbreviations

ACC ..... Angeles Chemical Company
ADI ..... Average daily intake
AST ..... Aboveground storage tank
BEII ..... Blakely Environmental Investigations, Inc.
BGS ..... Below ground surface
BTEX..... Benzene, toluene, ethylbenzene, xylenes
cis-1,2-DCE..... cis-1-2-dichloroethene
COC ..... Chain of custody
COPC..... Chemical of potential concern
CPT ..... Cone penetrometer test
1,1-DCA 1,1-Dichloroethane
1,1-DCE 1,1-Dichloroethene
DNAPL ..... Dense non-aqueous phase liquid
DPW..... Department of Public Works (Los Angeles)
DTSC ..... California Department of Toxic Substances Control
EDTA ..... Ethylene-diaminotetraacetic acid
EPA..... Environmental Protection Agency
EPC..... Exposure point concentration
Freon 11..... Trichlorofluoromethane
Freon 12..... Dichlorodifluoromethane
Freon 113..... 1,1,2-Trichloro-1,2,2-trifluoroethane
FS ..... Feasibility study
FT..... Feet or foot
HHRA..... Human health risk assessment
HI ..... Hazard index
HQ..... Hazard quotient
HLA ..... Harding Lawson Associates
ILCR..... Incremental lifetime cancer risk
LADI ..... Lifetime average daily intake
LNAPL..... Light non-aqueous phase liquid
LOAEL ..... Lowest observed adverse effect level
MCL ..... Maximum contaminant level
MEK ..... Methyl ethyl ketone (also known as 2-butanone)
MIBK ..... Methyl isobutyl ketone
MSL..... Mean sea level
MTBE ..... Methyl tertiary butyl ether
NOAEL..... No-observed adverse effect level
OEHHA ..... Office of Environmental Health Hazard Assessment
OU..... Operable Unit
PCE..... Perchloroethene (also known as Tetrachloroethene)
PEF ..... Particulate emission factor
QA/QC ..... Quality assurance/quality control
RAW..... Removal action work plan
RfD..... Reference dose
RWQCB ..... Regional Water Quality Control Board (California)
RI ..... Remedial Investigation
RME ..... Reasonable maximum exposure
SCC ..... Southern California Chemical Corporation

SCS..... SCS Engineers
SF ..... Slope factor
SVE..... Soil vapor extraction
SVOC..... Semi-volatile organic compound
1,1,1-TCA..... 1,1,1-Trichloroethane
TCE..... Trichloroethene
TPH..... Total petroleum hydrocarbons
Trans-1,2-DCE... trans-1,2-Dichloroethene
UCL..... Upper confidence limit
UST..... Underground storage tank
VOC ..... Volatile organic compound

EXECUTIVE SUMMARY

Subsurface contamination consisting of volatile organic compounds (VOCs) has been found at the former Angeles Chemical Company (ACC) site in Santa Fe Springs, California. Free product recovery and soil vapor extraction are ongoing at this site and contamination in shallow groundwater (and presumably in soil) have responded with declining concentration in recent monitoring events.

This Remedial Investigation Report compiles, presents, and interprets results of environmental investigations dating back to 1990 as well as historical information about operations at the ACC site. This report was prepared in general conformance with the U.S. Environmental Protection Agency *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* and incorporates California Department of Toxic Substances Control (DTSC) suggestions (DTSC, 2008) from an earlier draft. Available analytical data on groundwater, soil, and soil vapor, as well as interpretations of the geology and hydrogeology of the study area are presented. Based on this data, a site conceptual model was developed and is used to interpret the data and evaluate the fate and transport of subsurface contaminants at the site, as well as their historical occurrence and potential sources.

The former ACC site is located at 8915 Sorensen Avenue in Santa Fe Springs, California and occupies approximately 1.8 acres. The site is located in a predominantly industrial area and is surrounded by sites with known environmental problems. The site is bounded on the northwest by Liquid Air Corporation, on the north by Plastall Metals Corporation, and on the south by a Southern Pacific Railroad easement and the former McKesson Chemical Company facility. The former ACC site is currently used for storage of cargo containers and vehicles. Additionally, the site is being used as a vehicle impound, maintenance, finishing and restoration shop.

Site Description

From 1976 to 2000, ACC conducted chemical repackaging and blending operations at the site. This involved repackaging chemicals into containers of various sizes for resale to customers. Chemicals stored and used on site included, but were not limited to: acetone, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), toluene, xylenes, isobutyl acetate, butyl cellosolve, propanol, methylene chloride, tetrachloroethene (PCE); 1,1,1-trichloroethane (1,1,1-TCA), kerosene, diesel, mineral spirits, and unleaded gasoline.

At the time of operation, most of the site was paved with asphalt or concrete. Three buildings (two offices and a laboratory) were present at the facility. A canopy covered the packaging production line in the central portion of the site. A loading platform and ramp were associated with the offloading of chemicals delivered via trucks or railroad cars. Reports indicate that there were 35 underground storage tanks (USTs) on site: 34 were used for product storage and one was used as a waste tank. These USTs were located in the south-central portion of the site. In addition to the USTs, there were nine above-ground storage tanks as well as designated storage areas for palletized chemical storage drums at the site.

Site Characterization Activities

The following is a chronology of site investigation activities:

<u>1985</u> - Tank integrity tests and inventory records were initiated in response to Los Angeles Department of Public Works requirements related to UST permitting.

<u>1986-1989</u> – SCS prepared and then revised a Subsurface Investigation Work Plan for the ACC Site.

1990 - SCS Engineers conducted soil and groundwater investigations in January, April and June (14 soil borings, 1 excavation, 1 monitoring well) at the ACC site to determine whether any releases had occurred.

1992 - SCS collected near-surface soil samples along the railroad spur on the northwest portion of the site.

1993/1994 - SCS conducted additional soil and groundwater investigations to assess the extent of VOC contamination in the subsurface.

1995 – SCS prepared a Baseline Risk Assessment for the ACC site.

1996 - SCS performed a soil vapor survey (at 23 locations from northern and central portions of the site) and a soil vapor extraction (SVE) pilot test.

1997 - SCS performed an additional soil vapor survey at 12 locations to evaluate the extent of VOC impact in the southern and central portions of the site.

1997-1998 – SCS prepared Feasibility Studies for OU1 and OU2 of the site.

1998-1999 EREMCO removed 12 USTs (2 USTs in 1998 and 10 in 1999) by excavation and another 12 USTs were slurried and abandoned in place under the oversight of the City of Santa Fe Springs Fire Department. Confirmation soil samples were collected below each removed UST and analyzed for VOCs.

1999 - SCS conducted SVE testing (using an internal combustion engine in some tests and a thermal oxidation unit in other tests).

1999 - SCS sampled soil in four locations corresponding to the position of former ASTs; also a Removal Action Plan was prepared by SCS.

2000 – SCS conducted a soil investigation northwest of the canopy area, in response to California Department of Toxic Substances Control (DTSC) observations of potential releases.

2000 – SCS installed additional vapor extraction and vapor monitoring wells and produced a Soil Vapor Extraction Work plan.

2000 - Blakely Environmental Investigations, Inc. (BEll) performed a soil vapor survey at 36 sampling locations.

2000-present - quarterly groundwater monitoring has been conducted by various consultants.

2001 - EREMCO removed six additional USTs by excavation and another four USTs were slurried and abandoned in place under the oversight of the City of Santa Fe Springs Fire Department.

2002 - BEll performed an on- and off-site soil vapor survey in January and a soil and groundwater investigation in June. BEll advanced seven additional soil borings and installed 12 monitoring wells in November and December. Cone penetrometer testing (CPT) was performed at 26 locations. Monitoring well MW-1 was abandoned.

2003 - BEll installed five additional monitoring wells and abandoned MW-2, MW-3, and MW-7.

2005 - in April, The Leu Group prepared a Draft Removal Action Work Plan. In late 2005, an SVE system began operating at the site to remediate vadose zone soils.

2007 – Clean Soil, Inc. assumed tasks of quarterly monitoring and reporting and oversight of SVE operations. The SVE system is switched to granular activated carbon in September.

Off-Site Characterization Activities

ACC lies in a heavily industrialized area surrounded by sites with environmental problems that involve a large variety of contaminants, both organic and inorganic. While some of the surrounding sites had distinct historical operations and distinct contamination problems, at least two sites (McKesson to the south and Omega to the north) engaged in similar operations as ACC using similar chemicals of which large releases have been documented. The possibility exists for cross-contamination and migration of contaminants across property boundaries. This possibility for commingling of contamination from different sources should be considered in any attempt to understand the current environmental condition for ACC (or any site in the general area).

Nature and Extent of Contamination

The contaminants found in soil, groundwater, and soil vapor include petroleum hydrocarbons, chlorinated VOCs, and other organic solvents (such as acetone, MEK and MIBK).

In soil, the highest concentrations of VOCs were found in near-surface soils in the vicinity of the railroad spur on the northwestern portion of the site, in central portion of the site, and in the south-central area where a broken drain pipe has been documented. A non-uniform vertical migration pathway of contamination can be observed. In general, there are higher levels in near-surface soil and in deeper soil (between 25-35 feet below ground surface) and there are lower levels at intermediate depths. In many samples and for most contaminants there is a significant increase in contamination at lower depths that probably indicates a combination of lithologic contrasts as well as lateral transport in the vadose zone. There are locations at ACC with shallow and deep contamination where the lithologic contrasts alone do not account for the notable increase of contamination in deeper soil at levels where shallow groundwater has been reported. This suggests the presence of commingled contamination at the level of shallow groundwater. This is confirmed also by the presence of some contaminants in deeper soils that are absent or minimally present in shallower soils (e.g., methylene chloride).

The highest concentrations of soil vapor contaminants were reported at a depth of 20-ft (the lowest depth tested) and the soil vapor pattern generally correlates with the shallow groundwater contamination profiles. A notable finding from the soil vapor investigations is the occurrence of Freon 113, mostly along the southern border of the site. Freon 113 was rarely used or stored by ACC (records indicate just a single drum of a product which contained Freon 113 as an ingredient was handled by ACC in its entire history of operation) and significant releases of Freon 113 have been documented at the neighboring McKesson site. Its presence in ACC soil vapor indicates contributions from off-site sources to vadose zone and shallow groundwater contamination. Additionally the data indicate that off-site freon must have reached ACC in shallow groundwater or soil vapor since the soil vapor detections cannot have originated from the deeper regional groundwater which is a confined aquifer.

In groundwater, much higher VOCs are found in shallow groundwater compared to the deep (regional) aquifer. Light non-aqueous phase liquid (LNAPL) has been found historically in several shallow monitoring wells and in one deep monitoring well (MW-21 on south side of the site). The presence of LNAPL has contributed to the high levels of contamination in shallow groundwater, but it has also protected deep groundwater quality due to its inability to penetrate the shallow water table. The site data indicate that no significant cross-contamination from the shallow into the deep groundwater has occurred at the ACC site largely due to the separation of the two water-bearing zones by a low permeability layer. Supporting this conclusion is the presence of several contaminants (methylene chloride, MEK, MIBK) at high concentrations in shallow groundwater that have never been detected in deep groundwater. The contamination

profiles in shallow groundwater are different for different types of contaminants (e.g., chlorinated solvents vs. petroleum hydrocarbons). This finding suggests different contamination sources and different migration pathways for different contaminants.

Contaminant Migration

The main migration routes of contamination identified at the site are vertical migration in the vadose zone from surficial sources, lateral flow with groundwater, and vapor transport. Shallow groundwater has a complex flow pattern which is strongly influenced by episodic infiltration from the creek, whereas deep groundwater flows consistently toward the west/southwest. The data suggest that vertical transport occurred predominantly in shallow soil. Deeper vertical transport was precluded due to the presence of a low permeability layer below the perched, shallow groundwater. Moreover, the data suggest the possibility for commingling of contamination migrating vertically from the surface with significant amounts of similar contamination transported laterally though the shallow groundwater from more distant source areas.

The shallow and deep aquifers are isolated from each other by a less permeable silty-clay layer (unit C2) which maintains unsaturated conditions under the perched groundwater.

Baseline Human Health Risk Assessment

It is anticipated that the site will be redeveloped for commercial and/or industrial uses, thus potentially exposed future receptors at the site are identified as on-site construction workers and on-site commercial/industrial workers after site redevelopment.

The potentially complete soil exposure pathways for a construction worker are soil ingestion, dermal exposure to soil, and inhalation of particulates (as fugitive dust generated from soil) and organic vapors in ambient air. The potentially complete exposure pathways for a commercial/industrial worker are inhalation of VOCs in indoor air from vapor intrusion, soil ingestion, dermal exposure to soil, and inhalation of particulates and organic vapors in ambient air.

For future on-site construction workers and commercial or industrial workers, the baseline human health risk assessment (Section 5) concluded that the cumulative incremental lifetime cancer risk and total noncarcinogenic hazard index are greater than their respective acceptable risk thresholds. Therefore, mitigation such as the currently active SVE remediation program is appropriate to protect future on-site construction workers and commercial or industrial workers.

Conclusions

From the point of view of ongoing remediation and planning for future remedial needs, the lateral and vertical extent of contamination has been adequately delineated. Therefore, no further characterization or investigation work is recommended on the ACC site, rather we recommend that future environmental activities focus on monitoring remediation progress and optimizing remedial progress.

1. INTRODUCTION

1.1 Facility Identification

The former Angeles Chemical Company (ACC) facility is located in northeast Santa Fe Springs, California. Figure 1 is a Site Location Map. The facility covers approximately 1.8 acres, and is roughly triangular in shape. Pertinent identification information regarding the facility is:

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EPA ID No.	CAD 063837520
FACILITY APN(s):	8168-012-011
FACILITY ADDRESS:	8915 Sorensen Avenue Santa Fe Springs, CA 90670-2638
CONSULTANT:	Mark Slatten CEO/Principal Scientist Clean Soil, Inc. 23811 Washington Avenue C-110 Suite #241 Murrieta, California 92562 Phone 951-677-2111 / Fax 951-677-2088

The property is located on the west side of Sorensen Avenue west of Santa Fe Springs Avenue between Slauson to the north and Los Nietos to the south. From 1976 until 2000 ACC operated a chemical repackaging and blending facility. The activities at ACC ceased on November 7, 2000.

At the time of operation, most of the ACC site was paved with asphalt or concrete. Three buildings (two offices and a laboratory) were present at the facility. A canopy covered the packaging production line at the central portion of the site. A loading platform and ramp were associated with the offloading of chemicals delivered by truck or railroad car. There were 35 underground storage tanks (USTs). Thirty-four of the USTs were used for product storage and one was used as a waste tank. These USTs were located in the south-central portion of the site (Figure2). In addition to the USTs, there were nine above-ground tanks (ASTs) and designated storage areas for palletized drums and containers at the site.

The site is currently occupied by an automobile towing operation in accordance with DTSC's conditions (Sarah Amir, April 13, 2004 Letter to Mr. Joseph Kennedy) that the site could be leased and occupied as long as the entire site was paved and as long as portable buildings have adequate ventilation beneath them. Under the current occupancy, two employees apparently spend part of their work day in a trailer at the site. Operation of the SVE system, location of the trailer on a concrete slab and ventilation in the air space under the trailer all act to mitigate potential exposure of workers who spend time during the day in the trailer. The site is also accessible to the public to pick up or drop off vehicles. Because these visits to the site are of short duration and because most activities occur outside, visitors are not exposed to problematic levels of VOCs.

1.2 Purpose

The purpose of this Remedial Investigation (RI) Report is to collect and evaluate the available site information in order to characterize the nature and extent of contaminant releases, including release mechanisms and sources. A historical overview of activities and environmental issues at the site and neighboring sites is included. Ultimately these data will lead to the best selection of cleanup goals and strategies.

The specific objectives of this RI report are to:

- Identify the types and quantities of contaminants present at the site in soil, soil vapor, and groundwater;
- Characterize release mechanisms and sources;
- Evaluate the potential for contaminant migration and migration pathways;
- Identify data gaps, if any, and recommend further work to fill such gaps; and
- Provide a baseline human health risk assessment to evaluate the potential for adverse human health and environmental effects posed by the contamination.

1.3 Key Personnel

Mr. Joseph Kennedy is the owner of the property. Mr. Kennedy has retained Clean Soil, Inc. (CSI), and specifically it's Principal, Mark H. Slatten, PG/CEG, GP/CHG, as his consultant on this project. Mr. Slatten will act as the Project Manager, will be the primary contact with the DTSC, and will direct regulatory and technical aspects of the project, Mr. Slatten will be reporting directly to Mr. Kennedy.

Kevin Cosgrove is CSI's regulatory specialist and will assist, and report directly to Mr. Slatten in regulatory aspects of the project.

Haley & Aldrich has contributed to the revision and updating of this RI Report.

2. CURRENT CONDITIONS REPORT

2.1 Facility Background

2.1.1 Site History

Prior to 1976, Union Pacific Railroad owned the property. Railroad tracks are visible on maps and aerial photographs parallel to the southern property boundary as early as 1927. Activities in the area included agriculture both on the property and to the north, and oil production to the south. Industrial activities expanded into the general area in the mid 1960s. Interviews with ACC personnel indicate no permanent facilities existed on the site prior to January 1976 (SCS Engineers, 1994).

From 1976 until 2000, ACC owned the site, operating a chemical repackaging and blending facility (Figure 2 and Figure 3). ACC ceased operating on November 7, 2000.

2.1.2 Facility Operations

2.1.2.1 General Operations

ACC bought chemicals in bulk and stored, repackaged, and in some cases, blended products for resale to its customers. Chemicals handled by ACC were transported to and from the facility by ACC or by contract carriers using trucks and railcars. The bulk chemicals were stored in USTs, ASTs, and in railroad cars. Smaller quantities were stored in 55-gallon drums. The laboratory at the site was used for quality assurance/quality control (QA/QC; SCS Engineers, 1994). ACC had two filling machines. One was acquired in 1986 from Bortz for small packages and the other was a drum-filling machine. Both filling machines were located in the canopy area. The facility layout can be seen in Figures 2 and 3. As it can be seen, there were no operations on the southeast portion of the site.

In some instances, ACC arranged direct delivery of products from its suppliers to the customers, so many products sold by ACC were never actually stored at the site. As a result, the appearance of a chemical in ACC's business records does not automatically indicate that the chemical was handled at the site. ACC kept good records of its operations, including which chemicals were delivered directly to customers and which were stored on site.

The products were checked for QA/QC at the site laboratory. Lab samples were retained for 90 days, after which they were deposited into a drum of like product and eventually sold as part of a subsequent production run. Thus there were no reported wastes generated from laboratory activities at the former ACC site (SCS Engineers, 1994).

ACC stored products in three compartmented railroad cars, ASTs, USTs and in drums. ACC's tanks are reported to have had cathodic protection. The tanks were tested for tightness and passed in 1986 with no indication of leaking. Daily stick measurements were made to maintain inventory records for all tanks including the wash.

2.1.2.2 Wash Solvent and Line Flush

The wash solvent at ACC site was treated as a valuable commodity because it could be sold to customers as a cleanup product. Wash solvent consisted of line flush as well as spilled product. Line flush refers to chemicals used to clear hoses between deliveries to and from the site. ACC wash solvent did not have a pre-established composition; rather it reflected the mix of solvents handled at ACC over a given period of time. Wash solvent was classified into different grades based on the percentage of acetone or methyl ethyl ketone (MEK), which were referred to as active

solvents: the higher quality solvents contained a higher proportion of active solvents. Each batch of wash solvent sold by ACC had its own MSDS sheet reflecting its composition.

Although ACC's wash solvent composition varied, it did not contain chlorinated compounds. The small amounts of line flush generated from handling chlorinated compounds at ACC were purposely kept separate from the bulk wash solvent (stored in the waste tank). This practice was due to customer requirements related to wash solvent – which often involved cleaning materials other than metals (such as rubber that can be damaged by exposure to chlorinated solvents). There was also a demand for wash solvent from silk screen operators who purchased the wash solvent to clean their printing equipment. According to James Locke, former ACC Operations Manager, the amount of chlorinated compounds in wash solvent could not exceed 3-4% or it would not be suitable for ACC's customers. The practice was to separate chlorinated-bearing line flush for later blending with wash solvent for specific customer applications that could accommodate wash solvent with a higher level of chlorinated compounds (such as metal degreasing). Keeping chlorinated compounds out of the waste tank was ACC's solution for its need to supply chlorinated-free wash solvent. ACC's practice of storing chlorinated-bearing line flush separately and (upon demand) blending it with wash solvent explains the presence of chlorinated compounds in certain batches of wash solvent sold by ACC.

The wash solvent was typically stored in the waste tank (UST 32), although former employees report that it occasionally was stored in an AST tank on the west side of the property, in a railcar (when larger volumes of wash solvent accumulated before being sold), and in drums. When stored in the railcar, the wash solvent was pumped directly from the railcar into a tanker truck for bulk sales. One former employee (Cesar Hernadez) recalled that wash solvent may have been stored in UST 18. Another former employee (James Locke) indicated that a product he called "wash thinner" was stored in UST 9. Any wash solvent stored in an UST would have been a non-chlorinated product because of the inability of ACC's equipment to pump dense liquids from USTs and because of customer requirements noted above. During our review of operational information and extensive interviews with former employees there was no indication of how the wash solvent was transferred into or out of the railcar or AST, although it is possible that the waste tank loading pump was used to transfer wash solvent out of the UST and into the railcar or AST.

The ACC facility was configured so that spilled product from the packaging operation in the canopy area would be captured via drains and pipes connected to the 10,000 gallon waste tank. The goal was to recover and re-sell any spilled material as wash solvent as described above. In the event of rain, caps were placed to prevent water from accumulating in the waste tank.

Apart from capturing surface spills via drains and underground piping, ACC's usual operating practice involved the use of five-gallon buckets to capture drips and spills. This practice was in place from the very beginning of operations. Exceptions to the use of buckets under connections may have occurred occasionally, for example when a night time delivery arrived before ACC employees arrived the site. Such exceptions may have caused infrequent and accidental releases along the railroad tracks.

2.1.2.3 Chemicals Handled and Stored

The chemicals stored and handled on site included: acetone, MEK; methyl isobutyl ketone (MIBK); toluene; xylenes; isobutyl acetate; butyl cellosolve; propanol; mineral spirit; kerosene; diesel; unleaded gasoline; methylene chloride; 1,1,1-trichloroethane (1,1,1-TCA) and tetrachloroethene (PCE).

The vast bulk of chemicals handled and stored at ACC consisted of petroleum products and other non-chlorinated chemicals. Chlorinated hydrocarbons represented a small part of ACC's business.

Based on a review of available ACC purchasing records it is estimated that chlorinated compounds accounted for 3% or less of all chemicals handled at the site.

Of the chlorinated compounds handled at ACC site, methylene chloride was most prevalent. Specifically, only a small amount of PCE was sold by ACC and this product was kept in drums in the packing area at the north side of the canopy. Trichloroethene (TCE) was only reported at the site twice: once in November 1985 and once in February 1988. This explains why many past employees do not recall TCE at all at the ACC site.

Another example of a minor (in terms of volume and frequency) chemical handled by ACC is 1,4-dioxane, which is a stabilizer often added to 1,1,1-TCA. This compound was not routinely stored at ACC and was handled only on rare occasions when it had been special-ordered by an ACC customer. Related to the possible presence of 1,4-dioxane in 1,1,1-TCA purchased by ACC, it is noted that ACC purchased its 1,1,1-TCA from Vulcan which did not add 1,4-dioxane during this time period (Mohr, T.K.G., June 14, 2001, Solvent Stabilizers White Paper, Republication Copy. Santa Clara Valley Water District, Table 1.1). Additionally, there are no records indicating that ACC did its own blending of 1,4-dioxane with 1,1,1-TCA. Thus, apart from infrequent occasions when ACC purchased and delivered special orders of 1,4-dioxane, this chemical was not known to be present at the ACC site.

Freon 113 is another example of a chemical that is present in the subsurface but was virtually never handled by ACC. For example there were no product lines for this chemical and none of ACC's blended products included Freon 113. In 1989 ACC sold a single drum of a commercial product called "Fluorosolv-TF" which contains Freon 113. This is the sole record related to the storage of any Freon product at the ACC site.

Although the bulk of its products consisted of non-chlorinated compounds, some products containing chlorinated compounds were formulated at ACC and sold in drums. An example of a chlorinated-bearing product formulated by ACC site was referred to as printer line wash.

2.1.2.4 Chemical Storage and Delivery

Over the years, different chemicals were stored in different tanks, however chlorinated compounds were not stored in USTs, mostly due to their high density. The high density of chlorinated compounds made it difficult and impractical to pump them out of USTs with the equipment available at ACC.

ACC also owned three railroad cars which were used as storage tanks. Records indicate that different chemicals including linseed oil and chlorinated solvents were stored in the railroad cars.

Chlorinated compounds were stored only above ground at ACC, (SCS Engineers, 1994) usually in drums or in the compartmented railroad cars. Occasionally, a large delivery (500 gallons or more) would be stored in an aboveground storage tank (AST) under the canopy from where it would be transferred to 55-gallon drums.

Chlorinated solvents were not delivered to ACC via railcars because the amounts handled at ACC site would not justify such large shipments (although one former employee recalled that there may have been one exception when a rail shipment was delivered). Usually, chlorinated compounds were delivered to the site by truck and the practice was to pump it directly into a railroad car so the delivery truck could leave promptly. Later the solvents were repackaged into drums. The southernmost of the three railroad cars stationed at ACC was used in this way for temporary storage of chlorinated compounds.

Kerosene was stored in underground storage tank (UST) #17, while linseed oil was stored in the railroad cars. This is confirmed by one past employee who referred to the railroad cars as the "oil railcars." There has been some confusion about the use of the term "solvents" in reference to ACC

operations. In particular, past ACC employees used the word “solvents” in interviews and depositions. Certain parties have incorrectly concluded that employees were referring to chlorinated solvents. Rather, in using this term, employees were referring to petroleum-based solvents that were a major part of ACC’s trade.

2.1.2.5 Vendors

ACC was an official distributor for Vulcan Materials and most if not all chlorinated compounds were purchased from Vulcan Materials. ACC also bought chemicals from Union Carbide, Shell Oil, Celanese Corporation and Chemcentral. 1,4 -dioxane was supplied by Ashland Chemical on the rare occasions that it was purchased.

2.1.3 Site Features

At the time of operation, the surface of the site was paved with asphalt or concrete. Exceptions to this were strips of gravel along the railroad spur (along the northwestern periphery of the site), and a gravel strip to the south adjoining the railroad easement. Three buildings were present at the facility, two offices and a laboratory. A canopy covered the packaging production line on the central portion of the site.

A loading platform and ramp were associated with the offloading of chemicals delivered by truck. Peripheral areas of the site were used for temporary empty drum storage. The detailed site plan is given in Figure 2 .

The site had three spill drains, one located near the north central truck loading ramp, the second located in the south central portion of the site east of the canopy area, and a third was located immediately east of the canopy area between USTs 24 and 26 (Figure 2). Surface drainage for the central part of the site was toward these drains. Subsurface piping led from the first two drains to the underground waste tank. Subsurface piping for the third drain ran into the south central drain, which consisted of a subsurface concrete trap (dimensions of 2 x 2 x 2-ft.), from which a single subsurface pipeline at approximately 1-ft below ground surface (bgs) led to the waste tank. The connection between this pipeline and the trap was fitted with a plug, which was removed when the trap filled to allow flow to the waste tank.

The facility included 35 USTs. All the USTs were located in the southern and central portions of the site. A list of the chemicals stored in each UST in 1994 is given by SCS Engineers (SCS Engineers, 1994). All of the USTs at ACC were cathodically protected and all had been tested for tightness at least once (SCS Engineers, 1994). Specifically, the USTs were protected by a sacrificial anode system containing Mg anodes, according to Leon Chadbourne, a State of California certified corrosion engineer who was hired to test the tanks for tightness (PSC Corrosion Engineering, 1987). EREMCO noted in its tank removal report (EREMCO, 1999) that “the tanks were in very good condition and clean” and that: “The condition of the USTs that were removed and their steel piping was very good and there was no evidence of leakage.”

There were nine ASTs on the site. Four ASTs near the western corner of the site were compartmented steel tanks oriented horizontally, which contained propyl acetate, denatured alcohol, mineral spirits, and propyl alcohol (SCS Engineers, 1994). The remaining five ASTs were vertical steel transfer tanks located in the central canopy area, two by the drumming station and three by the small container filling area. These transfer tanks were used as temporary chemical holding tanks during filling of containers and not for long term storage.

At the former ACC site, there were five designated storage areas for palletized drums containing chemicals:

- One area along the southern fence line;
- One area immediately east of the central canopy area;

- Three areas in the northern portion of the site.

There were two storage areas for palletized small packages and containers located:

- Immediately east of the canopy area;
- Along the eastern boundary of the site.

The site had three main storage areas for empty drums and containers:

- One area in the northeast corner of the site;
- Two areas in the southwest corner of the site.

ACC owned three railroad cars (one with a single compartment and two with three compartments each) that were permanently stationed at the site. All three railroad cars were sold for scrap metal around 1997.

2.1.4 Hazardous Waste Permit History

Tank integrity tests (using the Horner EZ method) and inventory records were initiated in late 1985 in response to Los Angeles Department of Public Works (DPW) UST permitting requirements.

2.1.5 DTSC Orders and Agreements

DTSC issued an Imminent or Substantial Endangerment Docket Number 92/93-012, dated February 10, 1993 and the Clean Loan and Environmental Assistance to Neighbors Program Response Action Agreement Docket Number A-01/02-052, dated December 10, 2001. The above-mentioned Order and subsequent Agreement are the defining documents for the clean-up efforts at the site.

2.2 Environmental Setting

2.2.1 Land Use, Zoning, and Demographics

The Site occupies approximately 1.8 acres in a predominately industrial area of Santa Fe Springs, being surrounded by Liquid Air on the northwest, Plastall Metals Corporation on the north, Southern Pacific Railroad and McKesson Chemical Company on the south, and Sorensen Avenue on the east. The Site is zoned ML – Limited Manufacturing and Research.

Santa Fe Springs has (as of 2006) a population of about 17,000 in an area of 8.75 square miles. The population density is 1,950 people per square mile (below the state average). The city daytime population swells 250% by daytime commuters coming in each day to work. Only 18% of the city's population lives and works in the city. The average commuter drives for 27 minutes to get to work. Seventy-one percent of the population is of Hispanic heritage. Twenty-three percent of the population has emigrated from Latin America. The percentage of émigrés is significantly above the state average. Of the remaining population, 19% are white, 4% are black, and 6% are other races. The percentage of Hispanics is significantly above the state average, while the percentage of blacks is below the state average. The population is divided almost exactly 50% males to females. Fifty percent of the population is married and ten percent of the population is divorced. Only 11% of the population has a college or graduate degree (significantly below the state average). The median age is 33.1 years old and the median income is $51,000 per year (below the state average). The top three occupations for males in the city are truck drivers (11%), production workers (7%), and metal and plastic workers (6%). The top three occupations for females in the city are office/administration (7%), clerks (6%), and production workers/sales/ secretaries (5% each). Houses in the city have fewer rooms than the average house in the state but have a higher number of people per household (3.4) than the state average. The median house price is $389,000. There were no new single-family housing permits issued in Santa Fe

Springs in 2006. On average, more people are institutionalized in this city than the state average. The crime index (759) is more than double the national average (353).

2.2.2 Habitat and Local Ecology

There are no Significant Ecological Areas immediately adjacent to the subject property (Regional Water Quality Control Board [RWQCB], 1994). However, Coyote Creek, an ephemeral stream, is just south of ACC and flows east-west parallel to the southern border. Haley & Aldrich consulted the Department of Fish and Game and confirmed that the Department has not conducted studies of the Creek, no documents are known to exist related to the ecology of the creek in the vicinity of ACC and it is not known to be a sensitive ecological resource.

At least since the property was developed in 1976, runoff from ACC has been directed away from Coyote Creek (see discussion in next Section 2.2.3). Additionally it is noted that Coyote Creek is not directly adjacent to ACC, but rather it is separated by two sets of railroad tracks (on an elevated berm). The Creek is about 50 feet south of the ACC property line. At the same time, records do not indicate any dumping or discharges into the creek by ACC, in contrast with other neighboring facilities such as McKesson Chemical Company with a history of illegal discharges into the Creek and with many discharge violations dating back to 1976.

2.2.3 Topography and Surface Drainage

The Site lies at about 145 feet above mean sea level (msl). The Site is essentially flat with a gentle slope to the east and southeast toward Sorensen Avenue, thus the surface drainage is towards that street. This drainage pattern is confirmed by ACC's NPDES Permit. There has been speculation that runoff from the southern part of the property could have been to the south toward Coyote Creek. In addition to the eastern grading since at least 1976, the elevated railroad track between ACC and Coyote Creek would also preclude runoff to the south (see Figure 3).

2.2.4 Climate

The ACC Site is located in the South Coast Air Basin with a semi-arid Mediterranean climate consisting of warm, dry summers and mild winters. The annual average precipitation is less than 14 inches per year (California Data Exchange Center, Division of Flood Management, California Department of Water Resources [http://cdec.water.ca.gov]). April is historically the rainiest month (4 inches, on average). August typically has no recorded rainfall.

Temperatures in Santa Fe Springs reach the 90s during the day in August and fall to the mid-40s during January evenings. Sunny days peak in November (75% of the time) and the cloudiest month is May (60% of the time). Humidity peaks in September (80%) and falls to approximately 50% in April. Wind velocities typically range from 7.5 miles per hour (mph) in April to 5 mph in December. One quirk of the weather in Santa Fe Springs is that there is significantly more than the state average tornado activity. In recent two events, tornado damage was estimated to exceed $500,00 in each event.

2.2.5 Surface Water

Surface water in the vicinity of the Site is intermittent and limited to runoff associated with rainfall and irrigation. The only significant surface water drainage is Coyote Creek, an unlined drainage channel that extends parallel to the southern property line. This drainage channel flows to the east and serves as a discharge point for many industrial properties located along its length. A channel profile was measured near Sorenson Avenue. At that location, the channel is 66 inched deep, 36 inches wide at the bed and 228 inches wide at the top of the bank. The banks of the channel are steep-sided, ranging from 32° to 55°. According to USGS records, there are no systematic gauging data for the creek in the vicinity of or upstream of ACC. The San Gabriel River channel is approximately 1.5 miles to the east of the Site.

2.3 Geology and Hydrogeology

2.3.1 Regional Geology

The Santa Fe Springs area is underlain by the Santa Fe Springs-Coyote Hills anticlinal system, whose limbs dip gently to the northeast toward Whittier and to the southeast toward the Downey Plain. Consequently, the geologic units beneath the ACC site have been warped on a regional scale. The nearest major fault zones are the Whittier Fault Zone approximately 3.5 miles to the northeast, and the Newport-Inglewood Fault Zone approximately 11 miles southwest. As a result of the underlying structure and location along the margin of the Los Angeles Basin, Santa Fe Springs is underlain by a major oil field that has been producing significant quantities of oil since the early 1900's. During the years between 1920 through the 1940's this area was one of the major oil producing fields in the United States.

Surficial sediments consist of fluvial and alluvial deposits composed of interbedded gravel, sand, silt, and clay. Available data from California Water Resources Bulletin No. 104, (June 1961) indicate that surficial sediments may be Holocene and/or the upper Pleistocene Lakewood Formation. Bulletin 104 indicates that the Lakewood Formation generally ranges from 40 to 50 feet in thickness in the site vicinity. Frequent lateral lithologic changes are typical of the Lakewood Formation, with discontinuous permeable zones and considerable variation in particle size. Underlying the Lakewood Formation are stratified deposits of sand, silty sand, silt, and fine gravel comprising the upper portion of the lower Pleistocene San Pedro Formation. The San Pedro Formation generally ranges from 700 to 800 feet in thickness in the site vicinity.

2.3.2 Local and Site-Specific Geology

The lithology of the shallow sedimentary materials under and in the immediate vicinity of ACC is now well-defined based on many soil borings and Cone penetrometer test (CPT) pushes collected largely during investigations at ACC and the adjoining McKesson property. Figure 4 shows the soil boring and CPT locations at the ACC site. Figure 5 shows the location of groundwater monitoring wells and Figure 6 shows soil vapor sampling locations.

The lithologic data from the soil borings and CPT logs provide a robust data set with which the hydrostratigraphy of the site can be characterized. We have defined six distinct hydrostratigraphic units beneath the site (Figures 7, 8 and 9). The uppermost layer is designated "unit A" and is considered overburden consisting of a mixture of fill and silty sands to clayey silt. Beneath unit A is unit B, a well-defined clean sand that sometimes contains gravel. Next in depth is a fine-grained, predominantly silty zone designated as "unit C1" that is underlain by a coarser-grained silty sand named "unit D." As expected of fluvial or alluvial deposits (which commonly exhibit sinuous morphology) the silty sand of unit D may not be evident at every soil boring. However, in three-dimensions, it constitutes a continuous layer capable of transmitting water (Figure 7) over the spatial scale of interest for contaminant fate and transport.

Beneath unit D is "unit C2," described as a clayey silt that may be clay-rich near the top and sandier at depth. The lowermost "unit E" is a clean, coarse-grained sand that is considered the top of the regional aquifer system.

2.3.3 Regional Hydrogeology and Groundwater Occurrence

The site lies within the Central Basin Pressure area, a division of the Central Groundwater Basin that extends over most of the Los Angeles Coastal Plain. In this area the Gaspur aquifer, a part of the basal coarse unit of Holocene deposits, is found within old channels of the San Gabriel and other rivers. Locally, the Gaspur may be 40 feet in thickness, with its base at a depth of about 80- to 100-ft bgs. The Gaspur is nonexistent in many areas. The underlying Gage aquifer is found within the upper Pleistocene Lakewood Formation.

2.3.4 Local and Site-Specific Hydrogeology and Groundwater Occurrence

2.3.4.1 General Discussion

Two main water-bearing units were encountered during drilling at the ACC site. Shallow groundwater currently occurs in unit D, with two limited and transient occurrences in unit B (MW-4 and MW-6).

The water-bearing units have been referred to by different names and designations in different environmental studies of this and nearby sites, thus creating some degree of confusion. In particular, there appears to be confusion about the occurrence of the shallow, perched groundwater that is found predominantly in hydrogeologic unit D, but can also be found in hydrogeologic unit B. Given the limited and transient nature of perched water in unit B, “shallow groundwater” is classified as any groundwater encountered in unit D or above (generally shallower than 45-ft bgs, ibid). Any groundwater below unit D (generally deeper than 45 feet) is interpreted as “deep groundwater” (representing the regional aquifer). This classification system is intended to minimize confusion related to different water-bearing zones and will also help interpret the results and contamination pathways.

Based on the recovery of unsaturated soil samples beneath unit D, in unit C2, the shallow groundwater is interpreted as a perched aquifer. Based on historic water level measurements, the shallow groundwater is dynamic and can respond precipitation events with rapid rises and declines. Flow dynamics of the shallow groundwater are also strongly influenced by the structure of the perching layer. Unit C2, the less permeable clayey unit, is an aquitard separating the shallow and deep groundwater. This clayey-silt zone continues to a depth of approximately 50-ft bgs across the site becoming siltier with depth.

The occurrence and flow of deep groundwater at the site is less complex than that of the shallow zone. Based on regional, local, historic, and recent data, groundwater flow in the deep zone beneath ACC is consistently toward the west-southwest. The contact between unit C2 and E (which comprises relatively coarse-grained clean sands) defines the top of the deep groundwater zone. The deep groundwater has been interpreted at various times to be the upper portion of the Gage or Gaspur/Hollydale aquifer. The regional deep aquifer has also been referred to as the A1 zone by previous investigators, and has been correlated to hydrostratigraphic unit E. The base of the A1 sub-zone of the regional aquifer is defined as the top of a silt unit that generally occurs between 70-ft and 80-ft bgs. The aquifer is therefore relatively thin and ranges from about 25-ft to 35-ft thick across the site.

Current and historical groundwater elevations measured at the site are given in Table 6, while Figures 11 and 12 show interpretations of potentiometric surfaces for the shallow and deep groundwater for the 1st quarter 2008, respectively. Figure 10 presents an interpretation of the shallow groundwater potentiometric surface in 2005 to illustrate conditions of northerly flow in the shallow groundwater. A graph showing hydrographs for selected wells along with precipitation data is given in Figure 13.

While deep groundwater gradient is quite consistent over time, the shallow groundwater has fluctuated widely on both short time scales (days and weeks following precipitation events) and long time scales (on the order of years, responding to drought and non-drought conditions). For example, data from March 2005 (when water levels were higher than current conditions) show shallow groundwater flow toward the north (Figure 13).

The shallow and deep groundwater zones exhibit a positive correlation to precipitation events and recharge from Coyote Creek which could have had a great impact during ACC and McKesson site operations (Figures 13-16). The overall rates of rise and fall of water levels in both zones are correlated to the temporal patterns of seasonal precipitation and subsequent infiltration. In shallow

groundwater the response is not homogeneous across the ACC site, but is larger and faster on the south side of the site, nearer to Coyote Creek. Figures 13 and 14 show rapid increases and decreases of shallow water levels in response to precipitation in wells closest to the Creek on both the ACC and McKesson sites. Figure 14 illustrates this by a showing the rise in groundwater in McKesson Well SB-32 of about 6 feet from November 1990 to April 1991 in a period with high rainfall. Figure 15 shows a general representation of the recharge associated with surface water infiltration to demonstrate that this phenomenon of localized recharge is well understood.

Compared to shallow wells closest to the Creek, more distant shallow wells exhibit a later and dampened response to precipitation events (Figure 13). This pattern suggests that infiltration from Coyote Creek is a dominant source of recharge to shallow groundwater. Deep groundwater also responds to seasonal precipitation events, but the response does not vary spatially across the site, indicative of regional rather than local recharge.

As indicated above, the geometry of the bottom of unit C2 influences flow dynamics in shallow groundwater especially during periods with low groundwater levels. A significant hydrogeologic characteristic is that units D and C2 slope generally downward to the north, with these units approximately 10 to 15 feet lower under ACC compared to the neighboring McKesson site to the south.

Response of the shallow groundwater to precipitation events indicates this unit is highly sensitive to variations in recharge. In addition to seasonal variability, longer term drought and rainy conditions will affect the shallow groundwater, as could operations at the former ACC and McKesson sites if the operations involved significant discharges of water. For example, at McKesson, no groundwater was encountered to a depth of 45 ft bgs in January 1975 (Harding Lawson Associates [HLA], 1992). This observation was made before McKesson began operating. In March 1986, during McKesson's active operational period, groundwater was encountered at 22 ft bgs (HLA, 1992). The use of water and frequent presence of standing water at McKesson was a source of enhanced infiltration and recharge, apparently contributing to a rise in shallow groundwater. After McKesson ended operations, this enhanced source of infiltration and recharge ceased. These findings suggest that current shallow groundwater conditions, although important from the perspective of remediation, are not fully representative of past conditions, especially during the period of operation at the McKesson and ACC sites. In particular, given the complex and variable dynamics of the shallow groundwater, shallower groundwater prevailed when releases to the environment were occurring and would have exerted an important influence on contaminant fate and transport.

2.3.4.2 Investigation of potential cross-screening between shallow and deep groundwater zones at ACC Site

As a better understanding of site hydrogeology developed, the issue was raised that early monitoring wells (MW-01, MW-02, MW-03, and MW-07) could be screened across the aquitard, thus forming a possible conduit for migration of contamination into the deep aquifer. These wells were abandoned in 2002 and 2003 as a preventive measure to avoid possible migration of contamination from shallow groundwater into the deeper regional aquifer. In order to evaluate the possibility of cross-contamination between the shallow and deep aquifers, information on these wells has been reviewed and the findings presented below.

First, we compared the well construction details with current lithologic interpretations to evaluate if these wells were indeed cross-screened. We determined that MW-7 was not cross-screened but the other wells probably were. Further lines of evidence were investigated in order to evaluate if MW-01 did indeed contribute measurable contamination into the deep aquifer. The main findings are presented below.

- *Lack of correlation of contaminant concentration and water levels between abandoned wells and downgradient deep wells.* Figures 17 and 18 show the lack of correlation between MW-01 and downgradient wells in the deep aquifer in terms of both chemical analytical results and groundwater elevations. If there was any cross-contamination due to the abandoned wells, it was not significant enough to be measurable in downgradient wells.
- *Lack of correlation between contaminant concentrations in shallow and deep groundwater.* Much higher concentrations of volatile organic compounds (VOCs) are found in shallow groundwater at ACC than in the deep groundwater under ACC. If there was significant migration of contamination from the shallow to deep aquifer, the concentration disparities would tend to have equalized. In fact, there is no correlation between shallow and deep groundwater at the ACC site (see Section 4).
- *Absence of shallow contaminants in deep groundwater.* Contaminants commonly found in shallow groundwater at ACC included methylene chloride, MEK, and MIBK. None of these compounds have ever been detected in deep groundwater, demonstrating the integrity of the aquitard and lack of mixing between shallow and deeper aquifers at ACC.
- *Insignificant amount of free product in deep groundwater.* A significant amount of LNAPL has been encountered and a significant amount of LNAPL has been recovered from shallow wells. The only ACC deep groundwater well that has ever reported LNAPL is MW-21. The total volume of LNAPL reported and subsequently recovered from A-MW-21 was approximately 1.5 liters. This amount is insignificant compared with the amount of free product encountered in shallow wells. For example, to date a total of 208 liters of LNAPL have been removed from MW-18, 41.3 liters from MW-19, while 26.5 liters have been removed from MW-8.
- *Characteristics of the aquitard layer at ACC.* Soil physical testing (see Section 4) has confirmed that the unit C2 aquitard has a consistently low hydraulic conductivity and serves as an effective barrier to water and contaminant flux. Indeed, the very existence of a perched aquifer necessitates an effective barrier, otherwise the perched zone could not persist.

2.3.5 Regional and Local Groundwater Quality

In addition to releases at ACC, known and suspected releases that may have impacted local groundwater have been documented at numerous sites around the ACC property, including McKesson (to the south) and Omega (to the north). A thorough discussion of these releases is provided in Section 2.6 of this report and the nature and extent of groundwater contamination is discussed in Section 4.

2.4 Previous Investigations

A number of soil, soil vapor, and groundwater investigations have been conducted at the ACC site from 1990 through 2006. In 1996 the site was separated into three operable units. Operable Unit (OU) 1 addressed soil in the northern portion of the site, OU-2 addressed soil in the southern portion of the site, and OU-3 addressed the groundwater beneath the site.

The investigations conducted at the ACC site to date are summarized in the following sections and in **Table 1**. The locations of soil, groundwater, and soil vapor samples are given in Figures 4-6 respectively.

2.4.1 SCS Site Investigations

SCS Engineers (SCS) was the original environmental consultant for ACC. This section provides a chronological summary of the environmental work conducted at ACC site between 1985 and 2000. The original environmental reports are attached in Appendix D, while Tables 2-8 and Figures 20-44 of this report present results of these and subsequent investigations.

Contamination was first discovered at the ACC site in 1990. Although the exact date when releases began is not known, at least part of contamination is attributable to a broken pipeline around the south catch basin was apparently damaged during work conducted at the site in 1982.

1985 Tank Testing. The first known environmental records for ACC date back to late 1985 when tank integrity tests (using the Horner EZ method) and inventory records were initiated in response to DPW UST permitting requirements. The testing did not indicate any problems with the USTs and confirmed that they were cathodically protected (SCS Engineers, 1994). The lack of problems associated with the USTs was confirmed through the daily inventory records using stick measurements. Based on this testing, the USTs at ACC did not appear to have contributed to contamination of the vadose zone.

1986-1989 Subsurface Investigation Work Plan. In April 1986, also in response to DPW requirements, SCS Engineers submitted a work plan for a subsurface investigation. In March 1989 a modified work plan, revised according to DPW comments, was re-submitted by SCS to DPW.

January 1990 - Soil Investigation. Following approval of the Work Plan, SCS conducted the first site investigation (SCS Engineers, 1991). Eight soil borings (BH-01 to BH-08) were drilled at depths ranging from 20-ft to 50-ft bgs in the vicinity of the USTs and ASTs. Soil samples were collected at 5-ft intervals and were analyzed for VOCs using Environmental Protection Agency (EPA) Method 8240. The following VOCs were detected in one or more locations: benzene, 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), ethylbenzene, MEK, MIBK, PCE, toluene, 1,1,1-TCA, TCE, and xylenes. The highest concentrations were found in two borings (BH-05 and BH-06) in the vicinity of the south central spill drain, while in boring BH-08 (northeast portion of the site) no VOCs were detected. SCS proposed further evaluation of the area with higher VOCs.

April 1990 Soil Excavation and Sampling. In order to further investigate the locations with high VOCs, a shallow soil excavation was dug around the spill drain adjacent to the east side of the canopy. This excavation was limited to approximately 3-ft bgs due to the proximity of the USTs. The excavation revealed a severed pipe about 1-ft bgs. The break in the pipeline was approximately two feet east of the catch basin, allowing runoff that collected in the catch basin to discharge into soil. Discolored soils near the pipeline break along with OVA readings of 400 to 700 ppm and hydrocarbon odors were noted during the excavation. Two grab samples, S-1 and S-2 (renamed SS-01 and SS-02 in this report due to a naming conflict with later samples), were collected from 2 to 3-ft bgs near the pipeline break. These samples were found to contain ethylbenzene, toluene, xylenes, PCE, 1,1,1-TCA, and TCE in varying concentrations.

June 1990 Soil and Groundwater Investigation. The next investigation took place in June 1990 when seven soil borings (BH-09 to BH-14, and MW-01) were drilled to depths ranging from 20.5 to 60-ft bgs . Soil samples were collected at 5-ft intervals and analyzed using EPA Method 8240. A total of 13 VOCs were detected in one or more soil samples: the previously detected 11 VOCs along with acetone and methylene chloride. As part of the June 1990 site investigation, one soil boring was converted to a groundwater monitoring well (MW-01) near the southern property line in a location believed at the time to be downgradient of the contamination near the broken pipe. Groundwater was initially encountered at a depth of approximately 45-ft bgs in MW-01, and the well was screened from 40 to 60-ft bgs. The following contaminants were identified above their respective drinking water standards (maximum contaminant limits or MCLs) in the groundwater sample collected from MW-01: benzene, 1,1-DCA, 1,1-DCE, PCE, TCE, and trans-1,2-dichloroethene (trans-1,2-DCE). Three other contaminants were identified in the groundwater sample but below their respective MCLs: toluene, 1,1,1-TCA and xylenes. No free product was encountered at this stage of the environmental investigation.

October 1992 Railroad Spur Soil Investigation. In October 1992 SCS collected seven near-surface soil samples (RR-01 through RR-07) along the railroad spur in the northwest portion of the site to evaluate the extent of VOC impact along the railroad spur, where releases associated with delivery and off-loading of product were suspected. Samples RR-01 and RR-02 were collected from two depths at the same location (0 and 1.5-ft bgs, respectively); RR-03 and RR-04 were also collected at different depths from the same location, as were RR-05 and RR-06. The samples were analyzed using EPA Method 8240 for VOCs and Method 418.1 for TRPH. TRPH, PCE, 1,1,1-TCA, toluene, and xylenes were detected in these samples. Based on these results it was evident that releases along the railroad spur have contributed to ACC soil contamination.

*1993-1994 Soil, Groundwater, and CPT Investigations –1994 RI Report***.** Among other things, DTSC's Imminent or Substantial Endangerment Order called for ACC to conduct a Remedial Investigation and Feasibility Study (RI/FS) for the Site. As part of the RI/FS, additional investigations were conducted at the site in 1993 and 1994 (SCS Engineers, 1993, 1994). The purpose of the SCS RI was to characterize the nature and extent of chemicals of concern on the site and evaluate potential migration pathways. The primary focus of the RI was the groundwater investigation for which previously available data were limited. As summarized below, CPT, soil and groundwater investigations were performed as part of the SCS RI.

CPT Investigation. This investigation preceded the soil and groundwater work. The main objective was to verify the existence and assess the extent and quality of groundwater in the perched aquifer and obtain information for interpretation of local geology. Thus, in November 1993, SCS completed a CPT investigation as outlined in the SCS RI/FS Work Plan (SCS Engineers, 1993). Six CPT locations were attempted (CPT 1, 3, 4, 5, 6, and 8). Refusal prior to planned total depth was encountered in four of the six CPT locations (CPT 3, 4, 5, and 6). A gravel-rich zone made penetration beyond 23-ft bgs impossible with the CPT rig used for this work. In general, CPT data correlated well with available borehole data and assisted interpretations of the lithology of the site. Alternating silty clays and clayey silts were typically encountered in the top 15 to 17 feet, followed by silty sand leading into a gravelly sand zone with variable thickness (1-8 feet) across the site. Beneath the gravel zone, clays and silts with some sand were encountered to the total depth of the CPT logs. CPT logs are provided in Attachment A. All CPT holes were backfilled with bentonite grout.

Soil and Groundwater Investigation. Between 1993-1994, SCS used a hollow-stem auger drill rig to advance four exploratory borings (BH-15, BH-16, BH-17, and MW-05) to a depth of approximately 25-ft bgs, corresponding to the depth of the anticipated perched aquifer. Soil samples were collected at 5-ft intervals in brass tubes, using a California modified split-spoon sampler with a 140-pound slide hammer. Five other borings (MW-02 through MW-07), subsequently converted to groundwater wells, were drilled using a hollow-stem auger drill rig to depths ranging between 30 and 55-ft bgs. A monitoring well was not installed in boring MW-05 because it was dry. The screen intervals for the installed wells were 30 to 50-ft (MW-02) , 29 to 49-ft (MW-03), 17 to 27-ft (MW-04), 20 to 30-ft (MW-05), and 34 to 55-ft bgs (MW-07). Soil samples were analyzed for VOCs using EPA Method 8240. Groundwater samples from these wells were collected in February 1994. The wells were installed, developed, and sampled, and groundwater samples were analyzed using industry-accepted protocols and construction details are provided in the SCS RI Report (SCS Engineers, 1994). Groundwater was initially encountered in MW-02 at 34 feet, eventually rising to a depth of 28.8-ft bgs in the well. In MW-03 water was initially encountered at approximately 34 feet, eventually rising to 29.7-ft bgs.

Findings of the SCS RI Report

The SCS Report identified contaminants of concern, as well as potential contamination sources both on-site and off-site. At the same time, no evidence that ACC's USTs had contributed to contamination could be found. In summary, the results of this investigation revealed the following:

- In soil the following contaminants were detected in high concentrations: acetone, MEK, MIBK, PCE, toluene, 1,1,1-TCA and xylenes. The highest concentrations were found around the two identified on-site source areas: the railroad spur and the broken pipe. Concentrations in soil decreased with respect to depth in the railroad spur, however concentrations increased again around 20-ft bgs which SCS attributed to sorption on soil grains from contaminated perched groundwater.
- In groundwater the following contaminants were detected: benzene, 1,1-DCA, 1,2-DCA, 1,1-DCE, ethylbenzene, methylene chloride, PCE, toluene, 1,1,1-TCA, TCE, and xylenes.
- Samples were also analyzed for metals and these were found in the general range of natural background concentration and are not considered contaminants of potential concern for ACC.
- The perched aquifer appeared discontinuous, being absent at the MW-05 location.
- Free product was only encountered in MW-01 in February 1994.
- No significant impacts to the vadose zone were identified from the on-site USTs or activities other than the chemical handling along the railroad spur and the broken pipe.
- No evidence was found of chemicals entering the soil through cracks in the concrete or asphalt pavement on the site;
- The following potential sources of contamination were identified by SCS:
    - On site sources:
        - The immediate vicinity of the northwest railroad spur due probably to drips and spills during chemical loading and unloading;
        - The south central drain area – around the broken pipeline.
    - Off-site sources:
        - SCS cites the likelihood of lateral transport of contaminants by groundwater during times of high groundwater levels. These sources may originate off-site and could have impacted soils mostly at two depths: 20 feet bgs near the top of the perched aquifer and at 30 and 40 feet bgs near what SCS interpreted to be the top of the Gaspur/Hollydale aquifer.

The following recommendations were made by SCS in its RI Report:

- To submit a risk evaluation report following completion of the final RI report. This would provide the basis for remedial action;
- To submit an FS following completion of the RI and Risk Evaluation Reports.

1995 Baseline Risk Assessment. In 1995, SCS prepared a baseline risk assessment using data available at that time (SCS, February 1995). This study estimated human health risks in the absence of any site clean-up. The study found the following risks:

- The total non-carcinogenic health hazard for a hypothetical current (1995) on-site worker was calculated at 1.22, a value somewhat above that which would be considered an acceptable non-carcinogenic health hazard (1.0 is typically considered the upper threshold). This indicated that site remediation or other mitigating measures were warranted;

- The total carcinogenic risk for the hypothetical current (1995) on-site worker was calculated at 1.25×10^{-4}, which was considered an unacceptable risk based on EPA Superfund Guidance.
- A significant portion (90-95%) of the non-carcinogenic and carcinogenic risks for hypothetical future land uses were due to the groundwater pathway.

1996 Soil Vapor Extraction Pilot Study. In June 1996 SCS conducted an soil vapor extraction (SVE) pilot test in order to obtain site-specific parameters (including air permeability and moisture content of vadose zone soils) and to measure the specific VOC compounds and concentrations in the extracted vapor stream. The test also evaluated the efficacy of activated carbon beds for treating the extracted vapor stream (SCS Engineers, 1996; SCS Engineers, 1999). Additionally, different remediation design parameters for an extraction system were assessed, including effective radius of vacuum influence and optimal rate of vapor extraction. The overall goal of the pilot study was to evaluate the performance and feasibility of using vapor extraction technology as a means of soil remediation in OU1.

In May 30, 1996 one vapor extraction well (E-1) and three vapor monitoring wells (VP-1, VP-2, and VP-3) were installed in the northern portion of ACC site by Beylik Drilling. The vapor monitoring wells were placed at approximately 80, 40 and 20-ft from the extraction well. Vapors were extracted from E-1 which was screened from 7 to 22-ft depth. A total of five tests were performed at varying flow rates and levels of air dilution:

- Passive test – 15 min at a flow rate of 0 cubic feet per min, and an average vacuum at the extraction well of 0 inches of water;
- Test S1 – operation of SVE for 8 hours at a flow rate of 21.8 cubic feet per minute, and an average vacuum at the extraction well of 1.8 inches of water;
- Test S2 _ operation of SVE for 5.5 hours at a very low average flow rate, and an average vacuum at the extraction well of 10.05 inches of water;
- Test S3 – operation of SVE for 3.5 hours at an average flow rate of 41 cfm, and an average vacuum at the extraction well of 3.5 inches of water;
- Test S4 – operation of SVE for 25 hours at an average flow rate of 5 cfm, and an average vacuum at the extraction well of 0.34 inches of water;
- Test S5 – operation of SVE for 0.25 hours immediately after test S4 at an average flow rate of 122.1 cfm and an average vacuum at the extraction well of 14.5 inches of water.

SCS reported the following findings from the soil vapor pilot study:

- 1,1,1-TCA was the VOC with the highest concentration in the extracted vapor stream (about 60% of VOCs in the vapor stream by volume). Other detected VOCs in relatively high concentrations were: 1,1-DCE, TCE, methylene chloride, toluene, PCE, and xylenes. The radius of influence was up to a 36 feet for shallow soil and up to 80 feet for deeper soil. This data was used in the evaluation of alternatives described in the Feasibility Studies (SCS, April 25, 1997; June 1998) and Removal Action Workplans (RAWs; SCS, September 1997; February, 1999).
- Another finding was that the proportion between different classes of VOCs (such as chlorinated hydrocarbons vs. aromatic petroleum hydrocarbons and ketones) was different between the extracted vapor stream and soil. Thus 95% (by weight) of chlorinated hydrocarbons were observed in the vapor stream, while higher proportions of aromatic hydrocarbons and ketones were observed in soil probably due to differences in the volatility of these compounds.
- An interesting fact related to this testing is that two of the influent vapor samples contained high concentrations of Freon 113 (up to 39,100 ppbv in sample S4-5). Freon 113 is a chemical that

has not been handled at ACC with the exception of one drum and thus its presence in soil vapor probably reflects contamination from an off-site location. The two samples with detected Freon 113 were influent samples from test S4, with the longest time of operation (25 hours). Considering the radius of influence and the vacuum and flow rate recorded at this particular test, the vapors could have come from some distance. This fact, although not pointed out by SCS, is important for evaluation of potential off-site sources of contamination.

1996 and 1997 Soil Vapor Surveys. Soil vapor samples SV-01 to SV-23 were collected in January 1996 at 5-feet bgs in the northern and central portion of the site. Seven of the probes (SV1, SV7, SV9, SV10, SV13, SV15, and SV23) were also sampled at 15-feet bgs. The vapor survey results were summarized in an SCS Summary Report (SCS Engineers, 1999).

In November 1997, SCS conducted an additional soil vapor survey to evaluate the lateral extent of VOC impact. Twelve locations (SV-24 to SV-35) from the southern and central portions of the site were sampled at a depth of 5-feet bgs, and, at five of the locations (SV-26, SV-28, SV-30, SV-31, and SV-32) samples were also collected from depths of 15-feet bgs.

The results were presented in the Pilot Test Work Plan (May 1996) and in a letter report (SCS, December 8, 1997). Additional information is included in the RAWs (SCS, 1997, 1999) including the following:

- The following VOCs were detected in soil vapor: chloroethane, 1,1-DCA, 1,1-DCE, cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-DCE, methylene chloride, PCE, 1,1,1-TCA, TCE, vinyl chloride, benzene, toluene, ethylbenzene, xylenes, acetone, MEK, and MIBK.
- Concentrations of VOCs in samples at 15-ft bgs were higher (often by an order of magnitude) than those collected at 5-ft, which was explained by SCS as being due to the generally more permeable nature of soils at this depth.

1997-1998 Feasibility Studies. In 1997, SCS prepared a Feasibility Study Report for OU-1 (SCS Engineers, 1997). In 1998 SCS prepared a Feasibility Study Report for OU2 (SCS Engineers, 1998). These reports discussed remedial action objectives and proposed general response actions for vadose zone soils at ACC. Remedial action alternatives considered by SCS included:

1. Capping (asphalt or synthetic membrane),
2. Excavation and off-site disposal,
3. Vapor extraction using carbon adsorption,
4. Vapor extraction using catalytic oxidation,
5. Vapor extraction using direct condensation,
6. no action (used as a baseline).

Ultimately, SCS recommended vapor extraction using catalytic oxidation for both OU-1 and OU-2. SCS also recommended tying the extraction wells and a header system for OU2 into the proposed VES for OU1, thereby utilizing one treatment unit for remediation of both operable units.

1999 Soil Vapor Extraction Testing. The purpose of the 1999 testing was to determine whether thermal oxidation could effectively treat extracted soil vapor alone or in combination with vapor recovered from the ACC blending and filling operations (SCS Engineers, 2000). Thus, in 1999 SCS prepared a Soil Vapor Extraction Work Plan (SCS Engineers, 2000) to provide information regarding the location, design, and implementation of a removal action for VOCs in vadose zone soils in OU-1 and OU-2. A Summary Report on vapor extraction testing from 1999 is provided in Appendix B of SCS Soil Vapor Extraction Work Plan (2000). The 1999 testing consisted of 7 subtests designated I1, I2, T1, T2, T3, T4, and T5. Tests I1 and I2 (June 1999) involved an internal combustion engine for vapor treatment, while tests T1, T2 and T3 (October 1999) employed a 150 cfm, King Buck Technologies thermal oxidation unit. Tests T4 and T5 (November

1999) initially used the same King Buck unit followed by a Stealth Industries, Firecat 250 cfm thermal oxidation unit. Test I1 involved extraction from well E-1, Test I2 involved extraction from well E-1 and supplemental hydrocarbon fuel, test T1 extracted vapors only from well E-1, test T2 extracted from the ACC vapor recovery system, tests T3 and T4 used only supplemental fuel, while test T5 included extraction from well E-1 and supplemental hydrocarbon fuel.

Findings of the 1999 Soil Vapor Extraction testing were as follows:

- The SVE testing indicated thermal oxidation was highly efficient in VOC destruction of combined blending/filling and SVE vapor streams. Both thermal oxidation units resulted in significant reduction of VOC concentrations between the inlet and the outlet, while treatment with the IC engine did not perform as well in reducing VOC concentrations.
- Correlating with the 1996 results, some of the vapor extraction samples contained Freon 113 at high concentrations. The Freon 113 detections and specific values are listed below. The Freon 113 was captured from the extraction well and not to the wash line (i.e. was not related to ACC operations). Specifically in 1999, Freon 113 was detected in the following vapor samples:
    - Sample O-1 from 06/17/99 had 31.9 ppb (by volume) Freon 113 – collected from extraction well E1;
    - Sample O-2 from 06/17/99 had 6.3 ppb (by volume) Freon 113 - collected from extraction well E1;
    - Sample I-2 from 06/17/99 had 20,000 ppb (by volume) Freon 113 – collected from extraction well E1;
    - Sample T5-THOX Outlet-1 from 11/19/99 had 23 ppb (by volume) Freon 113 collected from extraction well E1.

1999 Removal Action Plan. In 1999 SCS also prepared a Draft RAW for OU-2 (SCS Engineers, 1999).

1999 Sampling in the ACC AST Area. On April 15, 1999, SCS performed subsurface soil sampling on the southwest portion of the ACC site where the four former ASTs were located (SCS, May 20, 1999). The work was overseen by Santa Fe Springs Fire Department Environmental Protection Inspector, Mr. Raul Diaz. The soil samples were collected at depths of 5-ft and 10-ft bgs from each of four borings (T-01 through T-04) located beneath the center of the former AST's locations. The resulting eight soil samples were submitted for analysis of total petroleum hydrocarbons (TPH) by EPA Method 8015-Modified (gasoline and diesel) and VOCs by EPA Method 8260.

Findings

- No detectable concentrations of TPH were found in any of the eight soil samples;
- The following VOCs were detected in concentrations ranging from 5.9 to 386 ug/kg: cis-1,2-DCE, PCE, TCE, 1,2,4-TMB, 1,3,5-TMB, xylenes, toluene (in only one sample), ethylbenzene (in only one sample).
- All the detected concentrations substantially lower at 10-ft compared to 5-ft. Thus, soil contamination in this area did not appear to have impacted the groundwater.

February 2000 Soil Investigation. On February 18, 2000, SCS produced a soil investigation Letter Report addressing an area near the northwest corner of the canopy (SCS, February 18, 2000). The investigation was conducted in an area where DTSC staff had observed possible evidence of a release. The letter report also describes the installation of an SVE well.

The soil sampling was conducted on January 3, 2000. Several soil borings were advanced (BH-15 through BH-18[1]) and soil samples were taken at multiple depths. SCS's presented the following findings:

- Shallow soils in the area northwest of the canopy were found to be impacted by VOCs, while concentrations generally decreased with depth, consistent with a surface source.
- Low concentrations of chlorinated compounds were generally found in soil samples.
- The prevalent VOCs were acetone and MEK.
- It was noted that some VOCs from deeper depths were likely due to lateral migration of contaminated groundwater from previously known source areas.
- On February 4, 2000, an SVE well was installed in the area northwest of the canopy in order to enhance remedial actions in this area.

2000 Vapor Extraction and Vapor Monitoring Well Installation. In April and May 2000, additional vapor extraction and vapor monitoring wells were installed at ACC. Specifically vapor extraction wells E-2 through E-4 were located in the railroad spur area extending to approximately 25-ft bgs, while extraction wells E-5 through E-9 were located in the canopy and former spill drain areas extending to approximately 25-ft bgs. Vapor extraction wells VP-4 through VP-10 were installed to a depth of 26-ft bgs. The boring logs and the testing parameters were presented in the April 2000 SCS Soil Vapor Extraction Work Plan.

2.4.2 EREMCO Tank Removal/Abandonment-in-Place

1998 and 1999 Tank Removals. EREMCO was engaged by ACC to remove twelve USTs by excavation and to slurry-fill and abandon-in-place another twelve USTs. The tanks were last used in November 1998. The work was done under the oversight of the Santa Fe Springs Fire Department. Specifically:

- USTs No. 33 and 34 (diesel and gasoline tanks) located near the office building were removed on December 23, 1998;
- 10 USTs (No. 1, 2, 3, 4, 18, 19, 20, 21, 22 and 23 – which contained straight line hydrocarbon chemicals) and their piping systems were removed between May 31 and June 3, 1999.
- 12 USTs (No. 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16) were slurried in place on June 3 1999. These tanks were first rinsed in early December 1998 and then filled with a mix of bentonite, powered barium sulfate, cement, and water.

Soil samples were collected below the gasoline and diesel USTs (samples A-1, A-2, B-1, B-2) and from the soil stockpile (SW-1-2', and SP-1). The sample locations and analytical data are given in the UST Removal Report (EREMCO, December 23, 1998). The samples were analyzed for VOCs including BTEX (benzene, toluene, ethylbenzene and xylenes) and methyl tertiary butyl ether (MTBE) and no VOC was detected in any of the soil samples. These results confirm previous investigations which suggested that USTs were not a source of contamination at ACC. The excavated soil was put back in place along with imported clean fill.

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[1] Note that borings BH-15 through BH-17 have the same name as borings advanced in 1994, although the locations of the two sets of borings are distinct. In order to account for this difference we have added the year in parenthesis after the name of each of these borings in our database and on Table 4. Confusion about these identically named borings is also the reason why logs of the 2000 BH-15 though BH-17 borings were not originally used by Shaw and Haley & Aldrich in its lithologic interpretations. Both sets of the "BH" boring logs have now been included in the lithologic interpretations presented later in this report.

Following the removal of USTs in 1999, soil samples were collected by SCS from beneath each end of the excavated USTs at depths between 14 and 22-feet bgs. These soil samples were collected on June 3, 1999 and marked as SPA and SPB (labeled as "TK" samples in this report) preceded by the number of the tank. Sixteen samples were collected and analyzed for TPH and VOCs (EREMCO, 1999). EREMCO's findings are summarized as follows:

- The condition of all removed USTs and their steel piping was observed to be very good and there was no evidence of holes or leaks.
- Sampling associated with the UST removal from 1998 (gasoline and diesel UST) showed no evidence of releases from the USTs. No detection of either BTEX compounds or gasoline range TPH was observed in any of the soil samples taken below gasoline and diesel USTs.
- Sampling associated with the UST removal from 1999 showed elevated VOC concentrations in some soil samples beneath or adjacent to the USTs although the tanks were found to be intact and in good condition. Thus, in the absence of apparent UST leakage, the contamination encountered in these samples may have originated from sources other than the USTs.

2001 Tank Removal/Abandonment in Place. The next and final tank removal and abandonment dealt with the remaining ten USTs and was carried out by EREMCO in July 2001 under the supervision of Santa Fe Springs Fire Department Inspector Raul Diaz. These tanks had been de-classified as USTs as they no longer contained liquids but remained empty to be able to contain liquids in case of a large release (the 10 tanks were joined by piping). These tanks had been triple rinsed in December 1998 and again in mid-2000, when they were opened to allow welding of the piping connections. The EREMCO operation consisted of the following:

- Six tanks (No. 17, 24, 25, 29, 30, and 31) were removed on July 16, 2001. These tanks were checked for organic vapors by a chemist, Tom Beck. There were two separate excavation areas. To access the tanks, the concrete on the surface was saw cut, broken into small pieces and stockpiled. At the same time, the soil from the top and surroundings of tanks was excavated and stockpiled. The stockpiled soil was tested for organic vapors. After soil sampling, the tank pits were backfilled with soil and imported fill material.
- Four tanks (No. 26, 27, 28, and 33) were slurried in place on July 23-25, 2001. Tanks 26, 27, 28 were under the building while tank 33 falls within the 45 degree foundation support range rule of the structure, which is why those tanks could not be removed but rather were slurried in place.

A total of 30 soil samples were collected and analyzed for TPH and VOCs (EREMCO, Tank Mitigation Report, 2001). Specifically, on July 19, 2001 soil samples were collected from the soil below the excavated tanks and labeled as "TK" followed by the tank number. Additional confirmation soil samples were also collected on July 19, 2001 and labeled as "G" samples 1 through 13 corresponding to 13 Geoprobe locations adjacent to the tanks abandoned-in-place. These samples were taken from approximately 15-ft to 16-ft bgs, with the exception of samples surrounding the 20,000 gallon tanks and tank 29 which were taken between 18-ft and 21-ft.

Related to the exact depth of collected samples, the EREMCO 1999 Report refers to depths of 14-ft to 16-ft bgs, however according to the recent testimony of Mr. Craig Norton of EREMCO the 14-ft to 16-ft depth was applicable only to the smaller size 10,000 gallon USTs, while for the larger 20,000 gallon USTs, soil samples were taken from 20-ft to 22-ft bgs. Specifically, according to Mr. Norton, the depth selected for sampling was in accordance with standard practice at the time. EREMCO sought to collect samples 2 to 4-ft below the invert of the tank. This is why different sized tanks required different sample depths. For example, a standard 20,000 gallon tank has a diameter of 16-ft. If the top of the tank is buried 4-ft bgs, then the bottom of the tank would be at approximately 20-ft bgs and EREMCO sampled 2-ft below that for a sample depth of 22-ft bgs. For

a 10,000 gallon tank with a diameter of eight feet, the appropriate depth for confirmation sampling would have been 14-ft bgs (or more depending on the depth of the tank).

EREMCO's findings were as follows:

- EREMCO (Tank Mitigation Report, 2001) noted that groundwater was encountered at the ACC site at approximately 18-ft bgs, below a clay layer detected at approximately 15-ft bgs.
- The tanks were in very good condition and clean; no holes and little or no rust was observed.
- Sampling associated with the UST removal showed elevated VOC concentrations in some of the soil samples adjacent to the USTs although the tanks that were removed were found to be intact and in good condition. Specifically:
    - EREMCO reported a strong presence of gasoline-range hydrocarbons; although benzene was not detected.
    - In the TK soil samples there were elevated VOCs surrounding the three 20,000 gallon USTs and tank 29 – these soil samples were collected from between 18-ft and 21-ft bgs.
    - The G samples taken from the vicinity of various tanks at 15-ft bgs showed spotty elevated concentrations of contamination centered in the area of probes 5, 6, and 7 (around tanks 32, 16, and 15). The concentrations of petroleum hydrocarbons such as toluene were much higher (several orders of magnitude) than that of chlorinated hydrocarbons, suggesting these samples encountered LNAPL in the subsurface.
- EREMCO recommended pilot testing using vapor extraction to test its effectiveness mitigating the vadose and capillary fringe above the water table

2.4.3 Blakely Site Investigations

In 2001 the site ownership was transferred to Greve Financial Services Inc. (Greve), the current site owner. This section provides a chronological summary of environmental work conducted at ACC site between 2000 and 2003, when Blakely Environmental Investigations, Inc. (BEll) was the environmental consultant. The original environmental reports are attached in Appendix D, while Tables 2-8 and Figures 20-44 of this report present results of these and subsequent investigation.

November-December 2000 Soil Vapor Survey. BEII was contracted by Greve to perform a soil gas survey and groundwater sampling in order to determine the lateral extent of VOCs beneath the ACC site, in response to a DTSC request at the meeting held on June 2, 2000. Thus, BEll performed a soil vapor survey at the site in November and December 2000 at 36 sampling locations (BEll, 2000b; BEII, 2001). These soil vapor sampling locations were identified as SV-01 through SV-36. Note that the names of these 2000 soil vapor samples are identical to those used by SCS in 1996. However the locations of the two sets of samples are distinct (see Figure 6). Vapor samples were collected from two depths at each sample point, one at 8-ft bgs and one at 20-ft bgs. SV-1 was an exception since the first soil vapor sample was collected at 10-ft bgs instead of 8-ft bgs. A mobile laboratory (Mobile One Laboratories, Inc.) was used for real time on-site field analysis.

The following ten VOCs were identified as constituents of concern in the vapor phase beneath the site: benzene, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, ethylbenzene, PCE, 1,1,1-TCA, TCE, toluene and xylenes. This finding correlates with previous soil vapor surveys by SCS in 1996 and 1997. All the DCE and DCA compounds are likely daughter products of PCE, TCE and/or 1,1,1-TCA. TCE could be a primary compound as well as a daughter product of PCE.

Results from this investigation showed relatively low VOC concentrations at 8-ft bgs and higher concentrations at 20-ft bgs (BEII, 2001). This suggests volatilization through shallow groundwater as the main source of soil vapor.

In general, higher amounts of petroleum hydrocarbons than chlorinated hydrocarbons (except some degradation products such as cis-1,2-DCE) were observed regardless of depth. However, petroleum hydrocarbons are more localized around the center and northwest parts of the property, while chlorinated hydrocarbons are found in soil vapor over a larger area. Another observation is that daughter products of chlorinated hydrocarbons were found in soil vapor over a larger area, especially to the south of the site, compared with their parent compounds (see Tables and Figures from BEII 2001 Report in Attachment D);

The highest concentrations of VOCs were detected beneath the railroad tracks, suggesting that surficial spillage from fluid transfers probably occurred. This finding correlates with the findings of the SCS surface soil investigation.

BEII concluded that VOCs have impacted the sandy soils beneath the site at 20-ft bgs. BEII also noted that groundwater exists at the ACC site in the same sandy formation.

BEII recommended that the on-site extraction wells be evaluated for the use of SVE.

Note that Freon 113 was among the VOCs detected in soil gas, with two detections: 150 ug/L (in SV-29-20 and 110 ug/L in SV-33-20). Both detections were on the southern portion of the ACC site. Additionally, many of the soil vapor samples at 20 feet had relatively high detection limits for Freon 113 (200 ug/L or higher) which could have masked its more widespread presence. This is one line of evidence related to migration of contaminants from McKesson to ACC as discussed in Sections 2.6 and 4.1.

2002 Soil Vapor Survey. In January and June 2002 a fourth soil vapor survey was conducted at the ACC and Liquid Air sites, to determine the lateral extent of VOCs in soil vapors along the southern and eastern property line and whether VOC contamination extended westward beyond the ACC site or *vice versa* (BEll, 2002a). This investigation included on- and off-site sample locations near the eastern, northern, and southern property boundaries. Greve retained BEII to conduct this study. A total of 30 locations (SV-37 to SV-67) were sampled at up to three depth intervals (5-ft, 7 to 12-ft, and 20-ft bgs). A mobile laboratory provided by HP Labs was used for this field effort. BEII reported the following findings from the 2002 soil vapor survey:

- Eleven VOCs were identified: the same ten compounds as in the previous survey plus vinyl chloride which is a degradation product PCE and TCE.
- Correlating with the previous survey, BEII found relatively low concentrations of VOCs in the silty clay soils at 5-ft to 12-ft bgs, while significantly higher concentrations were found in the sandy soils at 20-ft bgs. These deeper soils are more permeable and conductive to soil vapor migration.
- Also correlating with the previous soil gas survey, the concentration of daughter chlorinated hydrocarbons (DCEs, DCAs, and vinyl chloride) were significantly higher than the parent compounds (PCE, 1,1,1-TCA, and possibly TCE) which is an indication that biodegradation is occurring at ACC site.
- The soil gas concentrations were higher along the southern property line than along the east and north property lines.
- No significant concentrations of TCE were identified in soil vapor.
- Finally BEII concluded that soil at ACC is mostly impacted by VOCs within the permeable sand layer.

- BEII recommended the advancement of several CPTs and eight additional soil borings to further define the lithology of the site and sub-surface contamination.

2002 Soil and Groundwater Investigation. In June 2002 two soil borings (BSB-01 and BSB-02) were drilled to depths of 50-ft and 30-ft bgs, respectively and two additional monitoring wells (MW-08 and MW-09) were installed (BEII, October 2002). These wells were screened from 30.5 to 40.5-ft and 30.5 to 45.5-ft bgs, respectively. Three fine grained soil samples and three coarse grained soil samples were collected from MW-8 and MW-9 and tested for physical soil parameters. In August, eight additional soil borings (BSB-03 through BSB-I0) were drilled and a total of seventy soil samples were collected to depths of 45 ft bgs. In November and December, BEll drilled seven additional soil borings (BSB-11 through BSB-17) to a maximum depth of 49.5 ft bgs, and installed twelve additional monitoring wells (MW-10 through MW-21). Wells MW-10, MW-11, MW-12, MW-16, MW-18, and MW-19 were screened within the shallow groundwater zone at depths of 25 to 40-ft, 30 to 40-ft, 30 to 40-ft, 29 to 46-ft, 21 to 46-ft, and 30 to 45-ft bgs, respectively. Wells MW-13, MW-14, MW-15, MW-17, MW-20, and MW-21 were installed in the upper portion of the deep groundwater zone and were screened at depths of 52 to 62-ft, 55 to 65-ft, 54 to 64-ft, 56 to 66-ft, 57 to 67-ft, and 53 to 63-ft bgs, respectively. At that time monitoring well MW-01 was abandoned. During this same time period, samples of groundwater and LNAPL were also collected from monitoring well MW-08. BEII reported the following findings from the 2002 soil and groundwater investigation.

- Based on an analysis of the boring logs, BEII noted that the sand layer slopes down from south to north. This led BEII to conclude that any off-site releases from neighboring properties to the south may have the potential to significantly impact the subsurface under the ACC site if releases reached the permeable sands.
- BEII concluded that the soil at ACC site is mostly impacted by VOCs in the permeable sand layer, which correlates with the results of the soil vapor surveys (BEII, Oct. 2002).

August 2002 CPT Testing. Also, in August 2002, BEll conducted eleven CPTs to assist in the interpretation of subsurface lithology. Fifteen additional CPTs were pushed by BEll in November and December 2002. Note that these CPT samples are named similarly with the CPT samples advanced by SCS in its 1993-1994 RI Investigation.

*June 2003 Soil and Groundwater Investigation***.** In June 2003 BEll installed five additional monitoring wells (MW-22 through MW-26) to further define the extent of VOCs in groundwater. Monitoring wells MW-22 and MW-26 were installed in the southwest portion of the site and are screened from 30 to 40-ft bgs to sample shallow groundwater. Groundwater monitoring wells MW-23, MW-24, and MW–25 were installed within the lower portion of the deep groundwater zone in response to a DTSC request to evaluate the vertical extent of contamination. MW-25 is located in the southwest portion of the site, MW-24 is located in the south-central portion of the site, and MW-23 is located in the northeast portion of the site. MW-23 and MW-25 are screened from 71 to 81-ft bgs, while MW-24 is screened from 67 to 77-ft bgs. During the same time, monitoring wells MW-02, MW-03, and MW-07 were abandoned.

Groundwater Monitoring . BEII was contracted by Greve Financial Services to perform quarterly groundwater monitoring at ACC, in compliance with DTSC's request. In November 2000 Blaine Tech Services initiated groundwater monitoring under the supervision of BEll (2000a). From 2002 through 2004 BEll produced quarterly groundwater monitoring reports and reported the following findings and observations:

- Groundwater data confirmed that the site is impacted by VOCs, with higher concentrations in shallow groundwater and lower concentrations in deep groundwater.

- Dissolved VOC concentrations were detected along the southern property boundary at higher concentrations than along the northern property boundary;
- LNAPL free product was first detected in MW-1 and was subsequently found at the site in various monitoring wells. Periodic bailing of free product was carried out by Greve.
- The groundwater data demonstrate that intrinsic biodegradation is occurring at ACC.
- BEII recommended the continuation of groundwater monitoring and removal of free product.

2001 Report on Solvent Discharge from McKesson Facility to former ACC. BEII was contracted by Greve to review available data concerning the McKesson facility and to determine the possible discharge of solvents onto the former ACC site. The BEII findings were summarized in a 2001 report. BEII identified records of numerous regulatory notices of violation, citations, cease and desist orders, and clean up orders issued to the McKesson facility. McKesson discharged solvent contaminated water into the subsurface soil and groundwater adjacent to ACC site on a regular basis during the lifetime of its operations (1976-1986). From regulatory documents, BEII estimated that McKesson's daily waste stream was a minimum of 1,500 gallons per day.

2.4.4 Shaw Site Characterization

In February 2004 Shaw Environmental & Infrastructure, Inc (Shaw) crafted *a Summary Site Characterization Report* (Shaw, 2004). That document contained historical and new data collected between June 2002 and late 2003 on soil and groundwater conditions. The report goes into detail about lithologic structure and subsurface heterogeneity and how the sedimentary fabric and subsurface lithology may have influenced contaminant migration at the ACC site. It concluded, among other things, that the subsurface lithology favors the horizontal movement of contamination in the vadose zone.

2.4.5 The Leu Group

In April 2005 The Leu Group prepared a *Draft RAW* for the vadose zone at the former ACC site (Leu Group, 2005). In late 2005, under the direction of The Leu Group, the SVE system began operating at the site to remediate vadose zone soils.

From April 2005 until September 2007, the Leu Group produced quarterly groundwater monitoring and quarterly SVE operation reports.

2.4.6 Haley & Aldrich

In April 2007 Haley & Aldrich, Inc. (H&A) published an updated RI Report. The new version responded to comments made in writing by DTSC after a presentation by Shaw in 2005. The H&A RI Report also incorporated a baseline human health risk assessment. The Report presented an updated interpretation of the nature and extent of contamination in ACC soil and groundwater, identified contamination migration pathways, and recommended remedial action objectives. The Report pointed out the probable on-site (including the railroad tracks and the severed pipeline) and off-site (McKesson and Omega) contaminant sources.

2.4.7 Clean Soil, Inc.

In September 2007 Clean Soil, Inc. was retained Greve to provide environmental services and advice. Clean Soil, Inc. is now conducting the quarterly groundwater monitoring and SVE operation and sampling at the ACC site. Clean Soil also prepares the groundwater monitoring reports and SVE operation reports that are submitted to DTSC on a quarterly basis.

Clean Soil and H&A have collaborated to produce this document which (among other things) responds to DTSC comments itemized in a letter from DTSC to Mr. Kennedy dated June 25, 2008.

2.4.8 Previous Off-Site Investigations

2.4.8.1 McKesson Corporation

McKesson Chemical (formerly a subsidiary of McKesson Corporation) operated on the property directly south of the ACC site at 9005 Sorensen Avenue. McKesson Chemical operated a bulk chemical repackaging and blending facility from 1976 to 1986 at this site. The site currently has SVE and groundwater extraction and treatment systems. The McKesson site included 44 ASTs and 23 USTs. The ASTs were removed in 1990, while all the USTs were removed in 1996. No confirmation soil samples were collected following these removal operations. Chlorinated solvents were stored in the ASTs. Chemicals were also stored in 55-gallon capacity drums (often consisting of reconditioned drums). McKesson also had two tanker trucks maintained at the site.

The site was organized into four areas: a solvent repack area, a corrosive repack area, a hydrogen peroxide repack area; and a Freon blending area. Loading platforms and underground distribution lines were associated with off-loading of chemicals along railroad spurs located along the northern and western boundaries of the property. Surface runoff from McKesson drained to the north.

Environmental investigations began at this site in June 1984, when several soil samples were taken from the corners of the solvent AST area and contamination was recorded. The second investigation was conducted in March 1986. HLA conducted an RI in 1990 and 1991 (HLA, 1992). The RI identified impacts to vadose zone soils and groundwater by VOCs. The predominant compounds detected in both soils and groundwater were: 1,1,1-TCA; PCE; TCE; and methylene chloride. Other contaminants detected included: 1,1-DCE; cis-1,2-DCE; trans-1,2-DCE; 1,1-DCA; 1,2-DCA; benzene, toluene, ethylbenzene, xylenes, acetone, MIBK, MEK, chloroform, Freon 113; 1,4-dioxane; and vinyl chloride. Although the HLA RI was far from comprehensive and many portions of the McKesson site remained untested, the most highly contaminated soil was found in the vicinity of the former solvent storage AST area. Contaminants detected at depths of 40- to 45-ft bgs but laterally away from the AST solvent area appear to be the result of migration of VOCs in groundwater.

Known and Suspected Releases. The former McKesson Chemical site has a long history of contaminant releases, including both accidental and purposeful releases as part of routine operations. A summary of the known and suspected releases at McKesson is given below, in order to better understand the potential environmental impact of this site to ACC.

The most severe contamination at the McKesson site originates from its routine practice of dumping chemicals into the unlined AST solvent dike. McKesson employees (repackers, truck drivers, and leadmen) as well as common carriers reportedly emptied buckets and/or hoses, each containing up to a few gallons of line flush into the AST solvent dike. This practice (particularly involving chlorinated hydrocarbons and freons) was apparently common at McKesson Chemical sites, has been documented at the Santa Fe Springs facility through interviews of many former employees, and is consistent with the gross contamination encountered in this area. The exact frequency of emptying buckets and hoses in the AST solvent dike area and the cumulative volume of releases is not known. According to one former employee, this practice occurred as often as every other day. According to another former employee, the dumping of line flushes into the AST solvent dike was still a common operational practice in 1981, five years after operations started in the Santa Fe Springs location..

The impact of the AST solvent dike contamination as described above has significant environmental implications considering that water and chemicals often accumulated in the AST solvent dike, particularly after rain events. Standing water constituted a hydraulic head or a driving force for contamination to infiltrate into the subsurface.

Other documented releases at the former McKesson site include:

- Formaldehyde and acid spills recalled by former employees.
- A large sulfuric acid spill was recorded in 1982.
- Glycol ether spill was estimated to be about 300 gallons in 1982. Glycol ether was stored in USTs.
- Xylene spill from a UST.
- A methanol overflow from UST 19.
- An overflow of MEK .
- 1,1,1- TCA overflow of more than 20 gallons at AST S3 was attributed to a gauge malfunction.
- An overflow of acetone of several hundred gallons.
- A spill of Triton (surfactant) and a hydrofluoric acid leak.
- An incident involving Versene 100 (Dow Chemical commercial name for EDTA tetrasodium salt) consisted of pumping Versene 100 onto the ground from underground UST 17.
- Explosion of a drum with morpholine (diethylene imide oxide) near the solvent packing line.
- The Railroad Spur along the northern portion of the site has been contaminated through practices such as dumping of buckets of chemicals in the gravel along the rail trucks, leaks and spills, and draining of hoses on the ground.
- Repackage area was subjected to contamination through various mechanisms, including the periodic malfunction of automatic filler equipment, drips and leaks, overfills, overturned buckets, and leaking valves.
- Drum washing area in the northwest of the site.
- Truck delivery area north of the solvent AST area.
- Areas associated with drum storage/repackage/filling - there are many reports of leaking drums usually on the concrete area; furthermore, there are indications that leaking drums were not always repacked right away after discovery, depending on the work load of employees. There are also reports of splashing of solvents during the fill operations of drums and leaks of solvents from pump seals. Drum overfills were also reported in the drum filling area.
- Solvent AST area - apart from the repeated practice of dumping in the AST solvent dike, accidental leaks were also recorded in this area.

The frequency and extent of releases was substantial according to former McKesson employees. For example, a former employee recalls that “everything leaked, there were little drips there continuously”. A chronology of leaks, discharges, pooling, and regulatory notes is given by BEll (2002b).

2.4.8.2 Liquid Air Company

This facility is located immediately west and northwest of the former ACC site at 8832 Dice Road. Liquid Air Company manufactured acetylene, compressed gases and historically had two unlined lime settling ponds used for the storage of non-hazardous water and lime which was the by-product from acetylene production further sold to customers.

Operations and Materials. Acetylene gas was manufactured at the facility from water and calcium carbide. The by-product from acetylene manufacturing is hydrated lime (calcium hydroxide) which was pumped as a slurry and de-watered (by evaporation) in two lime settling pits located on the east boundary of the site. These ponds were used between 1957 and July 1992. The resulting

"dry lime" material was recovered and shipped for use in industrial wastewater treatment and agriculture.

Liquid Air was also a repackaging plant. Hydrogen, helium, nitrogen, nitrous oxide, propylene, oxygen and carbon dioxide were repackaged into cylinders sold to customers. In addition to the acetylene plant and gas repackaging plant, Liquid Air was reported to operate a cylinder paint removal booth and a cylinder paint booth.

Apart from calcium carbide and the gasses noted above, other materials used at the site consisted of small amounts of solvents such as 1,1,1-TCA, methylene chloride and Freon, used in a closed system to internally clean equipment and piping. On occasions, bulk 1,1,1-TCA and methylene chloride were brought on site for major cleaning efforts. There are no records of any unauthorized release of solvents.

Approximately 55 gallons of spent sulfuric acid, 55 gallons of TCE, 200-400 gallons of spent motor oil, and 1,104 tons of dry lime were generated at the facility per year

Environmental Issues. Incidents of releases of caustics, acetylene process water, and other waste waters to the ground surface and surface water channels have been documented (DTSC, March 1988, Preliminary Assessment, Burdett Oxygen Co., CKA Liquid Air Corporation, Santa Fe Springs, CA). Values of pH as high as 12.4 have been recorded. Other incidents recorded at Liquid Air include a spilled container of paint residue which contaminated some lime in one of the settling ponds and soil contamination from a diesel spill. Environmental investigations started at the site in March 1988, when IT Corporation collected samples of lime from one of the sludge pits that showed the presence of several VOCs such as acetone (90 ppb), carbon disulfide (55 ppb), MEK (46 ppb); 1,1,1-TCA (49 ppb); toluene (86 ppb), and xylenes (30 ppb). The lime was previously contaminated by a spilled container of green pigment paint residue on the north edge of the lime settling pit.

An investigation of soil around the acetone UST was conducted by AquaScience Engineers (ASE) in August 1988 when two soil borings were advanced to 40-ft bgs around the perimeter of the UST (ASE, September 2, 1988, Site Investigation for Acetone Contamination in Soil at: Liquid Air Corporation, Santa Fe Springs, CA). Groundwater was not encountered during the drilling. Soil samples were collected at 5, 10, 15, 20, 30, and 40-ft bgs from each soil boring and analyzed for acetone. Acetone was not detected in any of the soil samples except insignificant levels (6.8 ppb) in one composite sample from 30 to 40-ft.

In September 1988, two 7,500 gallon diesel USTs (in center-north part of the site) and product dispensers, one 6,200-gallon acetone tank (central area), and one 1,000 gallon waste-oil tank (close to railroad tracks to the south) were removed from the site by Whitaker Concrete Corporation. No sub-surface logging was performed. Upon removal of the tanks, soil samples were collected from below the tanks to determine any potential contamination. Soil samples from beneath the product dispenser indicated elevated TPH (805 mg/L – 6,930 mg/L). The soil sample collected beneath the waste tank was non-detect for TPH. Details of the tank removal activities were presented in a November 2, 1988 Tank Removal Report by George Devries, Consulting Geologist.

In November 1988, AquaScience Engineers (ASE) drilled soil borings directly adjacent to each diesel product dispenser. Soil samples were collected at 5, 10, 15, 20, 30, and 40-ft bgs from each soil boring. Groundwater was not encountered during the drilling. The results consisted of very low to non-detectable TPH concentrations. On the basis of these results, ASE concluded that the diesel contamination appeared to be restricted to a small volume of soil directly beneath the product dispensers (ASE, December 5, 1988, Site Assessment for Diesel Contamination of Soil at: Liquid Air Corporation, Santa Fe Springs, CA).

In August 1989, ASE remediated both the diesel contaminated soil and the paint residue contaminated lime by excavating contaminated material and placing it in on-site treatment pads constructed of bermed PVC liners. In December 1989, the treated lime was moved back into the settling pit after analysis show that all contaminants were below regulatory limits. In the treated soil, diesel concentrations were reduced to below 100 ppm from original concentrations above 3,000 ppm. The treated soil was used to backfill the dispenser excavations in April 1990. The results and details of remedial activities are presented by ASE in an April 23, 1990 Report entitled "Remediation of Hydrocarbon Contaminated Soil and Hydrated Lime" prepared for Liquid Air Corporation.

In December 1989, a 2,000 gallon concrete clarifier was exposed for cleaning and removal. Immediately after the clarifier removal, two soil samples were collected from beneath the clarifier and analyzed for detection of TPH as waste oil and VOCs. The results indicated low levels of TPH and non-detectable levels of VOCs. The excavation was found to be sufficiently clean by the standards of Los Angeles County DPW (ASE, January 22, 1990, Underground Fuel Storage Tank Closure at: 8832 Dice Road, Santa Fe Springs, CA).

Lime Storage Ponds. The two lime storage ponds (A total volume of 22,500 cubic yards) on the east side of Liquid Air (W-NW boundary of ACC site) differed in size and depth:

1. one being approximately 250 feet long by 150 feet wide and 25 feet deep,
2. the other one was 100 feet long by 80 feet wide and by 12 feet deep.

Lime was pumped as a slurry and then allowed to evaporate in the pits. Until 1992, the lime was removed from the ponds and sold as a soil stabilizer. In 1992, a Conceptual Closure Plan was developed to remove all lime from the ponds that were to be backfilled and closed. Liquid Air continued to produce acetylene so they continued to produce lime slurry which was then pumped into slurry holding tanks instead of the ponds.

Based on soil analyses from the two lime pits (Ralph Stone and Company, June 24, 1987. waste Classification Form Submission for Liquid Air Corporation, Santa Fe Springs, CA) and on a CERCLA Site Inspection conducted by EPA on February 17, 1989, it was concluded by DHS that no hazardous substances were present in the pits. EPA recommended no further action under CERCLA.

A Work Plan was submitted to the RWQCB for sampling and analysis of subsurface soils beneath the bottom of the two closed lime storage ponds. The potential impact of lime on the pH of groundwater beneath the pits was evaluated.

Triad Geotechnical Consultants took four soil borings in or near the large pit. Lime was not observed beyond a depth of 5-ft below the bottom of the pit. After that, Geomatrix Consultants drilled three soil borings in the large pit, two in the small pit and several others within the site. The borings advanced by Geomatrix did not encounter groundwater at depths of 16.5-ft below the deepest area of the large pit (approx. 41.5-ft bgs). Geomatrix also observed that the sandy soils underlying the bottom of the pits were cemented to depths of 4-7 feet. This finding confirmed that the lime reacted with native soil to form a relatively insoluble cemented layer on the bottom and walls of the ponds. This layer appeared to create a good seal allowing the pits to retain water and minimizing leaching from the ponds.

In October 1992 stockpiled waste lime was pushed into the pits leaving the surface around the pits basically level. Water was removed from the pits in late winter of 1992 and approx. 3,800 cubic yards of lime were hauled from the pits. The pits were backfilled with a mix of imported soil and 30% lime.

2.4.8.3 Southern California Chemical Corp.

The Southern California Chemical Corporation (SCC) is located at 8851 Dice Road, west of ACC and Liquid Air. SCC manufactures inorganic chemicals for electronic and printed circuitry, plating, water treatment, and agricultural uses. The facility historically manufactured liquid copper sulfate, copper oxides, copper chloride, ferric chlorides and other formulations including ammoniacal and other etchants. Chemicals reportedly used included ammonia, iron, copper chemicals, hydrochloric acid, sulfuric acid, and other inorganic compounds. This facility has a history of hazardous waste discharges and spills dating back to 1957. Groundwater investigations at the site revealed that the following VOCs were identified in groundwater under the SCC site: TCE (550 ug/L), toluene (8,300 ug/L), xylenes (10,000 ug/L), ethylbenzene (3,000 ug/L), PCE (1.2 ug/L), 1,1-DCE (100 ug/L), and 1,1-DCA (100 ug/L).

This facility has operated a liquid hazardous waste treatment operation since 1958. The SCC facility operated a number of waste management units and manufacturing processes, including reactors, settling tanks, and holding tanks, wastewater treatment tanks, multi-stage clarifiers, process and storm drain sumps, drum storage areas, and drum and truck washing areas. SCC received a variety of aqueous hazardous wastes and recyclable materials from generators primarily in the electronics and aerospace industries. The wastes variably contained copper, iron, ammonium bifluoride, tin, chromium, nickel, sulfates, chlorides, and hydroxides.

Environmental investigations at this site started in 1985 with Kleinfelder and Associates monitoring the on-site wastewater pond. Elevated levels of inorganics were detected, triggering the expansion of environmental investigations. Subsequent environmental investigations at this site indicated a leaking diesel UST with petroleum hydrocarbons detected in soils. Three contaminant plumes were identified within the Hollydale aquifer: (1) a metals plume aligned in a northeast direction along the west central portion of the site, (2) an aromatics plume along the northwest boundary of the site, and (3) a TCE plume along the west central portion of the site.

The distance and general cross-gradient location of the SCC site excludes SCC as a potential source of deep groundwater contamination at ACC. Because of the complexity and seasonality of shallow groundwater, we cannot completely exclude this site as a contributor to the contamination in the shallow aquifer. This is true especially since the lithology of the site is similar to that at the former McKesson and ACC sites and since perched water has been recorded under the SCC site at about 29-ft bgs (see report issued on November 7, 1986). However, the distance from ACC suggests a low potential for contributions from the SCC site.

2.4.8.4 Diversey Wyandotte Corporation

This site is located approximately 0.20 miles southwest of the former ACC site, west of Dice Road, and south of the Coyote Creek. The facility has been operating under various names since 1951. From 1954 through 1970, acids, alkalis, ethyl alcohol, and isopropyl alcohol were reportedly disposed of in on-site injection wells. From 1980 until 1984, the injection well waste stream at the facility reportedly consisted of acids, alkalis, methylene chloride, chromium, and phenolic and crysilic acids. Since 1985, it was producing a range of products including cleaners and defoaming agents.

A subsurface investigation was conducted in 1985 by Kleinfelder and Associates in response to concerns in a Preliminary Assessment prepared by the DHS in April 1984. While no organics were detected in the soil samples, the following contaminants were detected in groundwater: methylene chloride, 1,1,1-TCA; PCE; TCE; 1,1-DCE; 1,1-DCA; and chloroform, at concentrations up to 90 ug/L.

The relatively low levels of organic contamination detected and its location indicate that this site is not a likely contributor of contamination at ACC. However, it is of note that this site has similar

lithology and hydrogeology compared to the former McKesson and ACC sites, including the recorded presence of perched water.

2.4.8.5 T-Chem Corporation

The T-Chem facility is located approximately 0.15 miles southwest of the ACC site at 9028 Dice Road. According to the Santa Fe Springs Fire Department, materials used at this site include: chlorine, sodium hydroxide, hydrogen peroxide, ammonia, dodecylbenzene, sulfur dioxide, sulfuric acid, diethanolamine; 1,4-dioxane; ethanol, ethoxysulfate, and sodium dichloroisocyanate. Also a 12,000-gallon UST with diesel was reported on site with four shallow (less than 40 feet deep) monitoring wells used for leak detection (HLA, 1992).

Water samples from the waste stream/clarifier system, analyzed in July 1989 had the following organic contaminants: 1,1-DCE, chloroform, 1,1,1-TCA, and toluene in concentrations up to 7,500 ug/L (chloroform). No detectable VOCs were found in soil samples at this site.

The type and amounts of contamination reported at this site along with its location suggest that it has not likely contributed to the contamination at ACC.

2.4.8.6 Pilot Chemical Company

This site is located at 11756 Burke Street and has had documented releases of VOCs detected in groundwater.

2.4.8.7 Omega Chemical

The Omega Chemical site, located at Whittier Blvd. about 6,000 feet to the northeast of the former ACC site, is of particular note. At this Federal Superfund site, a large chlorinated solvent release has resulted in a regional chlorinated VOC groundwater plume that extends beneath the former ACC site and further downgradient to the southwest. An Omega plume map is reproduced here as Figure 19. The Omega plume contributes VOC contamination to deep groundwater at the former ACC site.

2.5 Chemicals of Concern

Based on previous investigations, the following chemicals of potential concern have been identified for the ACC site:

- Acetone
- Benzene
- 2-Butanone (MEK)
- Chloroethane
- 1, 1-DCA
- 1, 2-Dichloroethane (1, 2–DCA)
- 1, 1-DCE
- cis-1, 2-DCE
- trans-1, 2-DCE
- 1, 4-Dioxane
- Ethylbenzene
- Isopropylbenzene
- Methylene Chloride
- MIBK
- MTBE
- Naphthalene
- n-Butylbenzene
- n-Propylbenzene

- p-Isopropylbenzene
- PCE
- Toluene
- 1,1,1-TCA
- TCE
- 1,1,2-trichloro-1, 2,2,-trifluoroethane (Freon 113)
- Trichlorofluoromethane (Freon 11)
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Vinyl Chloride
- Xylenes (total)

2.6 Onsite and Off-Site Sources

2.6.1 Onsite Sources

The following contaminant releases at the former ACC site have been recorded or inferred:

- Release of acetate. Approximately 10 gallons were released on April 12, 1984 - the Santa Fe Springs Fire Department supervised the cleanup.
- Kerosene spill. Approximately 50 gallons were released on June 6, 1984 - again, the Santa Fe Springs Fire Department supervised the cleanup.
- Severed pipeline. Contamination was released through a broken pipeline that was discovered by SCS Engineers in 1990. The broken pipeline was located at the southeast corner of the operational pad (approximately 2-ft east of the catch basin). At that location, a drainpipe leading from the sump to the catch basin had been accidentally cut. While the exact date for the pipeline break is not recorded, it appears to have occurred during work on the USTs in 1982. The broken pipeline allowed runoff that collected in the catch basin to discharge into soil (SCS, 1991). The piping was approximately 1-ft bgs. The broken pipeline was discovered by SCS while conducting a shallow excavation around the central spill drain and catch basin to investigate the source of elevated VOC concentrations in boring BH-05 (drilled in January 1990). On this occasion, two grab soil samples (SS-01 and SS-02 from 1990) were collected near the pipeline break at a depth of approximately 2 to 3-ft bgs. Those samples contained ethylbenzene, PCE, toluene, 1,1,1- TCA, TCE, and xylenes.
- Drips and spills along the railroad tracks. Drips and leaks have been noted from the railroad cars according to interviews with site workers. Also, the previous owner of the site, John Locke, communicated to DTSC about leaks occurring at the railroad area from the railcars that came into the property to deliver chemicals. In any case, drips and spills have had an impact on the quality of shallow soil in railroad area as confirmed by contamination recorded in the "RR" surface soil samples collected by SCS in 1992 (SCS Engineers, 1994).
- Release northwest of the canopy area. During a site inspection, DTSC staff observed evidence of a releases immediately northwest of the canopy area (described during a January 2000 meeting). Subsequently, SCS conducted an investigation (SCS, February 18, 2000, Letter Report to Ms. Lori Parnass, DTSC) which confirmed that shallow soil was impacted with several VOCs. Concentrations were reported to decrease with depth and distance from the canopy. The results of SCS investigations suggested minimal impact, if at all, to deeper soil or groundwater.
- Former ASTs. According to an SCS investigation of April 15, 1999 (SCS, 1999, Letter to David Klunk, City of Santa Fe Springs, Headquarters Fire Station) some impact to shallow soil (5 and 10-ft bgs) was observed in the southwest portion of the property, where four ASTs were

formerly located. Detected concentrations have a strong decreasing trend with respect to depth from 5-ft to 10-ft bgs in all samples and for all detected contaminants. Based on this finding, minimal impact to deeper soil or groundwater is to expected.

- Occasional leaking or overflows of containers and drums, hoses, gaskets, faulty piping, solvent filling machine. Leaks may have occurred from containers and at the container-filling machines. Also, during a 2000 site visit, DTSC personnel observed staining at the footing of a solvent- filling station that loaded solvent from a bulk storage unit into smaller containers during filling operations. Another potential source for occasional leaks may have been transfer hoses and leaking from gaskets used to connect hoses. At the same time, many former employees have been interviewed and they reported that they responded rapidly to such leaks.

2.6.2 Off-Site Sources

2.6.2.1 McKesson Chemical

The following information synthesizes the factual data which supports the theory that McKesson contributed to contamination now under the ACC site.

With respect to deep groundwater, McKesson site is cross-gradient from the former ACC site and thus is not considered a potential contributing source to contamination found in ACC deep groundwater. This fact was pointed out by previous consultants (SCS Engineers, 1994).

While McKesson is not considered a potential contributing source to ACC deep groundwater, the existing information points out McKesson as a probable contributor to ACC shallow groundwater and soil vapor contamination. Various environmental investigations at both the McKesson and ACC sites confirmed the historical presence of a shallow aquifer on a low-permeability layer overlying the deep groundwater across both sites. The shallow aquifer has a complex and temporally-variable gradient which gives rise to flow directions that can differ from the deeper groundwater. Moreover, the shallow aquifer is strongly influenced by localized recharge from precipitation and surface water infiltration. Although historical data for the shallow aquifer during the operating years of McKesson site is almost non-existent, the wealth of environmental data currently available for both sites can be used to reconstruct the historical movement of shallow groundwater. This, along with the actual proof of McKesson signature contamination found in ACC's subsurface environment (Freon 113) constitute the basis for attributing part of the contamination now under ACC to releases at the former McKesson site. Several lines of evidence pointing out McKesson as a source to ACC contamination are identified below.

1. McKesson dumping into Coyote Creek has directly contributed to contaminant lateral transport toward ACC through shallow groundwater along the slope of the aquitard layer (see Section 2.3). McKesson dumping into the creek involved:

- the surface drainage from McKesson since the surface slope was to the north toward the Coyote Creek;
- rainwater runoff (including from the AST solvent dike) was pumped into the yard sump that was being released into the creek (after being checked for only pH and specific gravity);
- illegal dumping of wastes recorded through numerous violations starting with the very first year of McKesson operation. For example:
    - 1976 illegal discharge into Coyote Creek (NPDES violation letter from W.B. Westrope from McKesson Chemical Company to the California Water Quality Control Board dated October 6, 1976, Reference monitoring and reporting program #6213, NPDES permit #CA0057631).

- March 1981 illegal discharge in the ditch - According to a DTSC letter to McKesson dated March 24, 1981 referring to the January 22, 1981 inspection: "wash down waste waters from the container preparation and filling sheds were being discharged to a drainage ditch." As a result, McKesson agreed to pump the waste water from the ditch, remove the soils for disposal to a Class 1 disposal site and report the results back to the DTSC.
- Truck cleaning operations - McKesson trucks drained their valves on the gravel railroad right-of-way adjacent to Coyote Creek on a regular basis.

2. McKesson's dumping solvent from hose flush and buckets into the AST dike area contributed to recharge of the shallow with contaminated water**.** The routine practice of dumping into the dike involved chlorinated solvents, freons, and benzene and was part of the standard operation procedure in the early years of McKesson's operation. This practice has been confirmed by many former McKesson employees. An official McKesson document confirmed that dumping was permissible: "flammables and chlorinated solvents will be allowed to flash off" (Exhibit from Deposition of Maynard Dale Sands Nov. 15, 2006). This practice was apparently common at this and other McKesson facilities. For example according to a former McKesson employee, Angelo Russo, at least 200 gallons per year of solvents was dumped into an AST diked area at a different McKesson facility (McKesson Intra Company Correspondence from Kurt Danzinger to Dick Davis, Re: Hot Spot History, dated November 19, 1985). The dumping practice involved all solvent lines (e.g., hard pipe, hoses, buckets, tank truck valves). According another former employee, the practice of dumping into the AST dike occurred as often as every other day at McKesson.

3. McKesson releases at the railroad spur area (between the McKesson and ACC properties) contributed contamination available for lateral transport along the slope of aquitard from McKesson toward ACC during McKesson early operation years. At McKesson, apart from dumping into the dike, it was a routine operational practice (at least in the first 18 months of operation) to flush hose lines from chlorinated solvent operations and dump the liquid onto the bare ground along the railroad siding. Additionally, chemical releases on the northern portion of the McKesson site included dumping of buckets in the gravel along the rail tracks, leaks, and draining of hoses on the ground.

4. The regular presence of standing pools of liquids at the McKesson site was a result of accumulated rainwater mixed with dumped chemicals. This directly contributed to shallow groundwater recharge after each rain event, and subsequently added to contamination available for lateral transport in the shallow aquifer from McKesson toward ACC. Standing water was such a common feature that workers referred to "Lake McKesson" at the site. A good example of accumulated liquid in the AST dike is from 1984 when McKesson employee, Paul Marshall estimated 750 gallons of solvents (corresponding to an area of 10 feet x 20 feet x 6 inches) were pooled in the AST dike area (Memorandum to Carl Piercy from Paul Marshall on "June status Report Santa Fe Springs Soil Sampling" dated July 5, 1984).

5. The presence of Freon 113, a signature chemical for McKesson site, in ACC vadose zone. As noted in Section 4.1.1, Freon 113 is a known contaminant from McKesson that is now found in the subsurface at ACC.

2.6.2.2 Liquid Air

Liquid Air is generally crossgradient from Angeles with respect to the deep regional aquifer. However, the bottom of the former ponds at Liquid Air site are at the approximate level of the perched aquifer. It has been questioned whether the Liquid Air waste disposal ponds could have influenced the quality or the flow dynamics of the shallow groundwater and whether any of these influences extended onto the ACC site. The base of this pit was at the same approximate depth as

the perched aquifer. Thus any leaching from the ponds could have recharged the shallow aquifer, created localized groundwater mounding and could have contributed to contamination now in ACC's shallow groundwater.

However, a detailed review of various environmental issues associated with Liquid Air suggests that Liquid Air's ponds did not significantly influence ACC's shallow groundwater (see Section 2.4.8.2). In summary, the apparently lime reacted with native soils to form a relatively insoluble cemented layer in the bottom and walls of the ponds. This 4 to 7-ft thick layer was observed by Geomatrix during a site investigation. As a consequence, the permeability of native soils had been reduced so that the storm water was retained in the pits. No measurable evidence of lime release to groundwater was detected (Kennedy/Jenks Consultants, 31 March 1993, Site Investigation, Liquid Air Corporation, Santa Fe Springs).

Other Liquid Air releases (diesel in soil and paint residue in lime) were of limited extent and not in the immediate vicinity of the ACC site. The diesel dispenser (where the spill occurred) was located in the middle of the Liquid Air property, while the contaminated lime was in the N-NW corner of the pit. Remediation by excavation and on-site treatment was successfully completed for both releases.

Based on this analysis, Liquid Air does not appear to have significantly contributed to soil or groundwater contamination now underlying ACC.

2.6.2.3 Omega Chemical Site

From 1976 to 1991, the Omega Chemical Corporation and Refrigerant Reclamation Company operated a used solvent and refrigerant recycling facility at a location upgradient (approximately 6,000 feet northeast) of ACC. In the late 1980's the Los Angeles County Department of Health Services, Public Works Department and the Fire Department investigated Omega and found soil contamination at the site (Weston Solutions Inc., June 2003, Omega Chemical Superfund Site Whittier, California, Phase 2 Groundwater Characterization Study; see also http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/vwsoalphabetic/Omega+Chemical+Corporation?OpenDocument#descr). According to EPA, "a plume containing PCE and other chlorinated hydrocarbon compounds was identified to extend at least 2.2 miles downgradient from the Omega Property (EPA, Omega Chemical Corporation Site Overview: http://yosemite.epa.gov/r9/sfund/overview.nsf). This plume is below ACC as shown in Figure 19. Thus Omega site is a confirmed source of contamination in deep groundwater below the ACC site.

The magnitude of contamination migrating from the Omega site in the deep regional groundwater with may evaluated using data from three CPTs (sampled in August 2001) and one monitoring well (sampled in August 2002) located upgradient of the ACC Site. The following contaminants were reported in groundwater:

- PCE at a maximum concentration of 580 ug/l and an average value of 254 ug/l.
- TCE at a maximum concentration of 120 ug/l and an average value of 69.3 ug/l
- cis-1,2-DCE at an estimated value of 6 ug/l;
- 1,1-DCE at estimated values up to 6 ug/l;
- Freon 113 at estimated values up to 7 ug/l; and
- Freon 11 at an estimated value of 0.5 ug/l.

These values are generally comparable with values detected in ACC's deep groundwater (see Table 6), suggesting that the Omega plume is the main source of deep groundwater contamination under ACC.

2.7 Operable Units

In 1996 the site was separated into three operable units (OUs). OU-1 addressed soil in the northern portion of the site, OU-2 addressed soil in the southern portion of the site, and OU-3 addressed the groundwater beneath the site. A RAW for OU-1 was approved in June 1998. A RAW for OU2 was approved on August 5, 1999. The approved remedy for VOC contamination in soil and soil vapor for OU-1 and OU-2 is SVE.

2.8 Interim Measures

2.8.1 Summary of Excavations and Grading Activities

Soil excavation was conducted at the facility during UST removal efforts (see also Section 2.4.1).

April 1990. The first excavation was conducted by SCS Engineers in 1990 to investigate the source of elevated VOCs in soil around central drain area. This excavation revealed the broken pipeline.

December 1998. EREMCO's first soil excavation occurred in 1998 in connection with the removal of 2 USTs (gasoline and diesel) NW of the office building. The excavated area is depicted in original map in the EREMCO Report (1999) The excavated soil was sampled, determined to be appropriate for reuse, and put back in place along with imported fill material.

June 1999. Two excavations were performed by EREMCO in connection with the removal of 10 USTs. The excavated soil was staged in two stockpiles on the site. The excavated areas (tank pits) and stockpiles are depicted on a map in EREMCO's Report (1999). The excavated soil was sampled, determined to be appropriate for reuse, and put back in place along with imported fill material.

July 2001. Two excavations were performed by EREMCO in connection with the removal of six additional tanks. The excavated soil was staged in two stockpiles on the site. The excavated areas (tank pits) and stockpiles are depicted on a map from EREMCO's Report (2001). The excavated soil was sampled, determined to be appropriate for reuse, and put back in place along with imported fill material.

August 2004 Railroad Area Grading. In 2004, DTSC requested that the entire site be paved, (Sara Amir-DTSC, April 13, 2004 letter to Mr. Joseph Kennedy), in connection with the proposal for leasing the site. In preparation for paving it was necessary to remove the railroad ballast and grade the site. This grading activity has been inaccurately characterized as soil excavation, but no soil was removed from the site. The grading was performed in the railroad track area on the northwest portion of ACC on August 4, 2004 To achieve appropriate compaction for subsequent paving, the railroad ballast was mixed with soil and regraded. Soil for mixing with the ballast was dug from a trench parallel to the railroad spur. In digging the trench, old pipelines were encountered, which were removed. Because it exposed a shallow cross-section of soil, the trench was observed by some environmental consultants. Observers recall that the trench was approximately 3-5-ft deep.

2.8.2 Free Product (LNAPL) Removal

Free product was first detected in MW-01 in February 1994 as a thin layer (0.10-ft thick). The product was analyzed and determined to be a mixture VOCs (see Table 7).

On May 11, 1995, ACC began periodic free product recovery from well MW-01. The protocol involved a dedicated bailer emptied into a 55-gallon drum for later disposal at an appropriate recycling facility (SCS, July 31, 1997, Letter to Mr. Shawn Haddad, DTSC). The bailing was repeated as necessary until water removed by the bailer appeared clear and free of LNAPL. This

free product recovery program continued at MW-01 on a weekly basis until July 1995 when only a sheen was detected in the well.

Currently, a skimmer is suspended in monitoring well MW-19 to capture LNAPL in the well. As of September 2007, the thickness of LNAPL in MW-19 was less than 0.01-ft (i.e. a sheen). As of September 2007 (3rd quarter), approximately 308 liters (81.3 gallons) of free product had been removed by pumping and bailing wells on site.

2.8.3 SVE System

A permit to construct the SVE system, as an interim remedial measure, was issued by the South Coast Air Quality Management District (SCAQMD) on September 2, 2004. Operation of the SVE system began October 20, 2005. The details of the SVE system are provided in a report titled SVE Operations Report (Clean Soil, 2007). The most current SVE extraction data revealed only non-detect values in all vapor extraction samples. This is an indication of the efficiency of the vapor extraction system at the ACC site.

3. FIELD SAMPLING PLAN

Field investigations for this site have taken place over many years and by multiple consultants. Sampling protocols for soil, soil vapor, or groundwater sampling, while consistent with standard practices at the time of the respective field efforts, have varied. In this section, we have summarized sampling protocols from the various investigation reports from 1994 to the present.

3.1 Soil Vapor Sampling Protocols

3.1.1 SCS

1996. SCS collected soil vapor samples SV-01 to SV-23 on January 11 and 12, 1996 using Transglobal Environmental Geochemistry. The purpose of this work was to evaluate the effectiveness of SVE (SCS 1999), specifically to obtain site-specific parameters and evaluate the use of activated carbon beds in treating the extracted vapor stream (SCS 1996).

Stainless steel probes (5/8 inches in diameter) were driven into the ground to depths of 5- and 15-ft bgs. Soil vapor was collected from each probe (following purging) using a syringe attached to Nylaflow™ tubing threaded through the steel probe to the probe tip. A site-specific purge test was conducted to determine the optimum volume of soil vapor to extract to obtain the most representative VOC concentrations for the site. Transglobal also conducted a leak test at each probe location to ensure that ambient air was not diluting the samples. This was accomplished by turning the 3-way valve (to which the sample syringe was attached) to the “off” position and drawing the plunger in the syringe. If the plunger did not move due to the vacuum created, the system was deemed “air-tight”.

Typically, 40 cubic centimeters (cc) of soil vapor was purged from each sample location. The next 20 cc of soil vapor was locked into a syringe and hand-carried to a mobile laboratory on-site. The soil vapor sample was then directly injected into a gas chromatograph/mass spectrometer (GC/MS) for analysis for chlorinated and aromatic VOCs listed in EPA Methods 8010 and 8020.

Two duplicate samples were collected and analyzed as a check of laboratory analytical methodology. As a further QA/QC check, instrument calibration was checked daily before any sample was analyzed using calibration standard solution with a mid-point concentration within the linear range of the initial calibration. Field blanks were also analyzed to detect possible contribution from ambient air.

1997. In November, SCS conducted an additional soil vapor survey to evaluate the lateral extent of VOC impacts to the subsurface. Twelve locations (SV-24 to SV-35) were sampled to a depth of 5-ft bgs and, at five of the locations, samples were also taken at 15-ft. bgs (SCS 1997).

This survey was a follow-up survey to the one in January 1996. Transglobal conducted the survey with the same sampling protocols as used in the previous survey.

3.1.2 Blakely Environmental Investigations, Inc.

2000. BEII performed a soil vapor survey in November and December at 36 sampling locations. Soil vapor samples were identified as SV-01 through SV-36 (BEII 2001).

2002. BEII (2002b) conducted a soil vapor survey at the site in January. Included were off-site sample locations near the eastern, northern, and southern property boundaries. A total of 30 locations were sampled at up to three depth intervals (5-, 7 to 12-, and 20-ft bgs).

A direct push rig provided by HP labs was used to collect discrete soil vapor samples according to HP’s standard operating procedure (submitted in BEII, 2002). Soil gas samples were collected in tight syringes and analyzed on-site by Mobile One Laboratories, Inc., a California DOHS- certified mobile laboratory. Each syringe was labeled with the date and time of sample collection, the soil

gas location, and depth. Soil vapor samples were analyzed for VOCs using an equivalent to EPA Method 8260. Six soil vapor samples were collected in Summa™ canisters as duplicates for quality control. These samples were sent to a fixed-base laboratory and analyzed using EPA Method TO-14/TO-15.

3.2 Soil Sampling protocols

3.2.1 SCS

1990. In January 1990, SCS drilled eight soil borings (BH-01 to BH-08) to depths up to 50-ft bgs in the vicinity of the USTs and ASTs (SCS 1991). In April 1990 two near-surface soil "grab samples" (S-1 and S-2) were collected near a broken pipeline on site. In June 1990 SCS drilled seven soil borings (BH-09 to BH-14) to depths of 60 feet bgs. One groundwater monitoring well was installed (MW-01).

The methodology for the collection of the "grab samples" near the broken pipeline (including type of container, sample handling, and transportation) is undocumented (SCS 1991, p.11).

The soil samples collected during the January and June sampling events were analyzed by EPA Methods 418.1 (TRPH) and 8240 (VOCs) (SCS 1994, Table 2). For the January and June soil sampling events, the following soil sampling protocols were documented (SCS, 1991).

Soil samples were obtained at 5-ft intervals by placing 3-inch diameter by 6-inch long stainless or brass sleeves inside a Modified California split spoon sampler. The sampler was then driven into the soil ahead of a hollow-stem auger using a 140-pound slide hammer. Each time the sampler was retrieved, a representative sample from the lowermost intact sample sleeve was collected.

Both ends of each sample sleeve was covered with aluminum foil, sealed by tight-fitting endcaps, and secured with electrical tape. Each soil sample was identified with a chain-of-custody (COC) sample tag and placed in a refrigerated cooler for transport to the SCS Analytical Laboratory in Long Bach, California. COC forms were completed by the field geologist on-site to ensure proper tracking/analysis in the lab. Specific data regarding project number, sample location, and analyses to be performed were recorded on the COC. Soil samples were analyzed for VOCs by USPEA Method 8240.

1992. In October 1992, SCS collected seven near-surface soil samples (RR-01 through RR-07) along the railroad spur in the northwest portion of the site to evaluate the extent of VOC impact along the railroad spur (SCS 1994). No protocols for sample collection are given in the document for which these samples are referenced (SCS 1994, p.20). The soil samples collected during this sampling event were analyzed by EPA Methods 418.1 (TRPH) and 8240 (VOCs) (ibid, Table 3).

1993-1994. At the end of 1993, four exploratory borings (BH-15, BH-16, BH-17, and MW-5) were drilled using conventional hollow-stem auger drilling methods to depths of approximately 25-ft bgs (SCS 1994). Five additional soil borings were drilled to depths of 30-ft to 55-ft bgs and converted to groundwater monitoring wells (MW-2, MW-3, MW-4, MW-6, and MW-7). Groundwater sampling of these wells was conducted in February 1994.

Soil samples were collected at 5-ft depth intervals "using industry-accepted protocols as outlined in the RI/FS Workplan" (SCS 1993). Soil samples were collected in pre-cleaned thin-walled stainless steel or brass tubes. The ends of the sample tubes were covered with clean aluminum foil and capped with close-fitting plastic end caps, which were sealed with tape (unspecified type). No headspace remained between the soil and the end caps.

After sealing, the sample tubes were labeled and sample information was recorded in the field log book. Sealed sample tubes were placed in a cooler maintained at 4° Celsius. Samples were transported to the lab at the end of each field day.

For quality assurance/quality control purposes, duplicate samples were collected. The only reference to frequency of duplicate sampling is in the QAPP, which states that there will be "a total of three laboratory duplicates analyzed for VOCs using EPA Method 8240" (SCS 1993, QAPP Section 2, p. 17).

COC documentation was instituted to trace the possession and handling of samples from the time of collection through analysis and final disposition. Sample custody was initiated at the time of collection by placing a label on the container and filling out the COC. Every individual who took and/or released possession of samples signed, dated, and indicated the time of transfer. Soil samples were analyzed for VOCs using EPA Method 8240.

3.2.2 Blakely Environmental Investigations, Inc.

2002. In June two soil borings (BSB-01 and BSB-02) were drilled to depths of 50-ft and 30-ft bgs, respectively (BEII, 2002a). In August eight additional soil borings (BSB-03 through BSB-10) were drilled and a total of seventy soil samples were collected to depths of 45-ft bgs. In November and December, seven additional soil borings (BSB-11 through BSB-17) were drilled to a maximum depth of 49.5-ft bgs. Sampling protocols are summarized in BEII proposals submitted in 2000 and 2001.

Soil samples were collected either in two two-foot long, 1½-inch diameter, clear acetate liners or in four 1-inch by 6-inch brass tubes. If the sample was collected in an acetate liner, one liner was capped with Teflon™ tape and sealed with duct tape. If the sample was collected in a brass tube, the tube was packaged with Teflon™ tape and capped for laboratory analysis.

Soil samples were logged on COC forms immediately following sampling to insure proper tracking through analysis in the laboratory. Soil samples were analyzed for VOCs using EPA Methods 8015M and 8260 by way of EPA preparatory method 5035.

3.2.3 EREMCO

1998. On December 23, 1998, two USTs were removed from the ACC site (EREMCO 1991). Apparently no environmental samples were collected or analyzed.

1999. In June 1999, EREMCO oversaw the removal of 10 USTs and the abandonment in place of 12 more (EREMCO 1999).

Soil samples were collected from 14-ft to 16-ft bgs by a California-registered geologist. The samples were collected in 40-ounce glass bottles supplied by the laboratory. The bottles were inspected, labeled, and capped by Teflon™-lined plastic cap seals. The bottles were then placed in an ice-filled ice chest for transport to a state-certified laboratory for analysis.

COCs were prepared that showed the dates and times of sampling as well as contained the names and signatures of everyone who handled or transported the samples.

Sixteen soil samples were analyzed for BTEX and MTBE by EPA Method 8020; for gasoline by EPA Method 8015M(g); and for diesel by EPA Method 8015(d).

2001. On July 16, 2001, EREMCO oversaw the removal of 6 USTs and the abandonment in place of 4 more (EREMCO 2001).

Soil sampling was conducted using a backhoe from 2-ft to 4-ft under the inverts of each 10,000 gallon-capacity tank. An ENCORE™ sampling system (which produced 25-gram samples) was employed to collect soil samples from the backhoe bucket. Three samples (one from each end and one from the middle) were collected under each 20,000 gallon-capacity UST. Around the slurry-filled USTs, a Geoprobe™ direct push drilling rig was used to collect soil samples from 5-ft, 10-ft, and 15-ft bgs in brass sampling sleeves. ENCORE™ samples were then collected from the brass sleeves. ENCORE™ samples were sealed in aluminum bags and placed in an iced cooler for transport to a state-certified laboratory.

All soil samples were listed on COCs, which were then signed by the responsible party. A total of 30 samples were collected and analyzed for EPA Methods 8015M (full range) and 8260B (VOCs).

3.3 Groundwater Sampling Protocols

3.3.1 SCS

1990. In June MW-1 was installed and developed. Prior to sampling, approximately four well casings (45 gallons) of groundwater were removed (SCS 1991). During purging, pH, electroconductivity, and temperature were measured in order to verify that representative formation water had entered the well. After the field readings had stabilized, a pre-cleaned 3-inch diameter stainless steel sampler was lowered into the well from which sample containers were filled. All sampling equipment coming in contact with groundwater was thoroughly cleaned prior to, and after, sampling by washing with a TSP solution and double rinsing with distilled water.

Samples and duplicates were placed in 40 ml sample bottles supplied by the laboratory. Immediately upon collection, samples were labeled and logged. COC documentation was completed for each sample. Samples were stored in a field cooler until their delivery to the SCS Analytical Laboratory in Long Beach, California. Groundwater sample MW-1 was analyzed for EPA 624 VOCs.

1993. Five groundwater monitoring wells (MW-02, MW-03, MW-04, MW-06, and MW-07) were installed at the end of 1993. Groundwater sampling of these wells was conducted in February 1994 (SCS 1994). Protocols for the sampling of these new groundwater monitoring wells was documented in the SCS RI/FS Workplan (SCS 1993, QAPP, Section 2).

Groundwater was sampled using a Teflon bailer. Water samples were collected in “appropriately-sized” bottles with proper preservation supplied by the laboratory. Groundwater samples were identified with a sample tag and placed in a refrigerated cooler for transport to a state-certified laboratory. COC forms were completed to ensure proper tracking/analysis in the laboratory. Specific data regarding the project number, borehole location, depth of sample, and analyses to be performed was recorded on the COC.

In addition to the standard internal QA/QC conducted by the laboratory, one duplicate sample and one rinsate sample was collected and analyzed.

Groundwater samples were analyzed for general water quality analytes (e.g., TDS, pH, EC, calcium, magnesium, sodium, potassium, bicarbonate, carbonate, chloride, sulfate, nitrate, iron, and magnesium) and for VOCs by EPA Method 624.

3.3.2 Blakely Environmental Investigations, Inc.

2000. Quarterly groundwater monitoring began in November (BEII 200a). Wells were purged in an order designed to minimize the potential for cross-contamination. Three casing volumes were calculated based upon total well depth, standing water level and casing diameter. One casing volume was calculated as :

$V = \pi(d/2)^2 \times 7.48$

where:

V -- is the volume of one well casing of water (in gallons, 1 ft^3 = 7.48 gallons)

d -- is the inner diameter of the well casing (in feet); and

h -- is the thickness of the water column in the well casing

A minimum of three casing volumes of water was purged unless the wells were purged to dryness. The purge rate did not exceed one gallon per minute. Water was collected in a measured bucket to record

the purge volume. All purged groundwater was containerized in a 55-gallon capacity drum for disposal at a later date.

Water temperature, pH, EC, and turbidity were measured using field test meters (unspecified manufacturer) before, during, and after each casing volume purged. The measurements were recorded on well sampling logs. Groundwater samples were collected after the above-mentioned parameters had stabilized, with the assumption that stabilization indicated that fresh formation water had entered the well. For stabilization to occur, temperature did not vary by more than +/- 1°C, pH by more than 0.1 pH unit, and EC by more than 10% from reading to reading. Turbidity was measured to be less than 5 NTUs. If the above-mentioned parameters did not stabilize after five casing volumes had been purged, purging ceased, a notation was recorded in the field sampling log, and samples were collected. Observations of water quality, such as color, clarity, odors, sediment, etc. were also noted in the field sampling logs.

If the well de-watered during purging and three casing volumes had not been removed from the well, the well was allowed to recharge to 80% of the original static water level, then de-watered a second time. Groundwater samples were collected after the well had re-charged to 80% of the original static water level a second time.

All field meters (unspecified in original document) were calibrated according to manufacturer's guidelines and specifications before and after each day of field use. Field meter probes were decontaminated before and after use at each well. The name, model, and serial number(s) of field meters were recorded on the field sampling log. The calibration standards used and expiration dates were also recorded on the field sampling log. Any deviations noted during the day (e.g. meter drift) was also recorded. If the meter drift required an adjustment to any of the final values of field parameters, the results were flagged in the data base.

Wells were allowed to recharge for 15 minutes after well purging was completed before groundwater samples were collected.

At each sampling location, all bottles designated for a particular analysis were filled sequentially before bottles designated for the next analysis were filled. If a duplicate sample was collected at any particular location, all bottles designated for a particular analysis for both sample designations were filled sequentially before bottles for another analysis were filled.

Groundwater samples were collected by lowering a new disposable Teflon™ bailer into each well. Groundwater was transferred from the bailer directly into the appropriate sample containers with preservative, if required, chilled, and processed for shipment to the laboratory. When transferring samples, care was taken not to touch the bailer-emptying device to the sample containers.

Vials for VOC analysis were filled first to minimize aeration of water in the bailer. The laboratory provided vials contained sufficient HCL preservative to lower the pH to less than 2. The vials were filled directly from the bottom-emptying device. The vials were capped with a cap containing a Teflon™ septum. The vial was inverted and tapped to check for bubbles to insure zero headspace. If an air bubble appeared, the vial was emptied into the purge drum, the vial discarded, and a new sample collected in a new vial that had been prepared with preservative.

Groundwater samples for dissolved metals were collected in 500 mL poly bottles containing $HN0_3$ preservative provided by the laboratory. The bottles were filled directly from the bottom-emptying device.

New nitrile gloves were worn by personnel during sampling at each well to prevent cross-contamination of the samples.

A solvent-free label was affixed to each sample container denoting:

- project name and number,
- sample identification number,
- name of sample collector,
- date and time of sample collection,
- analytical parameters,
- known hazards,
- pertinent comments, and
- an identifying code to distinguish each individual bottle.

Labels were durable enough to remain legible when wet. Custody seals were used to detect unauthorized tampering of samples during storage and transport.

VOA vials and 500 mL poly containers, including laboratory trip blanks and rinse blanks, were placed inside new Ziplock™ bags (one per well) and stored in a cooler chilled with bag ice to a temperature of approximately 4ºC. Groundwater samples were logged on a COC form immediately following sampling of each well to document proper custody from sample collection through sample analysis in the laboratory. A sample was considered "in custody" if:

- it was in someone's possession,
- it was within visual proximity of that person,
- it was in that person's possession, but locked up and sealed (e.g. during transport), or
- it was in a designated secure sample storage area.

Each COC contained the following information:

- project name and number,
- names of sampling team members,
- laboratory destination,
- sample number,
- sample volume,
- sample location and description,
- date and time collected,
- sample type,
- container type,
- preservation type,
- requested analyses,
- requested turnaround time,
- special instructions, if any,
- disposal requirements,
- possible sample hazards,
- signatures of persons involved in the chain-of-possession.

Sample transfer from one custodian to another was documented by signatures on the COC, upon which the time and date of transfer was recorded. The field geologist was the acting custodian for the samples as they were being collected. Samples were not left unattended until transferred to the lab. A copy of the COC was retained by the geologist and kept with the field logbook. A copy of the COC accompanied the samples to the lab enclosed in a Ziplock™ bag and taped to the inside of the shipping container.

Several custody seals were attached to the outside of each shipping container such that the container could not be opened without breaking the seal. Clear strapping tape was placed over these seals to ensure that the seals were not accidentally broken during shipping. Each seal was dated and signed by the sampler.

Groundwater samples were transported to Applied P&Ch Laboratories, a California-certified laboratory, to perform the requested analyses. Samples were analyzed in accordance with EPA SW-846 methods (EPA, June 1998) on a normal turnaround basis. Quality Assurance/Quality Control (QA/QC) protocols for groundwater analyses consisted of:

- VOCs by EPA Method 8260 (June 2000, October 2001), Title 22 (CAM 17) metals by EPA Method 6010B and 7471A for mercury (June 2000, October 2001).
- TPH as gasoline by EPA Method 8015 modified (June 2000).
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270C (June 2000).

Groundwater monitoring and sampling reports were (and continue to be) submitted to DTSC on a quarterly basis. Each report contains the following information:

- Results of groundwater elevation and free-product monitoring,
- Well purging and sampling protocols,
- Laboratory analytical results and COC documentation,
- Groundwater contour map showing current “flow” conditions,
- Tabulated well construction and elevation data,
- Tabulated analytical results, including historical data,
- QA/QC assessment,
- Copies of groundwater Field Sampling Logs,
- Results of FP and disposal (as appropriate),
- Detailed description of any deviation from the work plan,
- Assessment of significant changes since the previous reporting period,
- Summary and recommendations, including a discussion of any
- outstanding issues.

Each report was signed by a registered civil engineer under whose supervision the monitoring was conducted. Each report contains a table of contents and numbered pages.

Free product was stored in sealed 55-gallon drums or similar containers for a period of not more than 90 days. Stored wastes were profiled for hazardous constituents and characterized as “non-Hazardous”, “California Hazardous”, or “RCRA Hazardous”, as appropriate.

All wastewater including decontamination water, and purge water was properly stored in 55-gallon capacity drums, characterized, and disposed of as appropriate. Any transportation of waste was properly manifested.

4. RESULTS OF THE RI INVESTIGATION

4.1 Nature and Extent of Contamination

A comprehensive tabulation of analytical results for soil vapor and soil are provided in Tables 2 and 4, respectively. A comprehensive tabulation of analytical results for groundwater is provided in Table 6. The distributions of selected analyte concentrations in all media are displayed in Figures 20 through 44.

4.1.1 Soil Vapor

As detailed in Section 2.4, four soil vapor surveys have been conducted at ACC between January 1996 and January 2002 and one off-site survey was conducted in June 2002. The results of these soil vapor surveys provided a comprehensive data set and good coverage of the entire site. A total of 94 onsite and 7 off-site soil vapor samples were analyzed. Sample depths ranged from 5 to 22-ft bgs.

VOC contaminants reported in soil vapor include: BTEX; 1,1-DCA; 1,1DCE; cis-1,2-DCE; vinyl chloride; PCE; 1,1,1-TCA; TCE; and Freon 113. The highest concentrations in soil vapor were found along the railroad spur (northwest boundary of site), along the southern border of the site, and in the central portion of the site.

The highest concentrations of soil vapor were typically at 20 ft bgs, the lowest depth tested and the closest depth to contaminated shallow groundwater. There is a good correlation between the contaminants detected in shallow groundwater and their corresponding concentrations in overlaying soil vapor. This suggests that off-gassing from shallow groundwater is a major source of soil vapor contamination at the former ACC site.

Freon 113, which was found repeatedly in the 2000 and 2002 vapor surveys is a notable occurrence because it was, with one exception, not handled or stored by ACC. Freon 113 was encountered in soil vapor at the following locations:

- Along the southern border of the site (SV-29 at 20-ft; SV-33 at 20-ft; BSV-37 at 20-ft; BSV-39 at 5, 10 and 20-ft; BSV-40 at 5 and 10-ft; BSV-41 at 5-ft; BSV-42 at 5, 10 and 20-ft; BSV-43 at 20-ft; BSV-47 at 20-ft; BSB-48 at 20-ft; BSB-49 at 20-ft; BSV50 at 8 and 20-ft.
- Center of the site (BSV-38 at 21-ft; BSV-51 at 20-ft; BSV-54 at 20-ft; BSV-52 at 20-ft).
- East and northeast (BSV-55 at 8 and 20-ft); BSB-56 at 8 and 20-ft; BSV-57 at 8 and 20-ft; _BSV-58 at 8-ft).
- Off-site at Liquid Air (BSV-64 at 20-ft).

Significance of Freon in ACC Soil Vapor

The significance of Freon 113 detections in ACC soil vapor stems from the fact that Freon 113 is a chemical abundantly handled at and released by McKesson. Freon 113 is a common contaminant in the subsurface at McKesson. This is why it is important to review and establish the history of Freon handling and releases at both ACC and McKesson.

Lack of Freon 113 at ACC. There is no record of the storage of Freon 113 at ACC with the exception of a single drum in 1988 with a product containing Freon 113 as an ingredient (Angeles Chemical Co., Inc, Suppliers by Product, 04/22/92, GSYN008358). Mr. Locke, the former owner of ACC confirms that freons were not handled in the normal course of operations. It has been argued by others that ACC could have stored more Freon 113 and even that Freon 113 could have been stored in ACC USTs or ASTs (GeosSyntec, 2007, Comments on “Updated Remedial Investigation Report for the Former Angeles Chemical Company” Santa Fe Springs, California). However, in

spite of the availability of good records of ACC's operations, there is not a single reference or for such storage. Geosyntec explains the lack of freon in the list of chemicals stored at ACC (compiled by SCS Engineers in 1994) and as a normal result of the freon phase-out in the mid-1990s in the U.S. Yet, an earlier table compiled by McKesson's own consultant, HLA, in 1992 argues against this explanation: Table 8 from HLA's 1992 RI Report entitled "Summary of Chemicals Stored at Angeles Chemical Company" does not refer to any freons at ACC. This Table was compiled from Santa Fe Springs Fire Department files. If Freon 113 were regularly handled and stored at ACC, it would have been noted in fire department files. Moreover, there is no listing of any freon storage at ACC in the table listing contents of ACC's USTs compiled by McKesson Environmental Services based on June 1984 information. The 1984 McKesson Environmental Services table is named "Listing of Underground Storage Tanks for Angeles Chemical Company" and based on the listing of products stored, as registered with the State of California in June 1984 in its Environmental Information Survey Report (McKesson Environmental Services, Inc., August 11, 1986, Environmental Information Survey McKesson Chemical Facility, Table 7).

Freon 113 Handling at McKesson. McKesson regularly handled and stored Freon 113 and had a dedicated area on the property referred to as "freon blending area". Evidence for the historical storage of Freon 113 at McKesson can be found in many documents (e.g., Summary of Tank Information, McKesson Facility Aboveground Solvent Storage and Freon Blending Area - see Table 5; HLA, 1992, Remedial Investigation, McKesson Corporation Property, June 25, 1992).

Summary of detections at ACC and McKesson. Freon 113 was released at McKesson and has been routinely detected in both shallow and deep groundwater at the site. The only time Freon 113 was actually analyzed in McKesson soil (in 1986), it was detected. The only time Freon 113 was actually analyzed in McKesson soil vapor (in 2001), it was detected. Freon 113 was not considered a chemical of potential concern for the ACC site, so was not analyzed for in ACC soil, groundwater, or free product. As noted above, Freon 113 was, however, analyzed (and detected) in 2000 and 2002 in ACC soil vapor samples. Additionally, Freon 113 was analyzed and detected in soil vapor tests performed at ACC in 1996 and 1999. This is significant because these tests show that the origin of Freon was from the vadose zone rather than from ACC's wash solvent.

Freon Detections in the Vapor Extraction Tests conducted at ACC. The vapor extraction tests conducted at ACC in 1996 and 1999, revealed the following Freon 113 detections (SCS Engineers, 1999, SCS Engineers, 1999, Summary Report Vapor Extraction Testing – 1999, Angeles Chemical Company, Inc. Santa Fe Springs, CA; SCS Engineers, April 2000, Soil Vapor Extraction Workplan. Angeles Chemical Company, Santa Fe Springs, CA):

- Sample S4-4:44-1 from 6/17/96 had 34,200 ppb (v/v) Freon 113
- Sample S4-5:14-2 from 6/18/96 had 39,100 ppb (v/v) Freon 113
- Sample O-1 from 06/17/99 had 31.9 ppb (v/v) Freon 113 – this sample was extracted from property well E1;
- Sample O-2 from 06/17/99 had 6.3 ppb (v/v) Freon 113 - this sample was extracted from well E1 and supplemental hydrocarbon FUEL (outlet)
- Sample I-2 from 06/17/99 had 20,000 ppb (v/v) Freon 113 – this sample was extracted from property well E1 and supplemental hydrocarbon fuel (inlet) (DTSC2762);
- Sample T5-THOX Outlet-1 from 11/19/99 had 23 ppb (v/v) Freon 113 – this sample was extracted from property extraction well E-1 and supplemental hydrocarbon fuel;

The vapor extraction tests used vapor extracted from the extraction well plus vapors recovered from ACC's blending and filling operations. Some tests (such as T2) used only the vapors from blending and filling operations while other tests (such as I2, T5) used a combination. Freon 113

was detected only in the tests that used the vapor extracted from the extraction well. The tests using only vapor from the blending and filling operations (T2) did not contain any Freon 113. This is an indication that the Freon came from the vadose rather than from the blending operations, so for this time, it cannot be associated with ACC operations.

The Omega plume contains freons but it cannot contribute Freon 113 to the vadose zone at ACC. The Omega plume is restricted to the deeper A1 aquifer which is under confined conditions at ACC. The occurrence of freon in groundwater below the aquitard cannot contribute to Freon in soil vapor well above the aquitard. It addition, concentrations of Freon 113 in deep groundwater are quite low and volatilization from this source is insufficient to account for the high values in ACC soil vapor.

In conclusion, the presence, pattern, and amplitude of Freon 113 appearing in the vadose zone at ACC site cannot be explained by the presence of the Omega plume in deep groundwater. While freon was never blended by ACC, and only one drum was ever stored at the site, freon was a major product for McKesson and there have been numerous detections in McKesson vadose zone and groundwater. Subsequently, the presence of Freon 113 in ACC soil vapor and its distribution to the south suggests its migration from McKesson.

4.1.2 Soil

At least 405 soil samples have been obtained across the ACC site at various depths from surface to greater than 45 ft-bgs. A complete listing of the soil analytical data is provided in **Table 4**. There is a strong horizontal component to the contaminant distribution in soil below about 20 feet that is characteristic of migration along low-permeability layers that can retard or even preclude further vertical migration. For many sample locations with near-surface detections of contaminants, high contamination values are found in shallow soil and then again in deeper soil, with little or no contamination at intermediate depths. More importantly, significant increases in contamination are observed at some sample locations near the base of the B or C1 lithologic units, as discussed below. Such changes are not due solely by variations in the physical properties of the geologic materials, but also indicate lateral contaminant migration with perched groundwater. In addition, there is not a strong correlation between contaminant abundance in shallow groundwater and contamination in immediately overlying soil. For example, the highest concentration of 1,1,1-TCA in shallow groundwater was recorded in MW -06, yet the soil samples from the same location display low concentrations of 1,1,1-TCA. This fact suggests additional sources for shallow groundwater contamination other than the directly overlying shallow soil, most probably through lateral transport in the vadose zone.

Figures 27 through 34 show that the increases of contaminant concentrations at different depths cannot be attributed solely to variations in lithology. The higher concentrations of contaminants at deeper depths correspond, in general, with the historical depths of shallow groundwater.

As seen in Figure 34, methylene chloride was not found in shallow soil at the main ACC release areas but appears in deeper soil. As noted below, methylene chloride is also found in shallow groundwater, but not in deep groundwater. This chemical was used (and released) by McKesson.

The highest concentrations of the contaminants of concern at the site were detected as follows:

- <u>1,1,1-TCA:</u> in sample RR-03 (surface sample from the railroad tracks on the northwest side of the site), followed by MW-19 at 14.5,28 and 29.5-ft bgs, respectively (northwest part of the site), and by sample G-06 at about 15-ft bgs (from the UST area). It is apparent that the deeper occurrence of 1,1,1-TCA is not solely due to vertical migration from directly overlying surface impacts. This suggests an additional source or sources that impacted the deeper soil by way of lateral transport.

- PCE: in sample RR-05 (surface sample from the railroad track in the northwest of the site), followed by another railroad track surface sample (RR-06), by sample BSB-06 (at 5-ft bgs) also by the railroad tracks (extreme northwest), and BSB 17 at the surface (center of the site). Similar to 1,1,1- TCA, the immediately overlying soil is not obviously the main source of deeper PCE impacts.
- TCE: in general, lower amounts of TCE are recorded compared to PCE or 1,1,1-TCA. The highest values of TCE are recorded in boring BSB-06 (extreme northwest of the site) however (unlike PCE) not in the surface soil but at a lower depth (35-ft bgs). The next higher value of TCE was also in BSB-06 but at 5-ft. TCE is also found in sample BSB-09 (to the northwest) at 27.9-ft bgs and also in sample G-OI at about 15-ft bgs (from the UST tank removal). TCE is also found to the northwest by the railroad tracks, but unlike other chlorinated solvents at the railroad tracks, more TCE is found at depth than at the surface.
- Benzene: the highest historical concentrations are found in deeper soils at 30-ft bgs in sample BH-14 (center-east of the site and to the east of UST area), followed by sample BSB-09 at 15-ft bgs (on the northwest of the site by the railroad tracks), and by BSB-13 at 4.5-ft bgs (also northwest by the railroad tracks).
- Toluene: the highest amounts were related to two samples from the tank removal G-07 and G-06 collected in 2001 (15-ft bgs), followed by sample BSB-17 at the surface (in the UST area). The next highest detections are in MW-14 (center-west of the site) at 29.5 and 30-ft bgs. For toluene, there appears to be a source for soil contamination in the central portion of the site, possibly associated with the severed pipeline, followed by lateral transport at depth in the vadose zone.
- Ethylbenzene: the highest soil concentrations are also related to a sample collected during the UST removal at about 15-ft bgs (G-07), followed by SS-01 (sample from 2.5 feet near the severed pipeline release) and BSB-17 at the surface (in the central portion of the site). Similar to toluene, a source of ethylbenzene in the soil may be the severed pipeline, followed by lateral transport at depth in the vadose zone.
- Xylenes (total): the highest amounts in soil are found in sample BSB-17 (in the central portion of the site) at the surface, followed by sample BSB-07 at 15-ft bgs and MW-14 (northwest of UST area) at 29.5 and 30-ft bgs. It is apparent that a probable source of xylenes is coincident with the source for toluene and ethylbenzene in soil and may be associated with the severed pipeline.
- Acetone: the highest concentrations are found in the railroad track area in sample RR-06 at 1.5-ft bgs, followed by sample BSB-06 by the railroad tracks in the northwest comer of the site (at 10-ft bgs), and by samples TK-24B and TK-25B (from tank removal) at about 20-ft bgs. Acetone in soil may have two sources one to the northwest and one in the central portion of the site, possibly associated with the severed pipeline incident.

Contaminant Concentrations Around the USTs. In 2001 during UST removal and tank abandonment, thirty soil samples were collected at depths of approximately 20-ft bgs from beneath, and adjacent to, the removed USTs. TPH and seventeen different VOCs were identified in the surrounding soil including: acetone, 1,1-DCA; ethylbenzene, MEK, MIBK; 1,3.5-trimethylbenzene; 1,2,4-trimethylbenzene, isopropylbenzene, n-butylbenzene, p-isopropyltoluene, toluene, PCE; 1,1,1-TCA; TCE, naphthalene, and total xylenes. Analytical results showed the highest elevated concentrations for selected VOCs as follows: 118,000 ug/kg acetone (B-24); 411,000 ug/kg PCE (G-06); 540,000 ug/kg 1,1,1-TCA (G-06); and 44,200 ug/kg TCE (G-01). It is noted that, in spite of the detection of contamination in soils around the tanks, the Tank Removal Report concludes: "The condition of the USTs that were removed and their steel piping was very

good and there was no evidence for leakage" (EREMCO, 1999). Thus, despite the high values of different contaminants in the soils adjacent to some USTs, the good condition of removed USTs suggests other possible sources. The tank removal soil samples were taken from the approximate depth of the shallow groundwater zone at times of high groundwater. These findings are consistent with the presence of LNAPL on or above the shallow groundwater and lateral transport from release points other than the USTs.

Contaminant Distribution in Soil. There is a non-uniform distribution of contamination with respect to depth. This suggests a combination of vertical and lateral migration of contamination at the former ACC site. In general, there is contamination present in surface soil samples and in deeper soils (with peaks of contamination generally between 25 and 35-ft bgs) and there is less contamination at intermediate depths. For example, in soil boring BSB-09, there is a slight increase of contamination at 8 and 15 ft bgs, after which there is little to non-detect at the three following depths (17, 22.5, and 24-ft bgs). In the next depth, at 27.5-ft bgs, contamination increases and then decreases again from 32.5 ft bgs. In other borings, such as BSB-12, BSB-13 and MW -10, there are significant increases of different contaminants at lower depths within the same lithologic unit. Thus, in soil boring BSB-12, there is a decrease of contamination from 14.5-ft to 19.5-ft bgs, followed by an increase of most contaminants at 24.5 ft bgs. In soil boring BSB-13 there is an increase of contamination between 25-ft to 29.5-ft bgs. For MW-10, a significant increase in all contaminants is recorded at 32-ft bgs as compared to the previous depth (27-ft bgs).

Other locations with surface detections have a similar contamination pattern with significant increases of contamination between 25-ft to 35-ft bgs. In general, little soil contamination is found below 35 ft bgs, due to the retardation of vertical migration at the low permeability unit C2.

For many locations, there is an absence or insignificant surface contamination and the presence of only deeper soil contamination. Such cases include:

- MW-08 (contamination substantially increases at 30-ft bgs)
- MW-04 (contamination substantially increases at 20-ft bgs)
- MW-01 (contamination substantially increases at 30-ft bgs)
- MW-26 (contamination substantially increases at 25-ft bgs)
- MW-12 (contamination substantially increases at 39.5-ft bgs)
- MW-14 (contamination substantially increases at 29.5-ft bgs).

This fact further supports the interpretation that vertical migration through the vadose zone is not the sole migration pathway for contamination and there has been significant lateral migration of contamination within the shallow water zone. Thus, the current locations of deep soil impacts are not necessarily directly under the original release locations of that contamination.

4.1.3 Groundwater

Groundwater monitoring data from 1994 to March 2008 were considered in the preparation of this RI Report. More than 400 groundwater samples collected from monitoring wells across the site have been evaluated. A complete listing of the groundwater analytical data is provided in **Table 6**. The first groundwater monitoring well was constructed in 1990. Since then, a total of 26 groundwater-monitoring wells have been installed. Since the beginning of 2002, quarterly groundwater sampling has been ongoing at the ACC site. The evaluation of available groundwater data at the former ACC site suggests that petroleum hydrocarbon and chlorinated compounds have different distributions which may be indicative of different sources, different release times, and/or different migration pathways.

There has been minimal communication between deep and shallow groundwater below the former ACC site. Although groundwater is contaminated with VOCs in both the shallow and deep aquifers at the former ACC site, different concentration patterns have been interpreted in each aquifer.

Also, the concentrations of VOCs in the shallow aquifer are an order of magnitude higher than those recorded in the lower aquifer (see Figures 37-44). This suggests that there is minimal communication between the two aquifers. This finding is largely explained by the occurrence of the low permeability unit C2 which acts as an aquitard between the shallow and deep aquifers.

Shallow Groundwater

Chlorinated Compounds. In shallow groundwater, methylene chloride (Figure 44), 1,1,1-TCA (Figure 37) and PCE (Figure 38) all show highest concentrations on the southwest corner of the property. In fact the only detection of methylene chloride in shallow groundwater in March 2008 was at MW-26 in the southwest corner of the site. This is striking because the soil data do not suggest a near-surface source and there are no known releases on this portion of the site. In general, PCE, TCE and 1,1,1-TCA all show declining historical concentration trends in shallow groundwater.

Certain chlorinated compounds (1, 1-DCE; cis-1, 2-DCE; trans-1, 2-DCE; 1,1-DCA; 1,2-DCA; and vinyl chloride) are reaction products created from the degradation of heavier molecular-weight parent compounds. A distinct pattern in shallow groundwater is observed for 1,1-DCE as compared to 1,1-DCA and 1,2-DCA.

Chlorinated daughter products tend to have higher concentrations in deep groundwater than their corresponding parent compounds. For example, 1,1-DCA was present in MW-21 at a concentration of 2,640 ug/L and cis-1,2-DCE was 2,910 ug/L in the same well. Vinyl chloride was not detected in a number of deep wells, but was present in some wells with a concentration up to 739 ug/L. 1,1-DCE and cis-1,2-DCE generally follow a concentration pattern similar to their presumed parent compounds, with the highest concentration located in the southwest corner of the site. In contrast 1,1-DCA has a similar contamination profile in shallow water as benzene, with the highest contamination located in the northwest of the site.

Such variability between different daughter products of chlorinated solvents could be attributed to different degradation pathways due to a series of site-specific factors rather than different sources. It is logical to assume that most or all of these daughter products of chlorinated solvents are from the degradation of parent chlorinated compounds and not from direct releases.

Petroleum hydrocarbons. Benzene (Figure 39 is not abundant at ACC. The highest concentration of benzene in shallow water is found in the northwest part of the site (288 ug/L at MW-11). Toluene (Figure 40) is more abundant in shallow groundwater than benzene. The highest concentration of toluene in March 2008 was 5,860 ug/L in MW-26, although it is notable that toluene was not detected in shallow groundwater wells Mw-9, MW-12 and MW-16. Xylenes (Figure 41) were found at somewhat lower concentrations than toluene, but following a similar profile in shallow groundwater. This may be indicative of common sources with toluene.

Ethylbenzene is found in even lower concentrations in the shallow groundwater at the former ACC site than toluene and xylenes (maximum concentration was 1,270 ug/L in MW-11 in March 2008). In general, decreasing concentration trends are observed for the BTEX compounds in shallow groundwater. LNAPL was encountered in shallow wells MW-18 and MW-19 in March 2008.

Organic solvents (ketones, acetone). MEK (Figure 43) follows a similar concentration pattern in shallow groundwater as toluene, ethylbenzene and xylenes. The highest values of acetone in shallow groundwater are recorded in the southwest corner, similar to the case of chlorinated solvents.

Deep Groundwater

In general, much lower concentrations are found in deep groundwater compared to shallow groundwater. Of note is the occurrence of contaminants in ACC deep groundwater at markedly

lower concentrations than have been observed in deep groundwater to the south of the site at the McKesson site (see Figures 37 to 44).

Concerning “parent” chlorinated solvents, the highest value for PCE in deep groundwater was 281 ug/L in MW-29 and the highest concentration of TCE was 104 ug/L in MW-23. 1,1,1-TCA was only detected in one deep well in March 2008 (70.4 ug/L a MW-21). Methylene chloride continues to be absent in all deep wells.

BTEX compounds are much less abundant in deep groundwater compared to shallow groundwater and unlike shallow groundwater, benzene is the prominent BTEX compound in deep groundwater. In fact, in March 2008, ethylbenzene and xylenes were not even detected in deep ACC wells and toluene was detected in only one well (MW-15) at the vanishingly small concentration of 1 ug/L. Concerning other organic solvents MEK, MIBK and acetone were not detected in any deep wells at the former ACC site.

4.2 Site Conceptual Model

The hydrogeology of the site is relatively complex and is significantly affected by sedimentary heterogeneity and subsurface recharge that is temporally and spatially inhomogeneous. Evaluation of lithologic data indicates at least two distinct sedimentary fabrics that affect the movement of fluids in the vadose zone and the shallow groundwater zone.

Six hydrogeologic units have been identified in the upper 80 feet of site (from top to bottom: A, B, C1, D, C2 and E). Based on the evaluated data, unit E always contains groundwater; unit D generally contains groundwater beneath the former ACC site and portions of the McKesson site, while unit B only sometimes contains saturated conditions and is currently dry.

The lithologic map of the combined Angeles and McKesson sites (see Figures 7-9) shows a fabric interpreted to represent paleo-stream deposition. The two nearly parallel troughs are interpreted to be paleo-stream channels that eroded into the older underlying sediments as they deposited the relatively coarse-grained materials comprising unit B. The net flow is from the higher elevations onto the lower elevations when vadose zone flow and/or shallow groundwater flow is controlled by this surface.

The structure of the base of unit D (top of unit C2) is lower and therefore older than unit B. Troughs separated by ridges that run from southwest to northeast are evident on this surface. Finally, it is observed that the channel in the base of unit D extends from beneath the former McKesson USTs and ASTs to the center of the ACC site and exits at the extreme northeast corner of the site. The possible significance of this observation is confirmed by the 2002 soil vapor data related to Freon 113, a chemical that was, with one exception, never used or stored at ACC. Freon 113 appears in most of the sampling locations along the south border of the site, and only sporadically in the center-east, east border and northeast of the site. The distribution pattern of Freon 113 is explicable by the model of channelized flow controlled by the topography of the base of unit D, suggesting that Freon 113 was transported from the south as soil vapor or as shallow groundwater (with subsequent volatilization) from an off-site location.

Fluids infiltrating downward from the unlined channel between the former ACC and McKesson sites would encounter fine-grained unit C1 at the eastern portion of the channel’s run and be retarded in vertical flow and would subsequently migrate horizontally to the north. While most of the eastern run of the unlined drainage channel between the two sites is underlain by unit C1 which would generally divert recharge from the channel to the north, direct recharge of unit D can occur along the last 40 feet before the culvert under Sorenson Avenue. The well hydrographs and shallow zone groundwater contour maps appear to corroborate this as a significant recharge point (Figures 11, 13, 14).

Fluids migrating downward through the permeable sands and gravels of unit B encounter either unit C1, D, or C2 depending on their point of entry from the surface. At areas where unit C1 is encountered, such as beneath the drainage channel, or where unit C2 is encountered, such as beneath the McKesson USTs and ASTs, downward flow is significantly retarded and horizontal flow dominates whenever perched groundwater is present. The slope of these surfaces controls groundwater migration when sufficient hydraulic head pressure is present (such as standing pools of liquids).

In summary, there are two distinct fabrics, from northwest to southeast at the base of unit B and from the southwest to the northeast at the base of unit D (top of unit C2), that, because of permeability contrasts, control fluid flow in the upper 50 feet beneath the site.

4.3 Contaminant Fate and Transport

The contaminants in the subsurface at the former ACC site exhibit a non-uniform distribution in soil, groundwater, and soil vapor. The historical analytical results for soil and soil vapor are shown in Tables 2 and 4. Groundwater data are tabulated in Table 6. The distributions of selected analyte concentrations are displayed in Figures 20 through 44. The distribution of contaminants is determined by the factors that control chemical transport and fate of chemicals.

4.3.1 Contaminant Transport in the Vadose Zone

Contaminants are transported through the vadose zone via three main mechanisms, namely:

- direct flow through unsaturated soil - vertical or lateral (if permeability contrasts are encountered),
- lateral flow with perched or shallow groundwater,
- pressure or density driven vapor transport - vapor flow does not necessarily follow the underlying groundwater flow direction.

In general, contamination released at the surface will migrate downward through soil and porous media if there is sufficient soil moisture and if the force due to gravity exceeds the capillary and adsorptive forces that act to immobilize contaminants. The vertical migration of contaminants depends on the existence of sufficient soil moisture to allow flow, and the physical characteristics of the porous media. Vertical migration can be stopped or retarded by barriers formed at lithologic contacts. In unsaturated conditions, it is well known that coarse-grained layers can create capillary barriers that can suspend vertical migration. Conversely in saturated conditions (such as perched groundwater in the vadose zone) fine-grained, low-permeability layers serve as barriers to flow.

There has been some vertical migration in the soil with high surface detections, but such vertical migration was limited and has commingled on the top of the C1 and/or C2 units with similar contamination transported by the shallow groundwater from other sources.

The analytical data, when viewed with respect to the Site Conceptual Model, suggest two primary mechanisms for the distribution of contamination observed in the shallow vadose zone:

Vertical transport - migration appears to be predominantly vertical through the shallow, coarse-grained stratigraphic units A and B. There is also an indication of limited lateral dispersion at the upper contact with the finer-grained sediments of unit C. The vertical migration of contamination from surface locations appears to account for much of the shallower contamination but only for a small part of deeper contamination (25-ft to 35-ft bgs),

Horizontal transport - the historical shallow groundwater data show a pattern of lateral contaminant transport along complex flow paths, although with a generally north and northwest trend. Commingling of contamination coming from the surface vertically with similar contamination

transported horizontally with the shallow groundwater seems to have accounted for most of the contamination in both deeper soils and shallow groundwater below approximately 25- to 35 ft bgs.

Fluctuating groundwater levels may influence VOC concentrations within soil and soil vapor. Contamination present at the water table can be smeared upward or downward by changing water levels. Changing water levels also influence the relative importance of lithologic controls, with a stronger influence from the geometry of fine-grained surfaces when water levels are nearer the elevation of the surface. The influence is more muted if rising water levels submerge the features, giving rise to less localized controls on the potentiometric surface (such as regional geometry and regional recharge).

Regarding vapor phase transport of contamination at the former ACC site:

- Vapor phase transport of contamination in the vadose zone is a migration pathway that has occurred at the former ACC site,
- Vapor phase transport in the vadose zone closely follows the shallow groundwater patterns and could have contributed to the lateral spreading of contamination in the vadose zone soils.

4.3.2 Contaminant Transport in Shallow Groundwater

Shallow groundwater currently occurs primarily in unit D, with two limited occurrences in unit B. Based on the recovery of relatively dry soil samples in unit C2, it is surmised that unit C2 is not generally saturated and therefore the shallow groundwater is not in direct hydraulic communication with the deep groundwater in unit E. This component of the Site Conceptual Model is supported by the actual site data that suggest the substantial lack of contaminant migration from the shallow into the deep groundwater. Comparing concentrations of VOCs in shallow vs. deep groundwater (see Figures 37-44) some contaminants found in abundance in shallow groundwater (for example, methylene chloride, MEK, and MIBK) are not detected in deep groundwater. Virtually all other VOCs that are abundant in shallow groundwater are found at strikingly lower concentrations in deep groundwater. Moreover the horizontal patterns of contamination in shallow vs. deep groundwater do not match (see Figures 37-44).

In addition to the large variability in shallow groundwater elevations discussed in Section 2.3, contaminant abundances have also exhibited a notable degree of variability in shallow groundwater. Figure 45 shows the relative abundances of contaminants in ACC's monitoring well, MW-01, along with a shallow groundwater hydrograph. (The hydrograph is from McKesson well SB-32 which has a relatively complete record of water levels. As shown in Figures 16 and 19, hydrographs from most wells at ACC exhibit parallel patterns over time.) In 1995, MEK rose from 6,150 ug/L in 1994 to 43,100 in 1995. Similarly, MEK rose from non-detect in 2002 to 30,400 in 2003. These events are characterized not only by an huge increase in overall contamination in MW-01, they are also characterized by a completely different mix of contaminants, as shown by the pie charts on Figure 45. The pie charts show the relative abundances of toluene, MEK and 1,1,1-TCA in 1995 and 2003 (the times of the two concentration peaks) and for 2002, a time between the two concentration peaks. In 2002, toluene was the only of these three contaminants in groundwater at MW-01 whereas in 1995 and 2003, MEK was the most abundant of the three compounds. This figure shows that pulses of contamination of fundamentally different chemistry have passed through ACC's shallow groundwater. These pulses apparently correspond to periods of rising water levels in the shallow aquifer (Figure 45). The data assembled here reveal the source and pathway of these pulses of contamination:

Source. Dr. Shahrokh Rouhani, a McKesson consultant, conducted a geostatistical analysis showing that an abundance of MEK in groundwater is a signature of contamination from McKesson (Rouhani, 2007; see also Johnson, 2008 who provides a clear explanation of this finding).

Concentrations of MEK up to 110,000 ug/L have been measured in McKesson groundwater, with highest concentration in the vicinity of the solvent AST area.

Pathway. In Figure 13 we provided evidence that shallow groundwater flows from north to south when groundwater elevations are rising in response to rainfall (there may be other conditions in which shallow groundwater flows northward, but this particular condition is illustrated in Figure 13).

Synthesizing these findings: McKesson is south of ACC and was grossly contaminated with MEK and 1,1,1-TCA, among other things. During at least two periods when shallow groundwater flowed toward the north, MW-01 and other ACC southern wells are inundated with MEK and 1,1,1-TCA. Between these periods (when the flow of shallow groundwater may have differed) contamination in MW-01 is dominated by petroleum hydrocarbons, which are consistent with releases from ACC.

The topography of the top of unit C2 is a major factor controlling saturated flow in the shallow sediments at the site. In addition to influencing flow dynamics of the shallow groundwater, the structural surface of the top of unit C2 also controls the lateral extent of shallow groundwater, which varies with water level, just as the shoreline of a lake advances and retreats in response to changes in water level. The Site Conceptual Model incorporates the complex dynamics of shallow groundwater flow as follows:

Recharge from the unlined drainage channel (south border of the property) migrates downward and away from the channel in both directions through units A and B until reaching the finer textured soils of units C1 and C2 which impede further downward flow. Some of the water ponds on the top of unit C1 then migrates to the north along this surface in unit B in response to gravity and slowly drains into the trough cut into C1 and D (base of unit B trough that runs northwest to southeast). Water from the channel may also directly recharge unit D as it ponds at the base of unit B beneath the channel due to the pinch-out of unit C1, thus exposing the medium textured (silty sands) unit D to water from the channel. The ponding head in unit B drives some of the channel recharge into unit D where it migrates downward until hitting the contact with unit C2 which, because of its fine-grained texture, impedes downward flow and directs flow along this surface, down slope to the north,

The overall flow in the shallow groundwater is primarily controlled by the surface of unit C2 that has a complex geometry that generally slopes to the north. During times in which the perched zone is saturated in the area, many releases immediately south of ACC would encounter unit D as a result of downward migration and then flow to the north along the sloping surface of unit C2. Southern flow in unit D may also occur especially from the northern part of the site toward the center. However, once reaching the depression in unit C2 (near MW-18) southward migration ceases and fluids collect in this depression.

The historical precipitation data and historical groundwater elevations in shallow wells at the former ACC site and off-site locations suggest that shallow groundwater elevations were significantly higher in the late 1970s and early 1980s. Higher shallow groundwater elevations may have facilitated migration of contaminants from the unlined drainage channel and off-site locations onto the ACC property from the south. This interpretation is based on the topography of unit D, dips northward from the McKesson site toward the center of the former ACC site.

An important observation relates to the presence of a contaminant that has never been used or handled at the former ACC site (Freon 11) in both shallow (1 detection) and deep (1 detection) groundwater. Recognizing that this contaminant has not been tested frequently because it was not considered of concern, the single detected value in February 2002 (120 ug/L) in the shallow well MW-3 may suggest more than just a sporadic occurrence. Rather, such a detection suggests the possibility of off-site contamination migrating onto ACC, at least in the southern part of the site.

4.3.3 Contaminant Transport in Deep Groundwater

The occurrence and flow of deep groundwater at the site is less complicated than that of the shallow zone. The contact between unit C2 and unit E (which comprises relatively coarse-grained clean sands) defines the top of the deep groundwater zone. The base of this aquifer is defined by the top of a silt unit that generally occurs between 70 and 80-ft bgs. The aquifer is therefore relatively thin and ranges from about 25- to 35-ft thick across the study area. Based on regional, historic, and recent data reviewed, flow in the deep zone beneath the ACC site is consistently from the east-northeast to the west-southwest. This is consistent with regional recharge and discharge dynamics.

The seasonal variations and response to specific precipitation events in deep zone wells is fairly rapid and similar in magnitude to responses in the shallow zone. It is hypothesized that the relatively rapid response to precipitation events in the deep zone is related to regional recharge from off site to the northwest and generally not related to local infiltration.

A high percentage of the contamination in the deep groundwater zone originates from the upgradient source of the Omega Plume (Figure 19). As shown in Figures 37-44, VOC concentrations in the deep aquifer underlying McKesson are consistently and significantly higher than the levels found in deep groundwater at former ACC site.

4.3.4 Factors Affecting Fate and Transport

The distribution of contaminants in the subsurface at the former ACC site can be explained by a complex interplay among hydrogeology, releases history, and the physical and chemical properties of the contaminants. The subsurface biochemistry is also important in determining if and how fast biodegradation may occur. The climate (especially precipitation) also plays an important role related to facilitating routes of contaminant migration. Finally, site operations at ACC or adjacent sites may have had an important impact on the fate and transport of released contaminants (e.g., creation of ponds of standing liquid or changing the soil pH by releases of acids or bases).

If dissolved VOCs reach groundwater, they can migrate by advective, dispersive, and diffusive mechanisms. The local groundwater flow regime is the major influence on dissolved contaminant distribution in the saturated zone. Additional factors that can impact the migration of contaminants are subsurface geologic features such as bedding planes or the presence of buried stream channels. Groundwater may flow preferentially within buried stream channels. Channelized or preferential flow can also cause relatively narrow zones of high concentrations to be present in a downgradient direction, and lower concentrations in cross-gradient directions.

Unlike dissolved contamination, the migration of non-aqueous phase liquids is more strongly controlled by the density contrast between the non-aqueous phase and water. LNAPL, such as has been encountered at ACC cannot generally penetrate into an aquifer due to its buoyancy. Dense non-aqueous phase liquid (DNAPL), which has been hypothesized at McKesson, has a tendency to sink through water, thus has the potential to penetrate deeply into an aquifer. This contrast between the behavior of LNAPL and DNAPL partly explains the differences in contaminant distribution in deep groundwater between ACC and the adjacent McKesson site. The presence of LNAPL at ACC has contributed to high levels of contamination in shallow groundwater, but it has also protected deep groundwater quality due to its inability to penetrate the water table. In addition, given the high solubility of many chlorinated compounds in petroleum LNAPL, the LNAPL in the vadose zone at ACC has accumulated chlorinated compounds migrating from other parts of the subsurface. Conversely, the implied presence of DNAPL at McKesson led to deeper and more profound impacts to deep groundwater at that site.

The persistence of a contaminant is related to the physical, chemical, and biochemical properties of the compound itself such as vapor pressure, solubility in water, adsorption characteristics, and

the ability to undergo biotransformations. The higher the vapor pressure, the more readily a compound will volatilize. Contaminants that tend to sorb to the surfaces of soil grains or organic material in soils are less likely to be transported far from their release areas. In addition, different VOCs have different rates of degradation and consequently, some VOCs may persist longer than others under the same geochemical conditions.

At the former ACC site, the generally vertical transport of shallow contamination followed by lateral movement with shallow groundwater or LNAPL along the less permeable unit C2 was a common migration pathway. During the vertical and lateral transport, some of the contaminants were absorbed to soil particles accounting for the soil contamination discussed before. It is less probable that any significant contamination (from soil or shallow water) has migrated to the deep water and several arguments discussed before confirm this hypothesis.

Vapor transport within the vadose zone is another migration pathway especially when high levels of contamination are present in soil vapor. Such vapor may or may not follow the groundwater pathway.

An important phenomenon likely to have occurred at the former ACC site is the occurrence of commingled contamination in the vadose zone comprising contaminants coming from local surface sources and those transported laterally with the shallow groundwater from distant on-site or off-site sources. This hypothesis of commingled contamination in the vadose zone at former ACC site is supported by different pieces of evidence:

The significant increase in contamination at lower depths (usually between 25- and 35 ft bgs) sometimes within the same lithologic unit in many soil borings,

Freon 113 and Freon 11 in the vadose zone at the ACC site were, with one exception, never stored or used at ACC, so is unlikely to have resulted from onsite releases. These contaminants have probably been transported laterally by the shallow groundwater along with other contaminants. Freons were historically used and detected in the subsurface at the McKesson site south of ACC. Freon 113 is also present at the Liquid Air site to the north-northwest,

The higher water elevations in shallow groundwater in the 1970’s and 1980’s due to higher rates of precipitation, increased water use, and increased infiltration at the ACC and McKesson sites.

5. BASELINE HUMAN HEALTH RISK ASSESSMENT

This section documents a human health risk assessment (HHRA) conducted for the former ACC site following EPA, California Environmental Protection Agency Department of Toxic Substances Control (DTSC), and Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidance, and using reasonable worst-case site-specific exposure assumptions. The primary guidance documents used are as follows:

- Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, prepared by Cal-EPA, and dated January 2005 (Cal-EPA, 2005).
- Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil, prepared by the California Office of Environmental Health Hazard Assessment (OEHHA), and dated November 2004 (revised January 2005) (OEHHA, 2005).
- Preliminary Endangerment Assessment (PEA) Guidance Manual, prepared by the Cal-EPA Department of Toxic Substances Control (DTSC), and dated January 1994 (revised June 1999) (DTSC, 1999).
- Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final, prepared by EPA, and dated December 1989 (EPA, 1989).
- Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, prepared by EPA, and dated December 2002 (EPA, 2002).
- Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, prepared by DTSC, and dated 15 December 2004, revised 7 February 2005 (DTSC, 2005a).
- Human and Ecological Risk Division (HERD) HHRA Note Number 1, Issue: Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Military Facilities, prepared by DTSC, and dated 27 October 2005 (DTSC, 2005b).
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, prepared by EPA, and dated December 2002 (EPA, 2002b).
- ProUCL User's Guide. Version 3.0, prepared by EPA, and dated April 2004 (EPA, 2004).

Other guidance documents used in the development of this HHRA are listed in the reference section.

The objective of this HHRA was to assess whether potential exposure to existing levels of site-related chemical impacts in soil, soil gas, and groundwater at the site could pose adverse human health effects to future on-site human receptors. The site is currently used as a vehicle impound, vehicle maintenance, finishing and restoration shop. The site is completely paved. Two workers occupy a trailer during the 8-hour work day. Additionally, various people access the site to collect vehicles. The trailer is located on an approximately 5-inch thick slab of Portland cement, located 18 inches above the ground surface, in accordance with DTSC recommendations. Sjnce the trailer is elevated above the ground surface and the site is entirely paved, current on-site receptors are not exposed to on-site impacts. Therefore, there are not complete exposure pathways for these receptors.

Conservative (health-protective) assumptions were used that overestimated the health risk to these future receptors. The receptors identified in the HHRA are those that would potentially have the greatest exposure to on-site impacts. For the purposes of this HHRA, it was assumed that the site would be redeveloped for commercial/industrial uses. The receptors evaluated under the assumption of redevelopment for future commercial/industrial land use include a future on-site

construction worker and a future on-site commercial/industrial worker. The off-site receptor is not part of this HHRA because this receptor is not considered to have the greatest exposure to chemical impacts at the site. In addition, for comparison purposes, a hypothetical future on-site residential redevelopment scenario was also evaluated, also considered to be an evaluation for future unrestricted land use. The receptors evaluated assuming potential redevelopment for residential purposes include the future on-site construction worker and a future on-site child/adult resident.

An HHRA is typically conducted in four steps: 1) hazard identification, 2) exposure assessment, 3) toxicity assessment, and 4) risk characterization.

- Hazard identification (Section 5.1) includes data collection and evaluation, and the identification of the site-related chemicals of potential concern (COPCs) at the site.
- Exposure assessment (Section 5.2) includes a study of the most sensitive receptors at the site and their possible exposure pathways (i.e., how they may come into contact with the COPCs at the site). A conceptual site model is developed (i.e., vapor intrusion model) and model input assumptions.
- Toxicity assessment (Section 5.3) includes the identification of the relevant toxicity values for the COPCs.
- Risk characterization (Section 5.4) includes a summary of the estimated human health risk results and the associated risk uncertainties.

These four steps of the HHRA for the site are described in detail below.

5.1 Hazard Identification

The initial step of the HHRA process is to review the available data to characterize the site and site impacts. The sampling and analysis program implemented at the site was identified based on site history, sampling results and DTSC guidance and protocol. A summary of the results of the investigation activities conducted for the site is presented earlier in this report (Section 4).

The site-related COPCs evaluated in this HHRA are the organic chemicals detected at the site in the media and depths where potential exposure could occur. Inorganic chemicals, including metals are not considered to be chemicals of concern at the site.

VOCs and semivolatile organic compounds (SVOCs) that were reported above laboratory detection limits in one or more soil samples obtained within the upper 10 feet of soil, and those VOCs detected in the soil gas samples at depths between approximately 5 and 20 ft bgs were considered COPCs in this HHRA for soil and soil gas. Groundwater was also evaluated to assess its potential contribution to potential future vapor intrusion concerns from VOCs emanating from shallow groundwater and migrating through subsurface soil and future building foundations into indoor air. VOCs detected in shallow groundwater (at a depth of approximately 29 feet bgs) are thus considered COPCs. A list of the COPCs in each media is presented in Table 9.

5.2 Exposure Assessment

The objective of the exposure assessment is to estimate the magnitude, frequency, duration, and routes of reasonably anticipated human exposure to the COPCs. The exposure assessment is based on identified potential worst-case receptors and associated potentially complete exposure pathways that define the conditions of exposure to the COPCs. The receptors and assessment of potentially complete exposure pathways are shown in the Conceptual Site Model (CSM) presented on Figure 46.

Human health risks are estimated for significant complete or potentially complete exposure pathways. For an exposure pathway to be considered complete for an existing receptor or potentially complete for a potential future receptor, it must have the following elements:

- A contaminant source;
- A retention medium and transport mechanism;
- A point of potential human contact with the contaminated medium; and
- An exposure route at the exposure point.

If any of the above required elements is absent, the exposure pathway is considered incomplete (thus, no exposure will occur) and will have no associated health risks (i.e., health risks will be zero for that exposure pathway). However, even if a pathway is considered potentially complete, it could be considered insignificant if 1) the associated risk is so small, relative to other pathways, that it will not add perceptibly to the total exposure being evaluated or if 2) the potential risk contribution from an insignificant pathway would be trivial (EPA, 1989). Insignificant pathways need not be quantitatively evaluated in the HHRA. Potentially complete exposure pathways are discussed below.

Once the complete and potentially complete exposure pathways are identified, quantification of chemical intake doses for each receptor requires that an estimate be made of:

- Each COPC concentration to which the receptor may be exposed (also referred to as exposure point concentration [EPC]);
- The absorption of each COPC into the human body once exposed via the subject complete and potentially complete exposure pathways;
- Frequency and duration of contact for the complete and potentially complete exposure pathways; and
- The biological characteristics of the receptor.

The components of the exposure assessment are discussed further below.

5.2.1 Conceptual Site Model

The CSM for the site, presented as Figure 46, identifies the potential chemical exposure pathways (i.e., ways that people could potentially be exposed to COPCs at the site). As mentioned above, current on-site receptors are not exposed to on-site impacts. It is anticipated that the site will be redeveloped for commercial and/or industrial uses. Thus, potentially exposed future receptors at the site are identified as the future on-site construction workers and on-site future commercial/industrial workers after site redevelopment. For comparison purposes, a hypothetical future on-site residential redevelopment scenario was also evaluated. (i.e., unrestricted redevelopment). Under the residential scenario, potentially exposed future on-site receptors at the site include the future on-site construction worker and the hypothetical future on-site resident. Since the greatest concentrations of the site-related impacts are on-site, the worst-case receptors are those present at the site.

The potentially complete soil exposure pathways for the construction worker are soil ingestion, dermal exposure to soil, and inhalation of particulates (as fugitive dust generated from soil) and organic vapors in ambient air. The potentially complete exposure pathways for the commercial/industrial worker are inhalation of VOCs in indoor air from vapor intrusion, soil ingestion, dermal exposure to soil, and inhalation of particulates and organic vapors in ambient air. On-site commercial/industrial workers after site redevelopment may be both inside and outside

buildings during a portion of a given day. Since it is unknown what percentage of the time a worker may be inside versus outside a building, it was conservatively assumed that the on-site worker would be both inside and outside a building during the entire 8-hour work day. The potentially complete exposure pathways for the hypothetical future on-site resident include soil ingestion, dermal exposure to soil, inhalation of particulates and VOCs in ambient air, and inhalation of VOCs in indoor air. These are the pathways evaluated in this HHRA.

5.2.2 Exposure Point Concentrations

Deriving estimates of chemical concentrations at points of potential human exposure is necessary for deriving chemical intakes for potentially exposed individuals. These chemical concentrations are referred to as EPCs.

For the purposes of the HHRA, it was assumed that exposure to on-site soil would occur with soil present at depths in the upper 10 feet. This assumption is consistent with the January 2005 Cal-EPA document entitled Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, which indicates that the CHHSLs are to be applied to soils at depths within the upper 10 feet where direct contact with soils by human receptors during and after redevelopment activities is possible.

It was further assumed that potential exposure associated with VOCs in indoor air could be estimated using on-site soil gas and groundwater data. Soil gas samples were obtained between 2000 and 2002 at the following depth intervals: 5, 8, 15 and 20 ft bgs. So future buildings may be located anywhere on the site, the maximum VOC concentrations in soil gas at each depth were used to derive EPCs in indoor air for both the hypothetical future on-site resident and the future on-site commercial/industrial worker. The maximum risk associated with each VOC, no matter what depth in soil gas, was conservatively used for that VOC to estimate the risk for the hypothetical future on-site resident and the future on-site commercial/industrial worker. The maximum concentrations of chemicals detected during the last four groundwater monitoring events (June, September and December 2007, and March 2008) were also used to estimate indoor air EPCs.

A list of the estimated EPCs for the upper 10 feet of soil, ambient air, and indoor air is presented in Table 10. Table 10 also includes a list of the maximum soil gas concentrations for the 5-, 8-, 15- and 20-foot bgs soil gas samples, and for the 29-foot bgs groundwater samples from which the EPCs for indoor air were estimated for the future on-site commercial/industrial scenario. Table 11 presents the list of EPCs for the hypothetical future on-site residential scenario. The derivation of EPCs is described in the following sections.

Overview of EPC Derivation

Development of long-term EPCs from the investigation data collected to date includes an underlying assumption about the representativeness of the data, both temporally and spatially. The EPCs were calculated under the assumption that environmental concentrations would remain constant at the levels detected during the investigation activities for an indefinite period of time. It is thus assumed that the data considered representative of current on-site conditions simulates current and future exposure conditions for a receptor having potential exposure to impacted media at the site.

The operations (i.e., associated with historical on-site commercial activities) resulting in chemical releases at the site have been removed. So there are no continued sources of chemical releases to the environment. Samples have been collected at locations of the likely highest chemical concentrations at each potential impact area, and the samples have been analyzed for associated COPCs at each of these locations. It is therefore reasonable to assume that the samples results represent the highest concentrations at the site and that concentrations will not increase overtime.

In actuality, organic chemicals including chemical degradation products naturally degrade in the environment, which results in the reduction of concentrations over time. In addition, an SVE system has been operating at the site since the last quarter of 2005. This remedial action will further reduce concentrations of VOCs in soil and soil gas. The above underlying steady-state assumption is therefore conservative, in that it assumes that no further reduction in COPC concentrations will occur. This assumption of steady-state concentrations for each COPC results in a conservative estimation of long-term exposure concentrations.

To simulate a receptor's spatially and temporally integrated exposure, EPA (1992, 1997, 2002b) defines the EPC used to estimate the reasonable maximum exposure (RME) as the 95% upper confidence limit of the arithmetic mean (95%UCL) or the maximum observed concentration, whichever is lower. The arithmetic mean reflects the assumption that exposure by the receptor is averaged as they traverse an area over time. The intent of the RME scenario is to focus the assessment on a conservative exposure that is within the range of exposures. For the commercial/industrial scenario, the lower of the maximum and 95%UCL concentrations were assumed to be the EPCs in soil for risk driving chemicals, as presented in Table 10. Maximum site-wide soil concentrations were assumed to be the EPCs for non-risk driving chemicals, and the maximum site-wide soil gas and groundwater concentrations were conservatively used to estimate indoor air concentrations. For the residential scenario, only maximum site-wide soil, soil gas, and groundwater concentrations were used to estimate EPCs.

The 95% UCLs were calculated using the EPA ProUCL software (Version 4.00.02, dated April 2007) (EPA, 2007) following the EPA December 2002 guidance document titled *Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites* (EPA, 2002b). The results of these calculations (software output) with the EPA recommended 95%UCL concentrations are presented in Appendix E.

Specific information regarding the estimation of EPCs for the inhalation of fugitive dust and organic vapor concentrations in ambient air and inhalation of volatiles in indoor air is presented below.

Fugitive Dust

The COPCs that are relatively nonvolatile can adhere to soil and become airborne due to wind erosion or due to mechanical disturbance such as soil grading operations. Once airborne, these soil particulates generate fugitive dust that can be inhaled. The fugitive dust EPC is estimated by multiplying the COPC EPC in surface soil by the inverse of the particulate emission factor (PEF) relevant to the fugitive dust generating activities.

During on-site construction activities associated with site redevelopment, fugitive dust may be generated by various activities including not only wind erosion but also by vehicles driven on unpaved roads, trucks dumping excavated soil, dozing, grading, tilling, or similar operations, as noted in the 2002 EPA document (EPA, 2002a). To account for these activities, the PEF during site redevelopment activities was assumed to be the DTSC-recommended default PEF identified for the construction scenario in the 27 October 2005 DTSC document entitled *Human and Ecological Risk Division (HERD) HHRA Note Number 1, Issue: Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Military Facilities* (DTSC, 2005b). This PEF value is 1.0×10^6 cubic meters per kilogram (m^3/kg). A site-specific PEF was not derived since specific information regarding the grading activities and types of equipment and earth-moving activities is not known at this time. The above-noted DTSC default PEF is considered by DTSC to be a conservative non-site-specific PEF value for a typical construction scenario.

For the on-site commercial/industrial worker after site redevelopment and for the hypothetical future on-site resident, fugitive dust may be generated from wind erosion of exposed surface soil. The PEF default value for wind erosion of 1.316×10^9 m^3/kg, as identified in the 2005 OEHHA

document entitled *Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil* (OEHHA, 2005), was used in this HHRA as the PEF value for fugitive dust-generating activities after site redevelopment.

Volatiles in Ambient Air

VOCs may volatilize from VOC-impacted soil into the ambient air. Since most of the surface soil across the site will be exposed during on-site redevelopment activities, VOC concentrations in ambient air were estimated for the on-site construction worker during on-site redevelopment activities. Most of the site will be paved after redevelopment which will limit VOC migration into ambient air. However, for the purposes of estimating VOC concentrations in ambient air after site redevelopment, it is conservatively assumed that 50 percent of the site will be unpaved after site redevelopment for both the future commercial/industrial scenario and the hypothetical future residential scenario. The EPCs for VOCs in ambient air during redevelopment activities were estimated following equations published by EPA (EPA, 2002a).

The soil volatilization factor (VF) for the construction scenario was calculated using the following equations presented by EPA (2002a) as Equation 5-14:

$$VF_{sc} = \left[\frac{(3.14 \times D_A \times T)^{1/2}}{2 \times \rho_b \times D_A}\right] \times 10^{-4} m^2/cm^2 \times Q/C_{sa} \qquad \text{(Equation 1)}$$

The soil volatilization factor (VF) for after site redevelopment was calculated using the following equations presented by EPA (2002a) as Equation 4-8:

$$VF = \frac{Q/C_{vol} \times (3.14 \times D_A \times T)^{1/2} \times 10^{-4} (m^2/cm^2)}{(2 \times \rho_b \times D_A)} \qquad \text{(Equation 2)}$$

where,

VF_{sc}	=	Subchronic volatilization factor (m^3/kg)
VF	=	Volatilization factor (m^3/kg)
D_A	=	Apparent diffusivity (cm^2/s, see Equation 5)
T	=	Total time over which exposure occurs (s, receptor specific, e.g., construction worker = 31,536,000 s = 1 year)
ρ_b	=	Dry soil bulk density (g/cm^3, same as used in the J&E model)
Q/C_{sc} *or* Q/C_{vol}	=	Dispersion emission component, ([g/m^2/s]/[kg/m^3], see Equation 3).

$$\frac{Q}{C} = A \times \exp[\frac{(\ln A_{site} - B)^2}{C}] \qquad \text{(Equation 3)}$$

where,

Q/C	=	Dispersion emission component, (g/m^2/s)/(kg/m^3), as Q/C_{sc} *or* Q/C_{vol}
A,B,C	=	Constants based on air dispersion modeling for Los Angeles

For a construction worker (as Q/C_{sc}): A=2.5438, B=17.5660, C=189.0426. For other receptors (as Q/C_{vol}): A=11.9110, B=18.4385, C=209.7845

A_{site} = Areal extent of subject site contamination (acres) (1.8 acres)

$$D_A = \frac{\left[\left(\Theta_a^{10/3} D_i H' + \Theta_w^{10/3} D_w\right) / n^2\right]}{\rho_b K_d + \Theta_w + \Theta_w H'} \qquad \text{(Equation 4)}$$

where,

D_A = Apparent diffusivity (cm^2/s, chemical-specific)
ρ_b = Dry soil bulk density (g/cm^3, same as used in the J&E model)
Θ_A = Air-filled soil porosity (l_{air}/l_{soil}, same as used in the J&E model)
n = Total soil porosity (l_{pore}/l_{soil}, same as used in the J&E model)
Θ_w = Water-filled soil porosity (l_{water}/l_{soil}, same as used in the J&E model)
D_i = Diffusivity in air (cm^2/s, chemical-specific)
H = Henry's Law constant ($atm\text{-}m^3/mol$, chemical-specific)
H' = Dimensionless Henry's Law constant (unitless, chemical-specific)
D_w = Diffusivity in water (cm^2/s, chemical-specific)
K_d = Soil-water partition coefficient (cm^3/g) = K_{oc} x f_{oc}
K_{oc} = Soil organic carbon-water partition coefficient (cm^3/g, chemical-specific)
f_{oc} = Fraction organic carbon in soil (g/g, 0.006 = default)

The ambient air concentration was calculated using the following equation:

$$C_a = \frac{C_s}{VF} \qquad \text{(Equation 5)}$$

where,

C_a = ambient air concentration (mg/m^3)
Cs = concentration in the soil (mg/kg)
VF = volatilization factor (m3/kg)

EPCs for volatiles in indoor air were derived using the EPA advanced soil gas (SG-ADV) and advanced groundwater (GW-ADV) J&E vapor intrusion models (Version 3.1, dated February 2004) substituting information in the EPA model with the following:

- DTSC-specified toxicity values included in the 25 January 2005 DTSC version of the screening soil gas (SG-SCREEN) J&E vapor intrusion model, and
- Other model default parameters as specified in the revised 7 February 2005 DTSC vapor intrusion guidance (DTSC, 2005).

In addition, site-specific information used in the model included maximum soil gas concentrations collected at each depth interval (5, 8, 15 and 20 feet bgs) and maximum concentrations of groundwater concentrations collected at 29 ft bgs, obtained during previous on-site soil gas investigations and groundwater quarterly monitoring events, respectively. Subsurface geologic information (SCS Engineers, 1996 and Shaw, 2004) was also reviewed to identify the soil property assumptions to be used in the J&E models, as presented in Table 12. The average of the data for samples E-1, VP-1, VP-2, VP-3, W-12, MW-15 and MW-16 were used as the properties for soil in the J&E model. A review of the boring logs for the top 29 feet of soil at the site indicates that this portion of the soil column could be described by three distinct soil layers:

- Shallow soil to a depth of 16 feet can be classified as sand. Physical property testing was conducted for twelve soil samples collected between 5 ft and 15 ft bgs. The average of these soil physical property data was used in the J&E model for this soil stratum (Strata A).
- A second soil layer was observed between a depth of 16 ft and 25 ft. Physical property testing was conducted for seven soil samples collected between 16 feet and 25 feet bgs. The average of these soil physical property data was used in the J&E model for this soil stratum (Strata B).
- The third soil layer, at a depth ranging from 25 ft to 29 ft, was classified as sand. Physical property testing was conducted for one soil sample collected between 28.5 feet and 29.5 feet bgs. This sample's soil physical property data was used in the J&E model for this soil stratum (Strata C).

Soil property assumptions are summarized in Table 12. The J&E model calculations are presented in Appendix F.

5.2.3 Estimation of Chemical Intakes

EPA risk assessment guidelines recommend that intake doses be calculated in a manner that will produce risk estimates of the RME scenario (EPA, 1989). The RME considers the upper bound case described by using the 50th or 95th percentile of the actual distribution of most input parameters used to estimate intake doses. The intent of the RME scenario is to focus the risk assessment on conservative exposures that are within the range of possible exposures. Since the RME scenario uses a mixture of upper bound and central tendency assumptions and data, the associated estimated COPC intake is not an average COPC intake, but is intended to be an estimate of the plausible upper-end intake.

The exposure parameter assumptions for the selected worst-case receptors are based on conservative values and are presented in Table 13. The exposure values for the on-site construction worker, the on-site commercial/industrial worker and the hypothetical future resident were primarily obtained from the 2005 DTSC guidance entitled *Human and Ecological Risk Division (HERD) HHRA Note Number 1, Issue: Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Military Facilities* (DTSC, 2005b). Other key guidance documents included the 2002 EPA guidance entitled *Supplemental Guidance for Developing Screening Levels for Superfund Sites* (EPA 2002a) and the 2005 OEHHA document entitled *Human-Exposure-Based Screening Numbers Developed to Aid in Estimation of Cleanup Costs for Contaminated Soil* (OEHHA, 2005).

For noncarcinogenic effects, intake is averaged over the period of exposure and is referred to as the average daily intake (ADI). For carcinogenic effects, the intake is averaged over a lifetime and is referred to as the lifetime average daily intake (LADI). The following general equation was applied to estimate COPC intake for each potentially complete exposure pathway considered in this HHRA:

$$Intake = \frac{C \times IR \times EF \times ED \times RAF}{}$$

$$BW \times AT \qquad \text{(Equation 6)}$$

where,

Intake = ADI (mg/kg-day) for noncarcinogens
LADI (mg/kg-day) for carcinogens

C = EPC of COPC in environmental medium (e.g., mg/kg for soil; mg/m^3 in air)

IR = Intake rate (e.g., mg soil/day; or m^3 air/day)

EF = Exposure frequency (days/year)

ED = Exposure duration (years)

RAF = Relative absorption factor (i.e., the ratio of bioavailability in the exposure scenario to bioavailability in the exposure situation from which the toxicity criteria is based)

BW = Body weight (kg)

AT = Averaging time (days)

A description of the derivation of COPC intake for each of the potentially complete exposure pathways is presented in the following sections.

Incidental Ingestion of Soil

The equation used to estimate COPC intake due to incidental ingestion of soil is presented below:

$$Intake = \frac{CS \times IR \times CF \times EF \times ED \times RAF}{BW \times AT} \qquad \text{(Equation 7)}$$

where,

CS = EPC of COPC in soil (mg/kg)
IR = Ingestion rate of soil (mg/day)
CF = Conversion factor (1×10^{-6} kg/mg)
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
RAF = Relative absorption factor (unitless)
BW = Body weight (kg)
AT = Averaging time (days)

Dermal Contact with Soil

The equation used to estimate COPC intake due to dermal contact with soil is presented below:

$$Intake = \frac{CS \times AF \times SA \times CF \times EF_1 \times EF_2 \times ED \times ABS_d}{BW \times AT} \qquad \text{(Equation 8)}$$

where,

CS = EPC of COPC in soil (mg/kg)
AF = Soil adherence factor (mg/cm^2-event)

SA	=	Surface area of exposed skin (cm^2)
CF	=	Conversion factor (1×10^{-6} kg/mg)
EF_1	=	Exposure frequency (days/ year)
EF_2	=	Contact rate (event/day)
ED	=	Exposure duration (years)
ABS_d	=	Dermal absorption fraction (unitless)
BW	=	Body weight (kg)
AT	=	Averaging time (days)

Inhalation of Fugitive Dusts

The equation used to estimate COPC intake due to inhalation of fugitive dust is presented below:

$$Intake = \frac{CS \times BR \times EF \times ED}{PEF \times BW \times AT} \qquad \text{(Equation 9)}$$

where,

CS	=	EPC of COPC in soil (mg/kg)
BR	=	Breathing rate (m^3/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
PEF	=	Particulate emission fraction (m^3/kg)
BW	=	Body weight (kg)
AT	=	Averaging time (days)

Inhalation of Vapors in Indoor Air or Ambient Air

The equation used to estimate COPC intake due to inhalation of indoor air is presented below:

$$Intake = \frac{CA \times BR \times EF_1 \times EF_2 \times ED}{BW \times AT} \qquad \text{(Equation 10)}$$

where,

CA	=	EPC of COPC in indoor air or ambient air (mg/m^3)
BR	=	Breathing rate (m^3/hr)
EF_1	=	Exposure frequency (days/year)
EF_2	=	Exposure frequency (hours/day)
ED	=	Exposure duration (years)
BW	=	Body weight (kg)
AT	=	Averaging time (days)

5.3 Toxicity Assessment

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from each exposure. For purpose of human health risk assessment, adverse health effects are classified into two broad categories: noncarcinogenic and carcinogenic. Toxicity values are generally developed

based on the threshold approach for noncarcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, or subchronic or chronic animal data. Toxicity values to estimate adverse noncarcinogenic health effects as hazard quotients (HQs) are derived using reference doses (RfDs), and toxicity values to estimate incremental lifetime cancer risks (ILCRs - also typically referred to as excess lifetime cancer risks) are derived using cancer slope factors.

Adverse Noncarcinogenic Health Effects

It is widely accepted that adverse noncarcinogenic health effects from chemical substances occur only after a threshold dose or intake is reached. For the purposes of establishing a toxicity value for an adverse noncarcinogenic health effect, a threshold dose is usually estimated from the no-observed-adverse-effect-level (NOAEL) or the lowest-observed-adverse-effect-level (LOAEL) determined from chronic or subchronic animal studies. The NOAEL is the highest dose at which no adverse effects are observed, while the LOAEL is the lowest dose at which adverse effects are observed.

Safety factors are applied to the NOAEL or LOAEL observed in animal studies or human epidemiological studies to establish RfDs or “reference concentrations.” A reference concentration for inhalation exposures may be converted to an RfD. An RfD is an estimate of a dose level that is not expected to result in adverse health effects in humans, even among the most sensitive members of the population (EPA, 1989). A subchronic RfD is defined as an acceptable estimated daily exposure over a portion of a lifetime (2 weeks to 7 years), while a chronic RfD is defined as an acceptable daily exposure over an entire lifetime (greater than 7 years) (EPA, 1989). RfDs are expressed as acceptable daily doses in milligrams of chemical per kilogram of body weight per day (mg/kg-day).

Carcinogenic Health Effects

Regulatory agencies have generally assumed that carcinogenic agents do not have toxicological thresholds. The dose-response curve used for regulation of carcinogens only predicts zero risk when there is zero dose (i.e., for doses greater than zero, some risk is assumed to be present). Cancer risks from potential human exposures to carcinogenic chemicals are modeled mathematically based on either animal or human data.

Cancer risks for exposure to carcinogens are defined in terms of upper bounds on probabilities. The probabilities identify the likelihood of a carcinogenic response in an individual that receives a given dose of a particular chemical (based on mathematical modeling of the animal or human data). Potential carcinogenic effects are expressed as the probability that an individual will develop cancer from a lifetime exposure. This probability is based on projected intakes and chemical specific dose-response data called slope factors (SFs). The SF defines the cancer risk due to average lifetime exposure to one unit of carcinogen (in units of risk per mg/kg-day written as the inverse of mg/kg-day $(mg/kg\text{-}day)^{-1}$.

To derive SFs, EPA generally uses the linearized multistage model for low-dose extrapolation. The model is considered to be one of the most conservative models that may be applied and has been recognized by EPA to overpredict ILCRs. Using this model, SFs are derived by calculating the 95%UCL on the slope of the linearized portion of the dose-response curve obtained from the multistage cancer model. Use of the 95%UCL of the slope means that there is only a 5% chance that the probability of a response could be greater than the estimated value of the experimental data used.

Chemical-specific Toxicity Values

Chronic toxicity values for adverse cancer and non-cancer effects were conservatively used to

evaluate both chronic and subchronic exposures for each COPC and TPH component mixtures, with the exception of lead. For the identification of California toxicity values, when Cal/EPA toxicity values were not available, EPA toxicity values were used. The hierarchy of toxicity values used to identify the California toxicity values is based on the recommendations in the PEA Guidance Manual (DTSC, 1999), and is as follows:

- Cal-EPA, Office of Environmental Health Hazard Assessment (OEHHA), Toxicity Criteria Database and 25 January 2008 California Cancer Potency List, http://www.oehha.ca.gov/risk/ chemicalDB/index.asp
- Cal-EPA, Air Resources Board (ARB), Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values, 25 June 2008, http://www.arb.ca.gov/toxics/healthval/ healthval.htm
- Cal-EPA, OEHHA, Chronic Reference Exposure Levels (RELs) for Airborne Toxicants, February 2005, http://www.oehha.ca.gov/air/chronic_rels/allchrels.html
- EPA, Region 9, Preliminary Remediation Goals (PRG) Tables, 20 October 2004, http://www.epa.gov.region09/waste/sfund/prg/

Chronic toxicity values for carbon chain ranges of TPH were identified in the 29 April 2008 DTSC Draft Interim Guidance titled *Evaluating Human Health Risks from Total Petroleum Hydrocarbons* (DTSC, 2008) for the following carbon chain fractions:

- C_5 - C_8 aliphatics
- C_6 - C_8 aromatics
- C_9 - C_{18} aliphatics
- C_9 - C_{16} aromatics
- C_{19} – C_{32} aliphatics
- C_{17} – C_{32} aromatics

The reported carbon chain ranges for soil samples collected at the Site were matched with those identified in the above-referenced 29 April 2008 guidance, such that:

- the toxicity values for C_5 – C_8 (aliphatic) and C_6 – C_8 (aromatic) were used for sample data reported for the carbon chain range of C_4 – $C_{12;}$
- the toxicity values for C_9 – C_{18} (aliphatic) and C_9 – C_{16} (aromatic) were used for sample data reported for the carbon chain range of C_{13} – $C_{23;}$ and
- the toxicity values for C_{19} – C_{32} (aliphatic) and C_{17} – C_{32} (aromatic) were used for sample data reported for the carbon chain range of C_{24} – $C_{40.}$

The selected toxicity values for the COPCs are presented in Table 14 and are included in the risk calculations spreadsheets presented in Appendices G, H and I.

5.4 Risk Characterization

Risk characterization is the fourth step in the risk assessment process. Risk characterization includes the integration of the toxicity and exposure assessments to provide quantitative and qualitative expressions of risk. Supporting calculations are included in Appendices G, H and I.

Calculation of Adverse Noncarcinogenic Health Effects

The RfD is used in the risk characterization to estimate the potential for adverse noncarcinogenic health effects. The estimated ADI divided by the RfD is referred to as a hazard quotient (HQ). An HQ value greater than 1.0 indicates a chemical dose above the RfD for that pathway, and thus a

potential for adverse noncarcinogenic health effects. A total HI is a sum of the HQs for more than one chemical with similar toxicological endpoints. A total HI greater than 1.0 indicates a potential for an adverse noncarcinogenic health effect from exposure to that chemical or chemicals that result in driving the total HI above 1.0.

As a first tier analysis, the HQs (e.g., for all COPCs, regardless of target organ) for each receptor can be summed as the basis for conservatively estimating a screening total HI for that receptor. In this case, it is assumed that each COPC acts by the same mechanism and induces the same effects (EPA, 1989). Typically, additional risk evaluation is undertaken when the HQs for each chemical are summed irrespective of their toxicological endpoints and that total HI exceeds a value of 1.0. Then acceptable target organ-specific total HIs can be calculated for the receptor based on target organs as recommended by EPA (1989).

Equations used to derive HQs and total HI are presented as follows. The HQ compares a receptor's exposure or intake level to the RfD of that COPC and complete pathway (EPA, 1989). To calculate an HQ, the ADI (e.g., upper bound intake averaged over the exposure period) for each COPC is divided by the chemical-specific RfD as shown in the following equation:

$$HQ_{pathway1} = ADI/RfD \qquad \text{(Equation 11)}$$

where,

$HQ_{pathway1}$	=	HQ of particular pathway for COPC (unitless)
ADI	=	Average daily intake of COPC (mg/kg-day)
RfD	=	Reference dose of COPC (mg/kg-day)

When using the above equation to estimate the potential for adverse noncancer health effects, both the intake and the RfD must refer to exposures of equivalent duration (e.g., chronic).

For each receptor, the HQ of each pathway for the COPC is then summed to calculate the total HQ for that COPC as shown in the following equation:

$$Total\ HQ = HQ_{pathway1} + HQ_{pathway2} + \ldots + HQ_{pathway\ n} \qquad \text{(Equation 12)}$$

where,

$Total\ HQ$	=	Summed HQs for COPC (unitless)
$HQ_{pathway1}$	=	HQ for particular pathway for COPC (unitless)

For simultaneous exposures to a receptor by several COPCs, a total HI is calculated as the sum of the HQs for each COPC by:

$$Total\ HI = HQ(COPC_1) + HQ(COPC_2) + \ldots + HQ(COPC_n) \qquad \text{(Equation 13)}$$

where,

$Total\ HI$	=	Total Hazard Index
$Total\ HQ(COPC_n)$	=	Sum of HQs for that COPC

Calculation of Cumulative Incremental Lifetime Cancer Risk

The SF is used in the risk characterization to estimate the cancer risk. The SF multiplied by the LADI is referred to as an ILCR. For each COPC identified as a potential human carcinogen, the

theoretical upper bound ILCR for a particular receptor is the sum of the calculated ILCRs for each COPC.

To calculate an ILCR, the LADI (e.g., upper bound intake averaged over a lifetime) for each COPC is multiplied by the chemical-specific SF as shown in the following equation:

$$ILCR = (LADI) \times (SF) \qquad \text{(Equation 14)}$$

where,

ILCR	=	Incremental lifetime cancer risk for COPC, also referred to as excess lifetime cancer risk (unitless)
LADI	=	Lifetime average daily intake of COPC (mg/kg-day)
SF	=	Slope factor of COPC $(mg/kg\text{-}day)^{-1}$

For each receptor, the ILCR of each pathway for the COPC is then summed to calculate the ILCR for that COPC as shown in the following equation:

$$ILCR_{COPC} = ILCR_{pathway1} + ILCR_{pathway2} + \ldots + ILCR_{pathwayn} \qquad \text{(Equation 15)}$$

where,

$ILCR_{COPC}$	=	Summed ILCR for COPC (unitless)
ILCRpathway1	=	ILCR for particular pathway for COPC (unitless)

If a receptor is exposed to several carcinogens, the following equation is used to sum cancer risks:

$$\text{Cumulative ILCR} = ILCR(COPC_1) + ILCR(COPC_2) + \ldots + ILCR(COPC_n) \qquad \text{(Equation 16)}$$

where,

Cumulative ILCR	=	Total risk of cancer incidence for all COPCs
$ILCR(COPC_n)$	=	Individual COPC ILCR

Acceptable Risk Thresholds

Estimates of the Site-specific noncancer HI and cumulative ILCR are compared to acceptable target levels by risk managers. There is some variability in acceptable cumulative ILCRs established by various regulatory agencies, although the acceptable target level for HIs is generally less than or equal to 1.0 and most target cumulative ILCRs considered acceptable lie within the risk range of 10^{-6} to 10^{-4}.

<u>Total Noncancer Hazard Index</u> - The HI evaluation process typically occurs in two steps. First, the HQs for all COPCs are added and compared to an acceptable target total HI. If the calculated value is greater than the acceptable target level, then for the second step only total HQs for those compounds considered to have additive adverse noncarcinogenic health effects are summed to refine the HI estimate.

An HI of less than 1.0 indicates that it is unlikely that adverse human health effects will occur during a lifetime in an exposed population, including sensitive subpopulations (EPA, 1989). Most environmental programs employ an HI of unity (i.e., 1) as an acceptable target for risk decisions. The most explicit directive comes from the federal Superfund program (EPA, 1990), which is Cal/EPA policy as well. This directive specifies an HI of 1.0 as the acceptable target for risk management decisions, as well as the acceptable target risk to be achieved in designing remedial responses. This noncancer risk threshold was used in this HHRA as the acceptable total HI to assess whether exposure to COPCs at the site may pose an adverse noncarcinogenic effect.

Cumulative Incremental Lifetime Cancer Risk – Potential risk estimates between 10^{-6} and 10^{-4} require risk management decisions based on site-specific land use/exposure scenarios and may require remediation (EPA, 1990). Risk estimates that are greater than 10^{-4} generally require remediation to reduce potential exposures.

A cumulative ILCR of 10^{-6} to 10^{-4} corresponds to theoretical probability of 1 chance in 1 million to 1 chance in ten thousand, which is in addition to or in excess of the background cancer risk. The conservatism of such risk increments is enhanced by the fact that risk is typically expressed as an upper bound ILCR. That is, true risk is anticipated to lie somewhere between zero and the upper bound risk estimated in the risk characterization (EPA, 1989).

Potential risk estimates between 10^{-6} and 10^{-4} require risk management decisions based on site-specific land use/exposure scenarios and may or may not require remediation or mitigation. It is generally widely accepted in the regulatory community that risk estimates that are equal to or less than 10^{-6} do not require remediation or mitigation measures. Risk estimates that are greater than 10^{-4} generally require remediation or mitigation to reduce potential exposures. California Proposition 65 (1986, Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65, Health and Safety Code Section 25249.5 et seq.) requires specific notification and warning for exposure to carcinogens above the "no significant risk level," which is based on a 10^{-5} excess lifetime cancer risk. In addition, the EPA, under the RCRA Corrective Action Environmental Indicators (EI) program (EPA, 2005), indicates that "For the purposes of making Current Human Exposure under Control EI determinations with respect to subsurface vapor intrusion, EPA generally recommends the use of 10^{-5} levels for carcinogens (incremental individual lifetime cancer risk), and a Hazard Quotient (HQ) of 1 for non-cancer risk." Within this range of acceptable risk values, the Cal/EPA and EPA typically default to an acceptable cumulative ILCR threshold of 10^{-5} in risk management decision making for occupational receptors (e.g., on-site construction worker and commercial/industrial worker) and 10^{-6} in risk management decision making for residential receptors. Therefore, the cumulative ILCR threshold of 10^{-5} for occupational receptors and the cumulative ILCR threshold of 10^{-6} for residents were used in this HHRA as the acceptable cumulative ILCR to assess whether exposure to COPCs at the site may pose an unacceptable cancer risk.

Summary of Risk Characterization Results

The risk characterization results for the future on-site construction worker, the future on-site commercial/industrial worker and the hypothetical future on-site resident are summarized below and in Table 15. The associated risk calculations are presented in Appendices G, H and I.

> *Future On-site Construction Worker. Based on the results of this HHRA for the future on-site construction worker, the cumulative ILCR is 9×10^{-5}, and the total HI is 24. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of 1×10^{-5}, and the total HI is greater than the acceptable total HI of 1.0. Therefore, mitigation is necessary to protect the future on-site construction worker.*
>
> *Future On-site Commercial/Industrial Worker. Based on the results of this HHRA for the future on-site commercial/industrial worker, the cumulative ILCR is 4×10^{-3}, and the total HI is 35. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of 1×10^{-5}, and the total HI is greater than the acceptable total HI of 1.0. Therefore, mitigation is necessary to protect the future on-site commercial/industrial worker.*
>
> *Hypothetical Future On-site Resident. Based on the results of this HHRA for the hypothetical future on-site child/adult resident, the cumulative ILCR is 3×10^{-2}, and the total HI is 349. The cumulative ILCR is greater than the acceptable cumulative*

ILCR threshold of 1 x 10^{-6}, and the total HI is greater than the acceptable total HI of 1.0. Therefore, mitigation is necessary to protect the future on-site resident.

Although groundwater COPCs were not included in the risk characterization results described above, the cumulative ILCR and total HI was calculated to evaluate the contribution of groundwater impacts to the site, as presented in Table 16. Based on the results of this HHRA for the future on-site commercial/industrial worker using groundwater data only, the cumulative ILCR is 2 x 10^{-3}, and the total HI is 10. Based on the results of this HHRA for the hypothetical future on-site resident, the cumulative ILCR is 1 x 10^{-2}, and the total HI is 94. The cumulative ILCRs is greater than the associated acceptable cumulative ILCR thresholds and the total HI is greater than the acceptable total HI of 1.0 for both the future on-site commercial/industrial worker and the hypothetical future on-site resident. Therefore it appears that groundwater is significantly contributing to the risk posed to future receptors at the site.

Uncertainty Analysis

It should be noted that the above risk estimates are conservative estimates of potential future health risks. The EPA and DTSC guidance documents for risk assessment provide a systematic means for organizing, analyzing, and presenting information on the nature and magnitude of risk to public health posed by chemical exposures. Despite the advanced state of current risk assessment methodology, uncertainties and limitations are inherent in the risk assessment process. In an attempt to minimize the consequences of uncertainty, regulatory guidance typically relies on the use of conservative estimates of adverse health effects in the absence of strong scientific data. Because multiple conservative assumptions are used, the overall risk characterization results are much more likely to overestimate the potential risk rather than to underestimate it.

The risk estimates presented herein are likely overestimates of risk for the following reasons:

- Use of the maximum concentrations assumes that a person would be exposed to a maximum concentration during their entire exposure duration, which is unlikely. It is more realistic to assume that a person may be exposed to representative average concentrations. Thus, the use of maximum concentrations overestimates risk.
- It is also assumed that COPC concentrations would remain constant over time. It is more likely that, due to natural degradation processes, organic COPC concentrations would decrease over time. Thus, estimated organic COPC intakes would decrease over time, which would result in lower risk estimates than presented herein. A vapor extraction system has been in operation at the site since the last quarter of 2005. This remedial action has likely reduced VOC concentrations in soil and soil gas at the site. Thus, the use of soil and soil gas concentrations obtained prior to 2005 in the development of EPCs will result in an overestimation of risks.
- Risk assessments require assumptions in order to assess potential human exposure. This HHRA includes assumptions about general characteristics and potential patterns of human exposure. RME exposures were calculated to provide some measure of the range and uncertainty in potential exposures. The RME case is developed to provide an upper bound on exposure. For instance, it was conservatively assumed that an on-site construction worker would be at the site for a period of 250 days over a period of one year, when it is likely more realistic that the longest any one particular construction worker (e.g., grader, electrician, plumber) would be on site is significantly less. Because RME estimates are based on a combination of conservative assumptions, the estimates likely overpredict exposures that would generally be encountered.
- Toxicity values used in risk assessments present overestimates of the potential toxicity of these chemicals to humans. Assumptions used to develop toxicity values include the

addition of safety factors to account for uncertainties associated with extrapolating high doses to low doses where chronic environmental exposures would occur, and to account for uncertainties associated with the use of laboratory animal studies to assess potential toxicity to human receptors.

6. CONCLUSIONS AND RECOMMENDATIONS

Soil and groundwater at the former Angeles Chemical Company site are impacted by volatile organic compounds. The nature and extent of contamination has been thoroughly delineated, free product recovery and soil vapor extraction are ongoing and shallow groundwater (and presumably soil) contamination has responded with declining concentrations. We recommend that future environmental activities focus on monitoring remediation progress and optimizing the remedial program.

6.1 Impacts to Soil

Soil is affected by contamination with VOCs reported both at the surface and in deeper soil (Table 4, Figures 27-34). In areas with surface contamination, there are significant variations of contaminant concentrations at different depths with a general decreasing trend from the surface to approximately 15-ft to 25-ft bgs followed by an increase of contamination between 25-ft and 35-ft bgs for many contaminants. Very little soil contamination is found below 35-ft bgs.

The near-surface contamination occurs, in general, in the northwest of the site along the railroad tracks and in the central part of the site (around the former canopy area). These areas have been identified as potential on-site sources for soil contamination at the former ACC site (see Section 1 Site History). Deeper soil contamination is generally below 25-ft bgs which is the area where shallow groundwater is also reported at the site. This deeper contamination involved lateral transport with the shallow groundwater and to a lesser extent from vertical migration of contamination from shallower soil.

6.2 Impacts to Soil Vapor

Similar contaminants were reported in the soil vapor (Table 2) as those present in soil and groundwater at the site. The highest amount of vapor contamination was reported at 20-ft and is correlated with the shallow groundwater contamination profiles.

6.3 Groundwater Impact

Groundwater is found at the former ACC site in two water-bearing zones: a shallow, perched aquifer and the deeper regional aquifer. These water-bearing zones are not in direct contact, being isolated by the less-permeable C2 unit and a zone of unsaturated soil. A second, shallower occurrence of perched groundwater has also been observed on the northern portion of the site, but the wells in this perched zone (MW-4 and MW-6) are currently reported dry. The worst groundwater contamination at ACC occurs in the shallow groundwater and not in the deep regional aquifer. Moreover, the site geology along with the analytical data (the absence of some contaminants from deep groundwater that are present in shallow groundwater) indicates that little or no cross-contamination has occurred between the shallow and the deep groundwater. Most of the contamination in deep groundwater is from the Omega Plume.

6.3.1 Shallow groundwater

The contamination distributions in shallow groundwater are different for different types of contaminants (e.g., chlorinated solvents vs. petroleum hydrocarbons). The highest concentrations of chlorinated compounds in shallow groundwater are currently recorded in the southwest corner of the site around MW-26. For benzene, the highest level is in the northwest area by the railroad tracks. For toluene, ethylbenzene and xylenes there is a second hot spot in the center of the site. Such data suggest different contamination sources for different contaminants or classes of contaminants. In the case of chlorinated solvents, undegraded "parent" compound concentrations

are recorded highest in shallow groundwater in the southwest corner of the site but the "daughter" degradation products are more abundant in the center of the site. This suggests a lateral movement of shallow groundwater to the north and northeast. This interpretation is based on the fact that chlorinated solvents are often progressively more degraded farther from the source. This hypothesis is consistent with the site geology and hydrogeology and with the site conceptual model.

6.3.2 Deep groundwater

Much lower contaminant concentrations are detected in deep groundwater compared to the shallow groundwater. Moreover, the concentrations of different contaminants in deep groundwater south of ACC are much higher confirming substantial off-site contaminants release at the immediately adjacent McKesson site. The shallow groundwater has not significantly impacted deep groundwater. Several facts support this conclusion including the absence of methylene chloride, MEK, and MIBK in deep groundwater: compounds that are detected in significant concentrations in the corresponding shallow water. If these mobile contaminants did not reach deep groundwater from the shallow zone, it is unlikely that other contaminants migrated by this route either. Additionally, the historical presence of LNAPL above the shallow groundwater, constituted a barrier for downward contaminant migration by sequestering the different contaminants within the product.

6.4 Geology/Hydrogeology

The flow direction of the deep groundwater unit is consistently to the west-southwest beneath ACC. This is consistent with regional interpretations. However, the flow in the shallow zone is more complex. The shallow hydrogeology of the site, while complex, is well understood based on data from over 156 sampling locations. ADD SUMMARY OF LITHOLOGY

6.5 Fate and Transport

In general, contamination released at the surface will remain in near-surface soil and migrate downward into the vadose zone only if there is sufficient soil moisture and if the force of gravity exceeds the capillary and adsorptive forces that act to immobilize contaminants. Thus vertical migration of contaminants in the vadose zone depends on the physical characteristics of the porous media and the existence of sufficient soil moisture to allow flow. Vertical migration can be stopped or retarded by barriers formed at lithologic contacts or other permeability contrasts. In saturated conditions fine-grained, low-permeability layers such as unit C2 serve as barriers to flow.

A detailed data evaluation (**Sections 4 and 5**) shows that vertical contaminant migration mechanism, while active in the shallow vadose zone at ACC, could not have accounted for all deep soil and groundwater contamination under the site. The analytical data are consistent with the commingling of contamination migrating vertically from the surface with similar contamination transported laterally through the shallow groundwater from a distant location. The data distribution indicates that the off-site source for shallow groundwater impacts was probably to the south but the off-site source for deep groundwater impacts is the Omega site to the north.

Apart from vertical and lateral migration of contamination through soil and with shallow groundwater, vapor transport is also a potential migration pathway. The soil vapor data indicate that the distribution of vapor contaminants mostly follows the pattern of shallow groundwater contamination.

6.6 Human Health Risk Assessment

Based on the results of this HHRA for the future on-site construction worker, the cumulative ILCR is 9 x 10^{-5}, and the total HI is 24. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of 1 x 10^{-5}, and the total HI is greater than the acceptable total HI of 1.0. Therefore, mitigation is necessary to protect the future on-site construction worker.

Based on the results of this HHRA for the future on-site commercial/industrial worker, the cumulative ILCR is 4 x 10^{-3}, and the total HI is 35. The cumulative ILCR is greater than the acceptable cumulative ILCR threshold of 1 x 10^{-5}, and the total HI is greater than the acceptable total HI of 1.0. Therefore, mitigation is necessary to protect the future on-site commercial/industrial worker. Mitigation would also be necessary under a hypothetical future residential land use scenario.

Although groundwater COPCs were not included in the risk characterization described above, the cumulative ILCR and total HI was calculated to evaluate the contribution of groundwater impacts to the site, as presented in Table 16. Based on the results of this HHRA for the future on-site commercial/industrial worker using groundwater data only, the cumulative ILCR is 2 x 10^{-3}, and the total HI is 10. Based on the results of this HHRA for the hypothetical future on-site resident, the cumulative ILCR is 1 x 10^{-2}, and the total HI is 94. The cumulative ILCRs is greater than the associated acceptable cumulative ILCR thresholds and the total HI is greater than the acceptable total HI of 1.0 for both the future on-site commercial/industrial worker and the hypothetical future on-site resident. Therefore it appears that groundwater is significantly contributing to the risk posed to future receptors at the site.

6.7 Data Limitation and Recommendations for Future Work

Based on the data synthesized during the preparation of this document, we believe the lateral and vertical extent of contamination on the former Angeles Chemical Company site has been adequately delineated. Therefore, no further characterization or investigation work is recommended for the ACC site.

6.8 Recommended Remedial Action Objectives

It is recommended that a rigorous soil, soil vapor, and groundwater treatment program be completed to address vadose zone and groundwater contamination at the site. A vapor extraction system is currently operating at ACC and we recommend that this system continue and be evaluated periodically for effectiveness and efficiency.

Active remediation is recommended for shallow groundwater, as rates of natural attenuation are likely to be too slow to be a viable option. At this time, we cannot recommend unilateral remediation of deep groundwater at ACC because most of this contamination emanates from the upgradient Omega Chemical Company. Until a comprehensive remediation program is implemented for the Omega plume, remediation of deep groundwater at ACC will not be durable because this zone is destined to become re-contaminated as flux from the Omega Plume continues to impinge upon ACC groundwater.

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Deposition of James Blackwell, December 22, 1993. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty Company et al. - Defendants, and Related Cross-Actions, Case No. 910659. Reported by Warren Jones, CSR No. 8679, Los Angeles, CA.

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Deposition of Harlan Brooks, May 5, 1994. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty Company et al. - Defendants, and Related Cross-Actions, Case No. 910659. Reported by Karen K. Kidwell, RPR, Monroe, North Carolina.

Deposition of Henry Bustamante, February 25, 1994. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty

Company et al. - Defendants, and Related Cross-Actions, Case No. 910659. Reported by Joan E. Whipple, CSR No. 5336, Los Angeles, CA.

Deposition of Megan Cambridge, October 14, 2005. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Tamara Berlin Stanley, CSR No. 9706. PRS Job No. 43-289485. Sacramento, CA.

Deposition of Ed Carlton, January 4, 2006. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Warren Jones, CSR No. 8679. Whittier, CA.

Deposition of Leon Chadbourne, December 13, 2005. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Warren Jones, CSR No. 8679. Whittier, CA.

Deposition of Daniel R. Dalke, February 14, 2006. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Sharon Lindsay-Milnikel, CSR No. 5335. Job No. 44394. Los Angeles, CA.

Deposition of Douglas L. Eisner, January 6, 2006. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 Till (Mcx). Reported by Quyen N. Do, CSR No. 12447. PRLS Job No. 96-303903. San Francisco, CA.

Deposition of Bonnie L. Estes, July 7, 1994. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty Company et at. - Defendants, and Related Cross-Actions, Case No. 910659. Reported by Joan E. Whipple, CSR No. 5336, Los Angeles, CA.

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Deposition of John C. Fragua, November 9, 1993. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty Company et at. - Defendants, and Related Cross-Actions, Case No. 910659. Reported by Joan E. Whipple, CSR No. 5336, Los Angeles, CA.

Deposition of Hiram Garcia, August 12, 2006. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et at. - Plaintiffs, v. McKesson Corporation et at. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Ex). Reported by Warren Jones, CSR No. 8679. Huntington Beach, CA.

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Deposition of Gary D. Heater, December 8, 2005. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et at. - Plaintiffs, v. McKesson Corporation et at. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Tifani L. Goetsch, CSR No. 10406. PRS Job No. 2-296335. Costa Mesa, CA.

Deposition of Cesar Hernandez, September 21, 2004. United States District Court for the Central District of California. Angeles Chemical Company, Inc. et at. - Plaintiffs, v. McKesson Corporation et at. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Warren Jones, CSR No. 8679, Cerritos, CA.

Deposition of James L. Holland, November 16, 1993. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff, vs. Continental Casualty Company et al. - Defendants, and Related Cross-Actions. Case No. 910659. Reported by Joan E. Whipple, CSR No. 5336. Los Angeles. CA.

Deposition of Candi Hutton, June 16, 2004. *United States District* Court for *the* Central *District* of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH (Mcx). Reported by Sharon A. Honning, CSR No. 2878, File No. 18051. South Gate, CA.

Deposition of David Jack Leu, October 23,2006. United States District Court for *the* Central *District* of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH. Reported by *Kate* Sonoma Stickle, CSR No. 10409, Job No. 54467. Irvine, CA.

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Deposition of John Locke, November 6, 2006. *United* States *District* Court for *the* Central District of California. Angeles Chemical Company, Inc. *et* al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH. Reported by *Kate* Sonoma Stickel, CSR No. 10409, Job No. 55849. Covina. CA.

Deposition of Walter Loo, May 23, 2006. United States District Court for the Central *District* of California. Angeles Chemical Company, Inc. et al. - Plaintiffs, v. McKesson Corporation et al. - Defendants, and Related Cross-Actions, Case No. 01-10532 TJH. Reported by Theresa A. Darnell, CSR No. 9966, PRS Job No. 96326609. Oakland, CA.

Deposition of Renaldo Manriquez, April 29, 1994. Superior Court of the State of California for the County of San Francisco. McKesson Corporation, - Plaintiff. vs. Continental Casualty Company et al. - Defendants, and Related Cross-Actions, Case No. 910659. Reported Warren Jones, CSR No. 8679, Los Angeles, CA.

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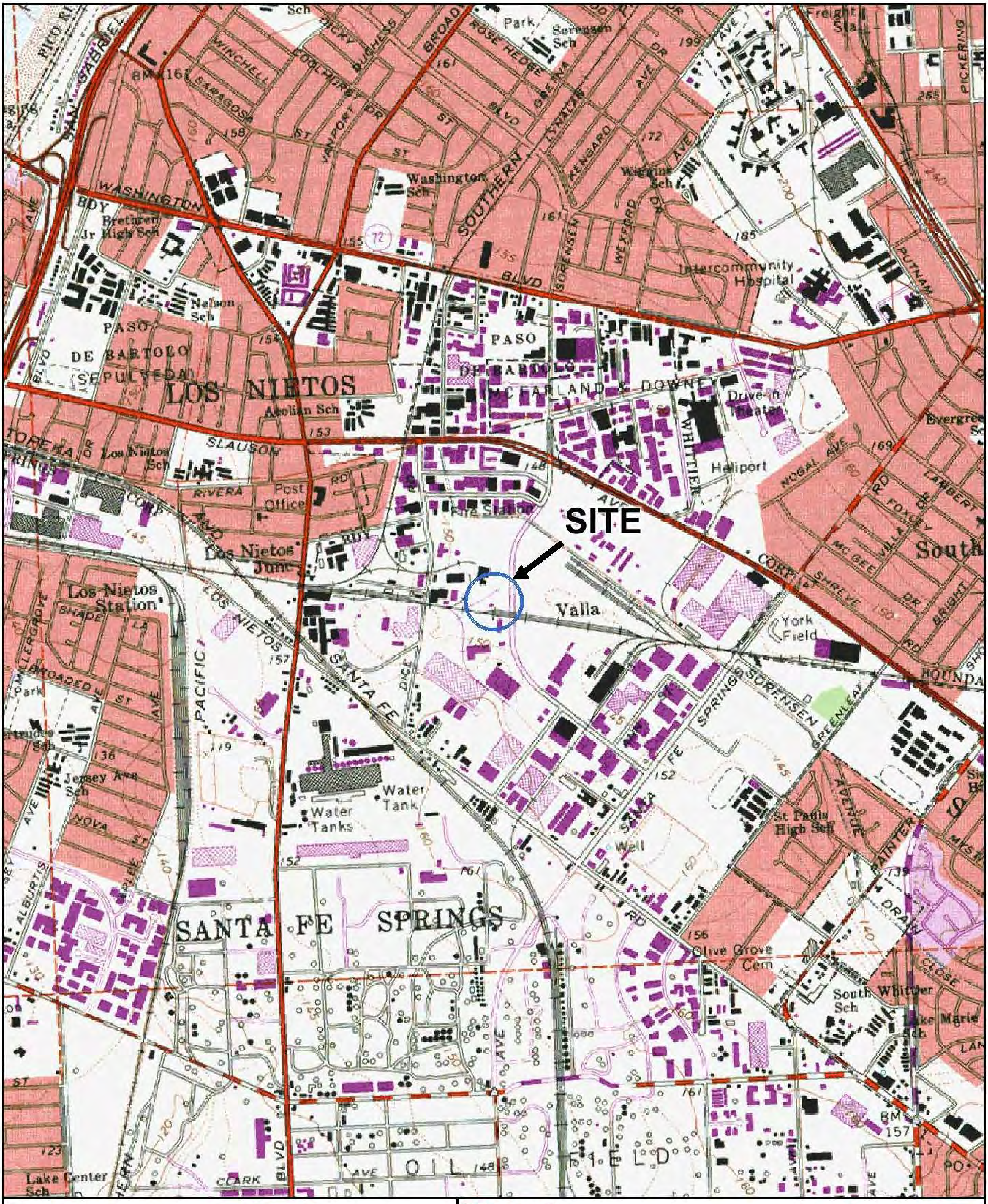
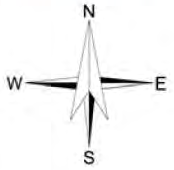


SITE COORDINATES:33°57'32"N 118°3'47"W



U.S.G.S. QUADRANGLE: WHITTIER, CA

HALEY & ALDRICH

FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

PROJECT LOCUS

SCALE: 1:24,000
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FIGURE 01

32942-000 01.PDF

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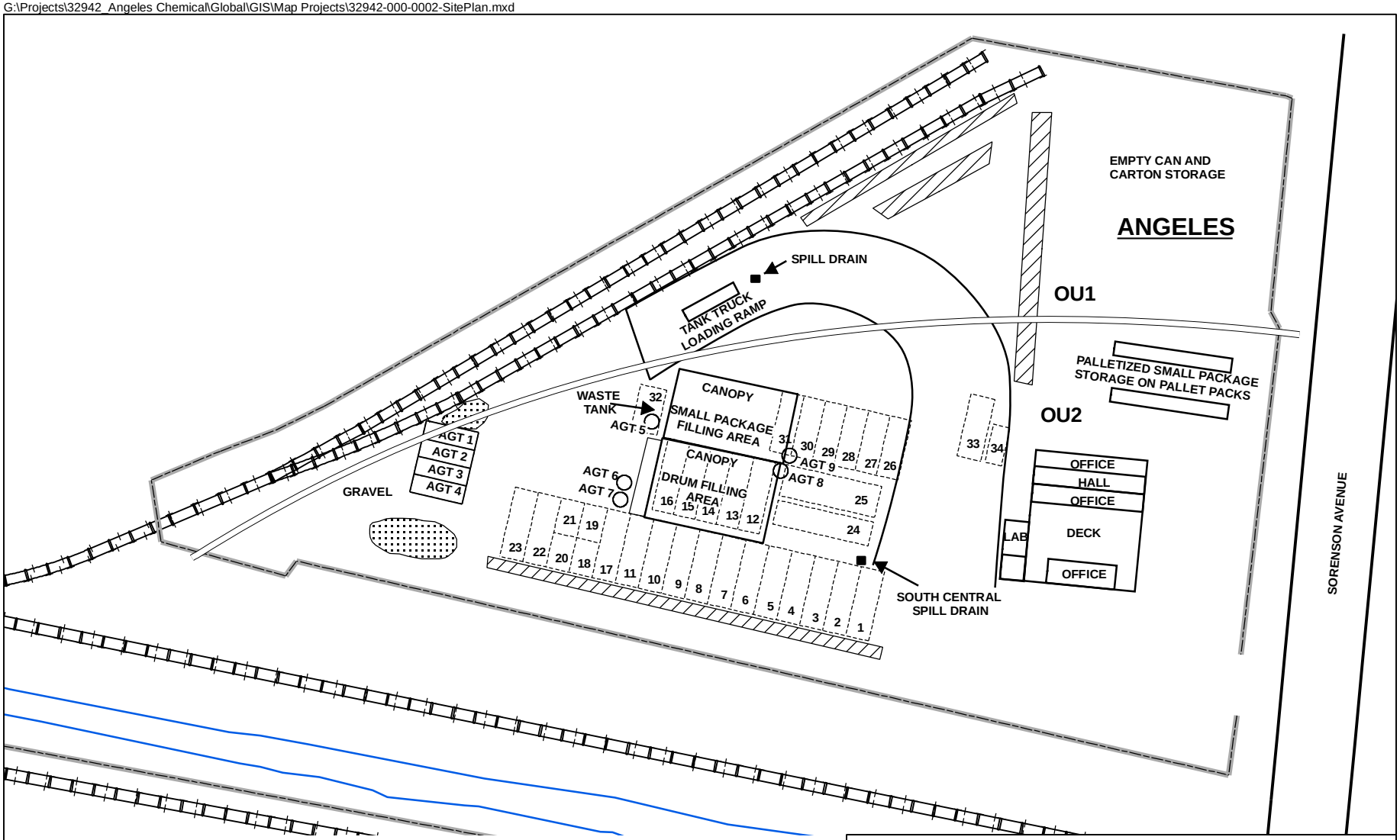

LEGEND

- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD
- AGT-1 ABOVE GROUND STORAGE TANK
- 1 UNDERGROUND STORAGE TANK
- PALLETIZED DRUM STORAGE AREA
- EMPTY DRUM STORAGE AREA
- BOUNDARY BETWEEN OPERATING UNIT 1 AND OPERATING UNIT 2

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SCALE IN FEET

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SANTA FE SPRINGS, CALIFORNIA

SITE PLAN

SCALE: AS SHOWN
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FIGURE 02

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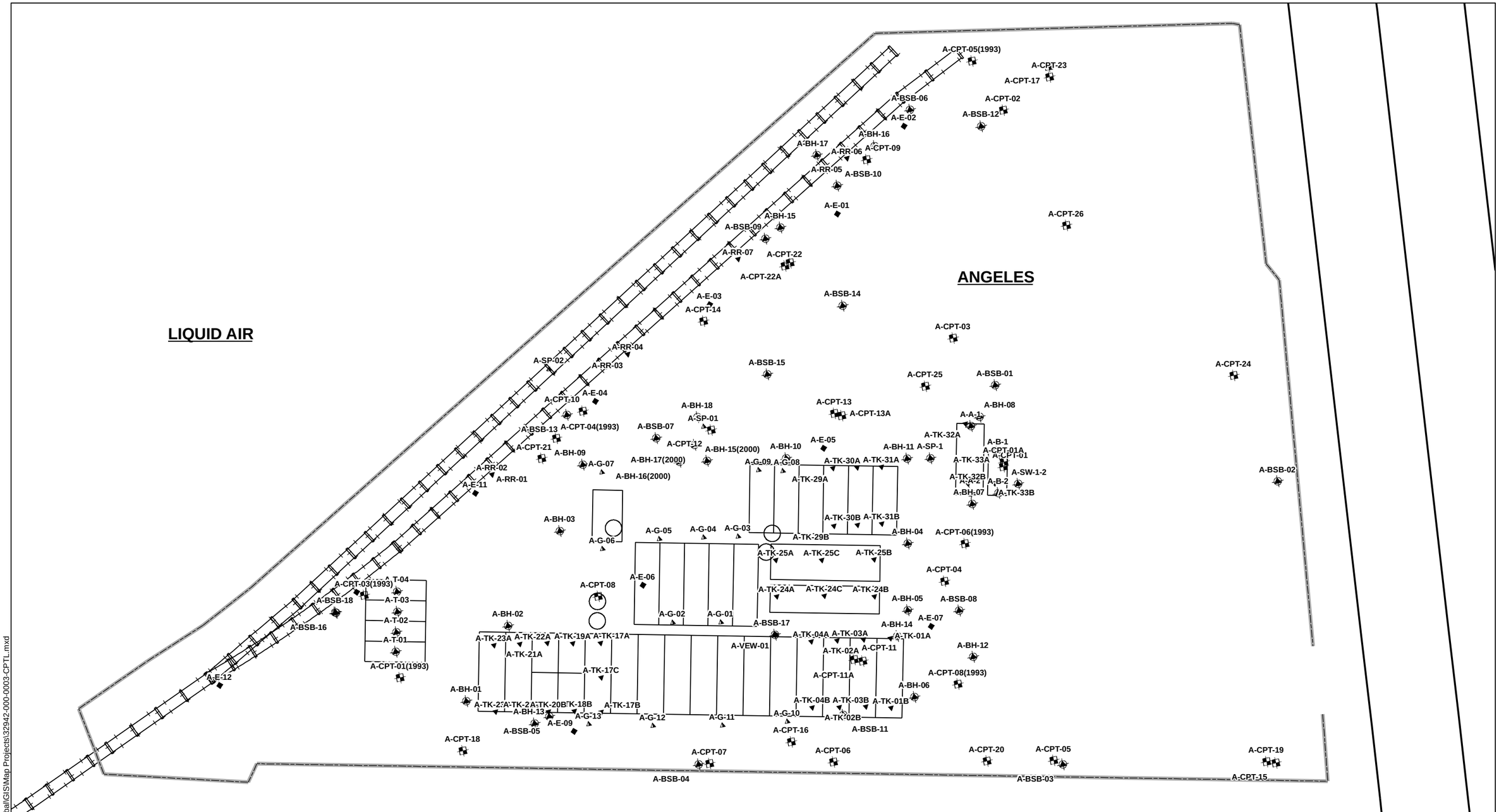
SANTA FE SPRINGS, CALIFORNIA

1979 AERIAL IMAGE OF
ANGELES CHEMICAL COMPANY

AUGUST 2008

FIGURE 03



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SANTA FE SPRINGS, CALIFORNIA

SOIL SAMPLING, CPT LOCATIONS AND EXTRACTION WELLS

SCALE: AS SHOWN
AUGUST 2008

FIGURE 04

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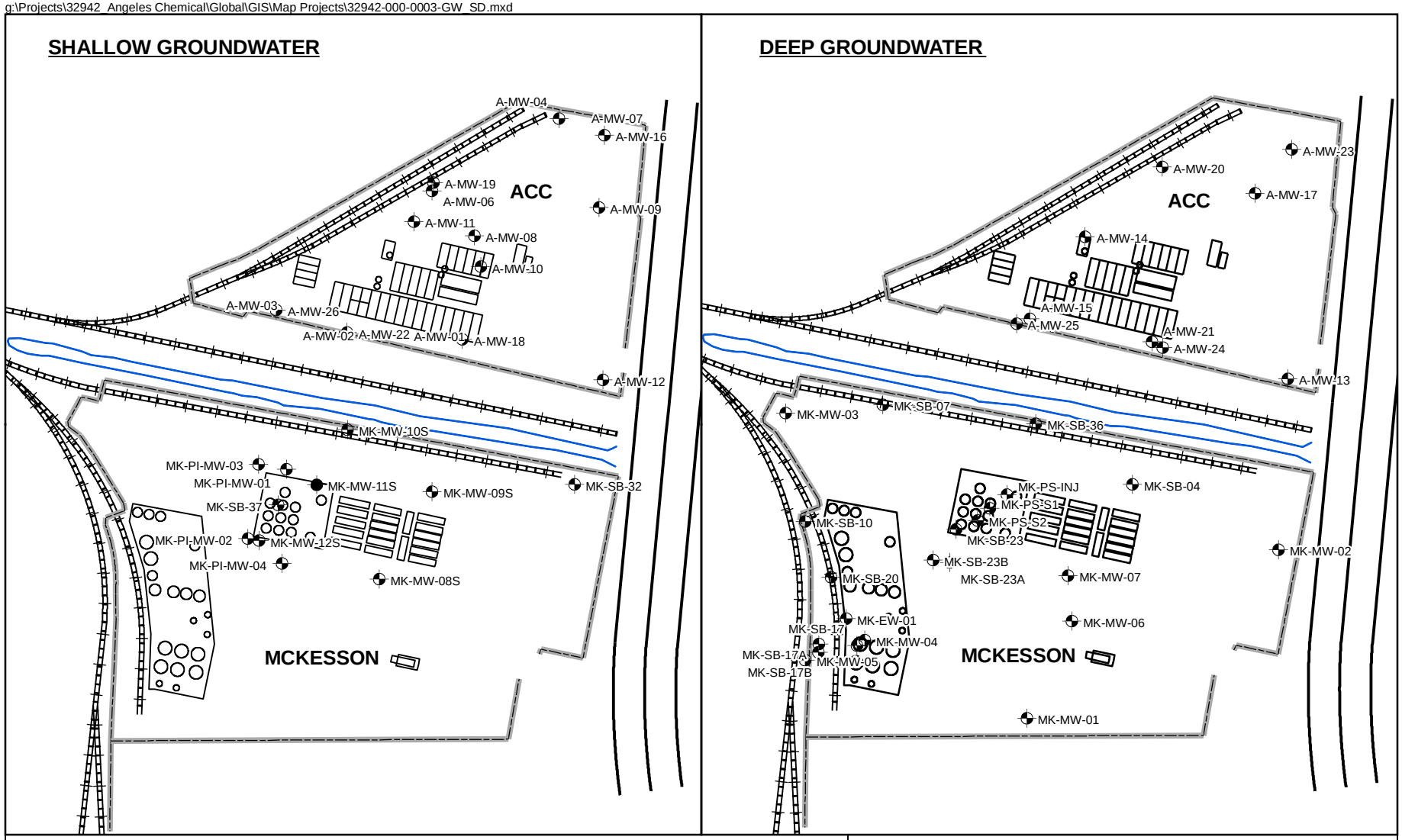

LEGEND

- MONITORING WELL
- ABANDONED MONITORING WELL
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD

NOTES:

1. WELLS WITH THE PREFIX A- CORRESPOND TO ANGELES AND WELLS WITH THE PREFIX MK- CORRESPOND TO MCKESSON.
2. ACC = ANGELES CHEMICAL COMPANY.

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SCALE IN FEET

HALEY & ALDRICH

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SANTA FE SPRINGS, CALIFORNIA

GROUNDWATER MONITORING WELL LOCATIONS FOR ANGELES AND MCKESSON

SCALE: AS SHOWN
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FIGURE 05

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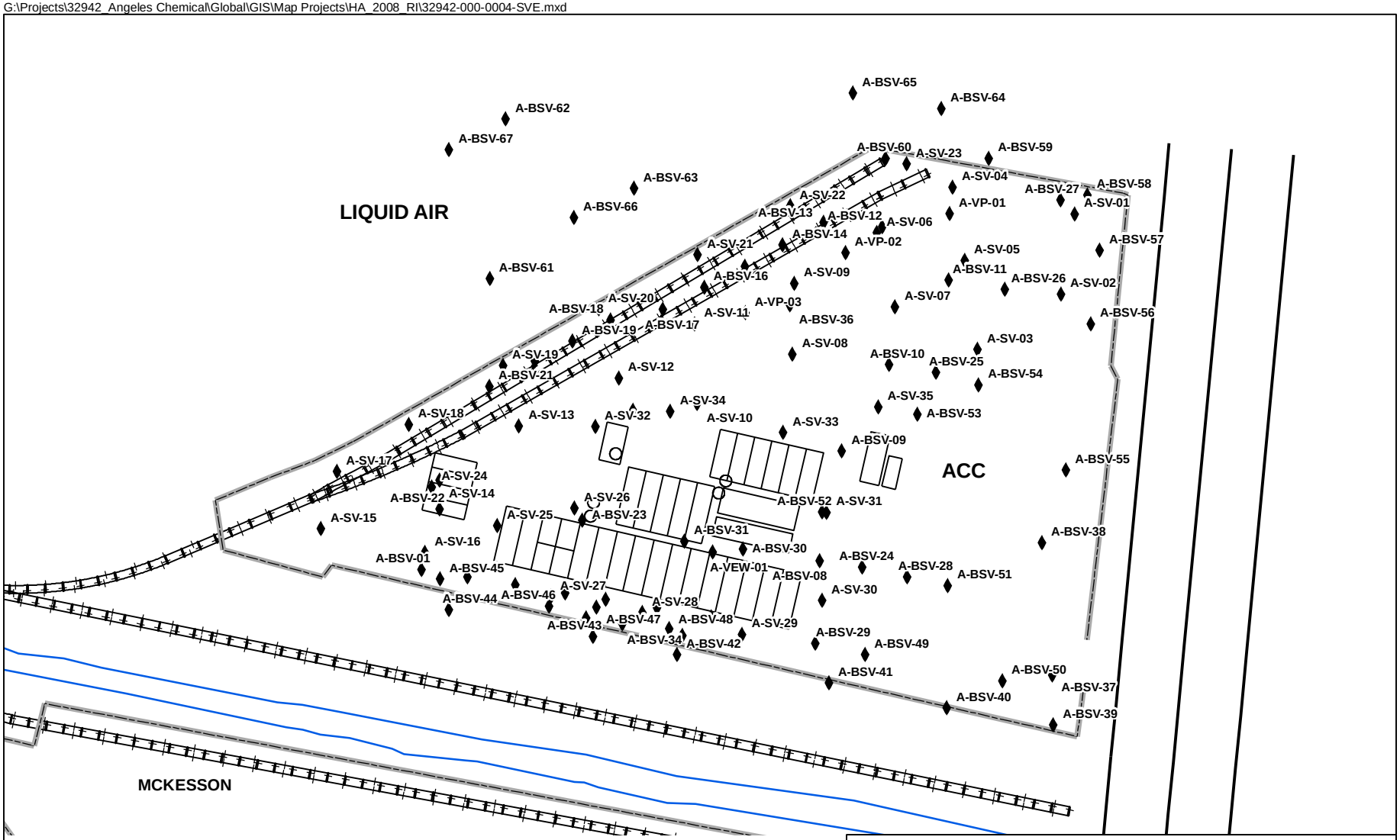

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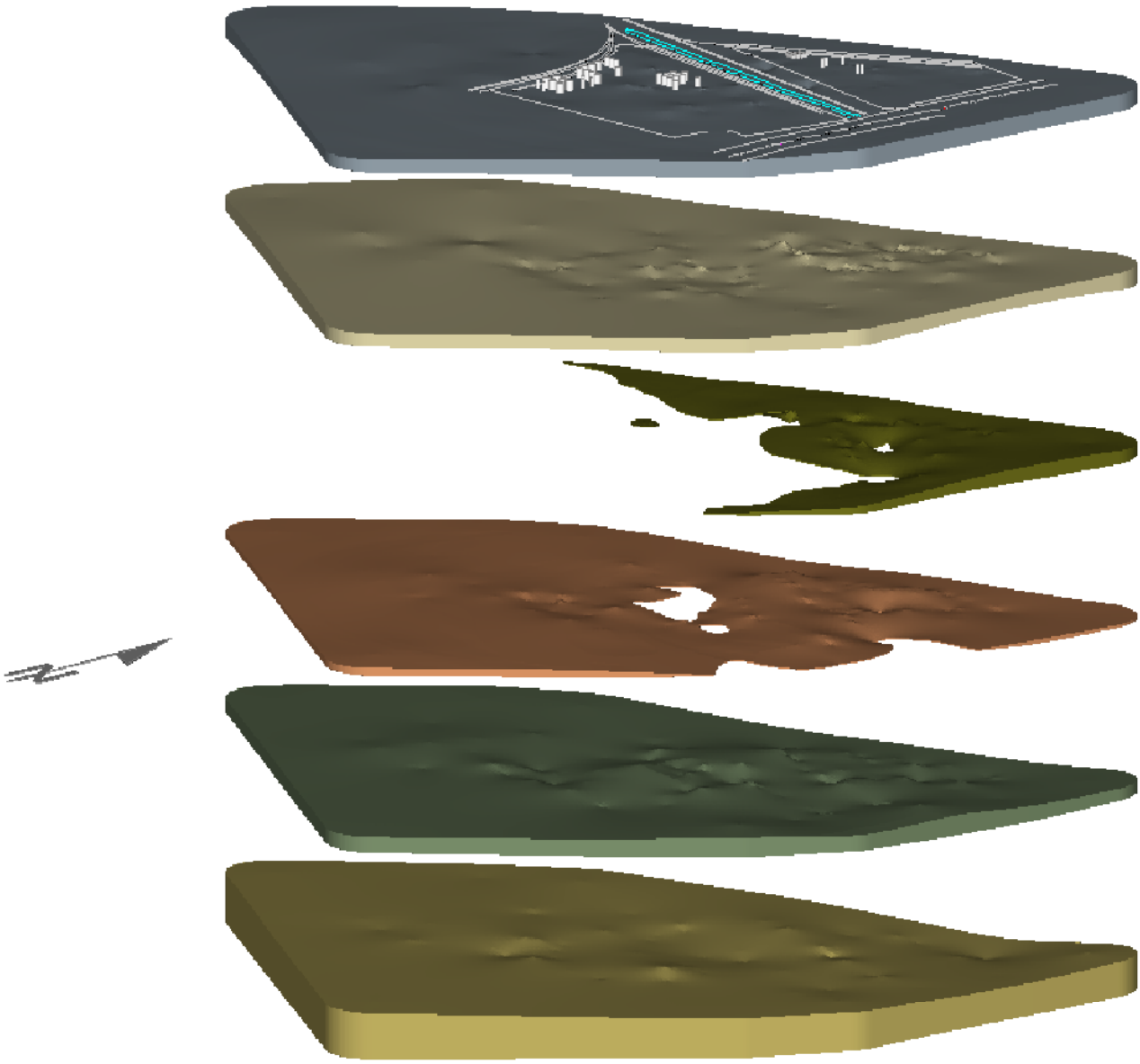
SANTA FE SPRINGS, CALIFORNIA

SOIL VAPOR SAMPLING LOCATIONS FOR ANGELES AND LIQUID AIR

SCALE: AS SHOWN
AUGUST 2008

FIGURE 06



Legend

Hydrogeologic Units

- Unit A Fill to silty sand to clayey silt
- Unit B Sand
- Unit C1 Silt
- Unit D Silty sand
- Unit C2 Clayey silt
- Unit E Sand

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SANTA FE SPRINGS, CALIFORNIA

LOCAL STRATIGRAPHY

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FIGURE 07

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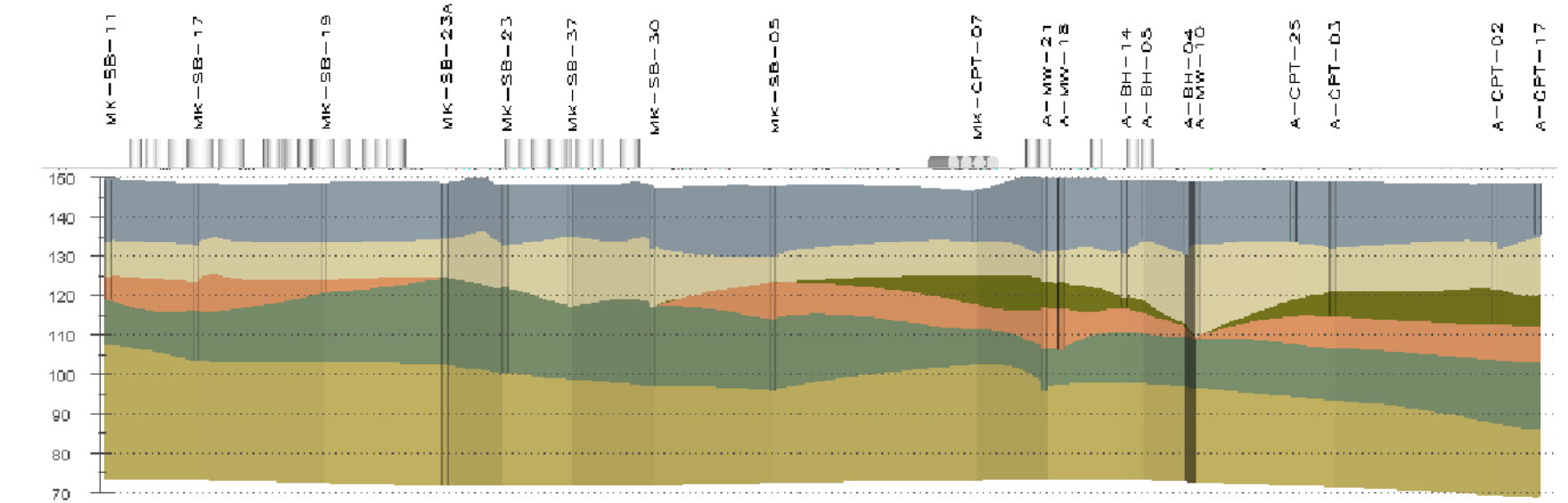
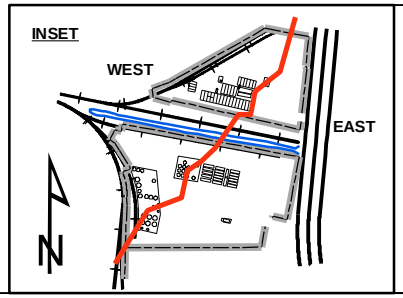
NORTH SOUTH CROSS SECTION



Hydrogeologic Units

- Unit A Fill to silty sand to clayey silt
- Unit B Sand
- Unit C1 Silt
- Unit D Silty sand
- Unit C2 Clayey silt
- Unit E Sand

NOTES:
1. VIEWS ARE TOWARDS THE NORTHWEST.
2. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
3. VERTICAL EXAGGERATION IS 2:1.



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NORTH - SOUTH LITHOLOGIC CROSS-SECTION

SCALE: AS SHOWN
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FIGURE 08

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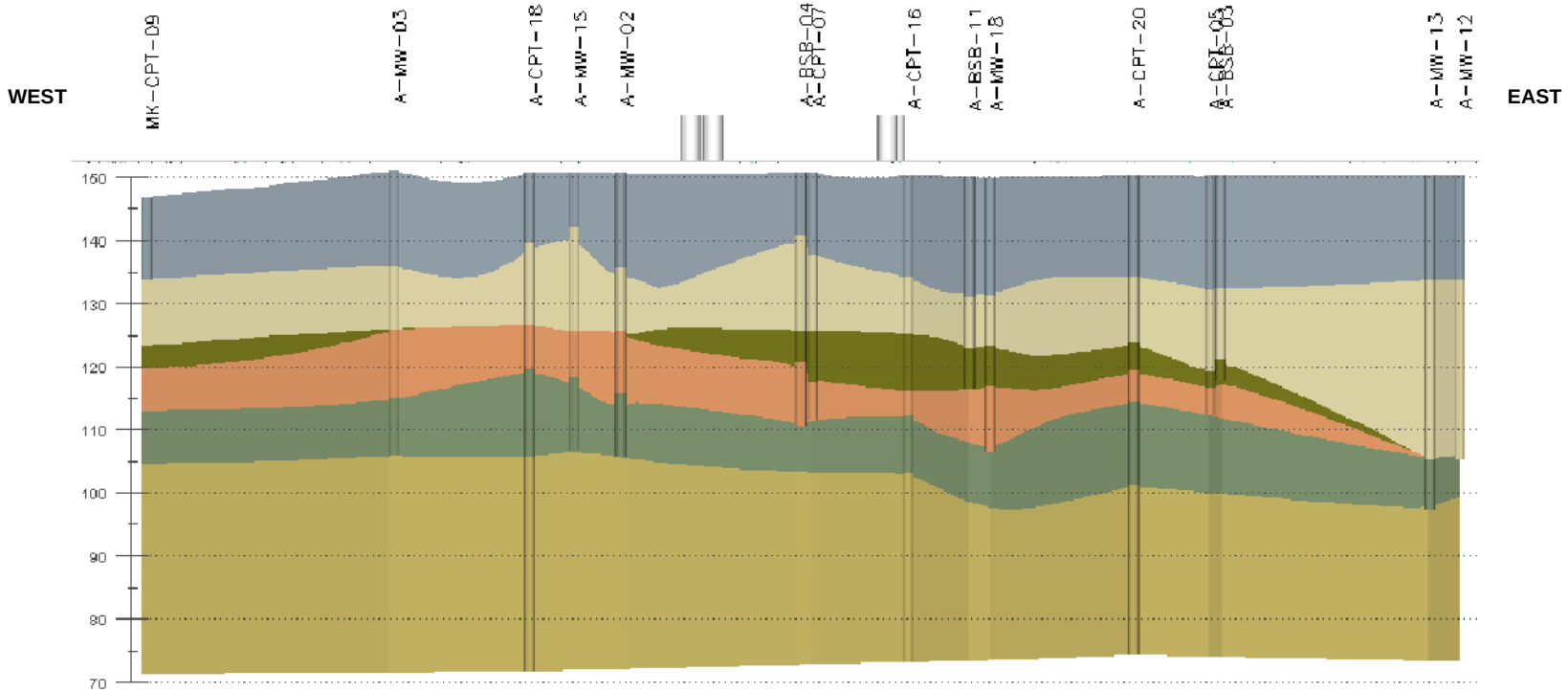
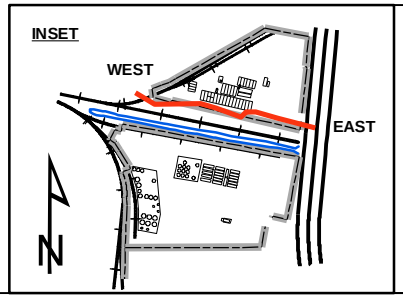
WEST-EAST CROSS SECTION



Hydrogeologic Units

- Unit A Fill to silty sand to clayey silt
- Unit B Sand
- Unit C1 Silt
- Unit D Silty sand
- Unit C2 Clayey silt
- Unit E Sand

NOTES:
1. VIEWS ARE TOWARDS THE NORTH.
2. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
3. VERTICAL EXAGGERATION IS 2:1.



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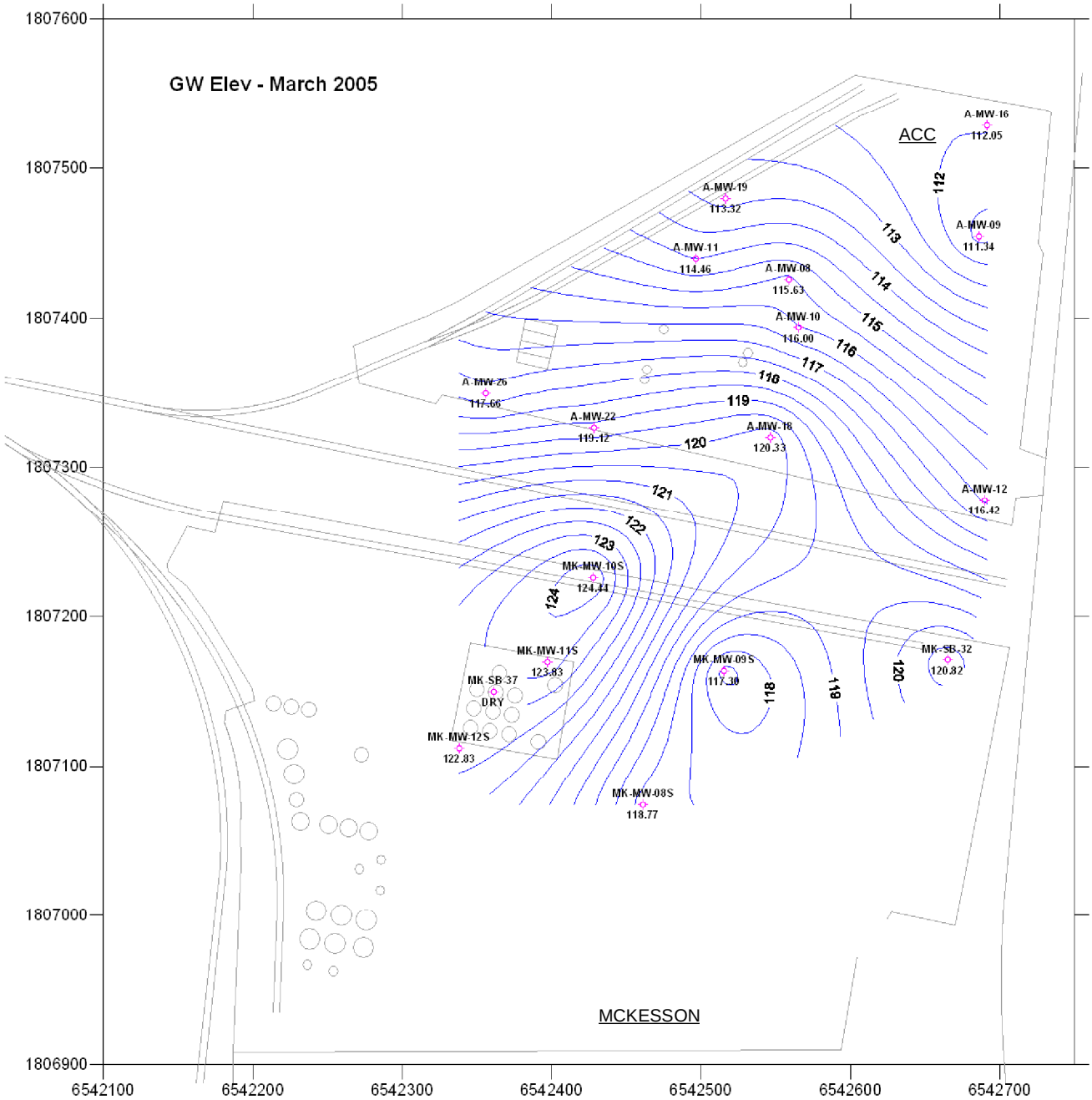
HYDROGEOLOGIC LAYERS ALONG SOUTHERN BORDER OF ANGELES

SCALE: AS SHOWN
AUGUST 2008

FIGURE 09



LEGEND

- 114 GROUNDWATER CONTOUR
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD

N
W E
S

0 120
SCALE IN FEET

NOTE: ACC = ANGELES CHEMICAL COMPANY

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SANTA FE SPRINGS, CALIFORNIA

SHALLOW GROUNDWATER ELEVATION MAP - MARCH 2005

SCALE: AS SHOWN
AUGUST 2008

FIGURE 10

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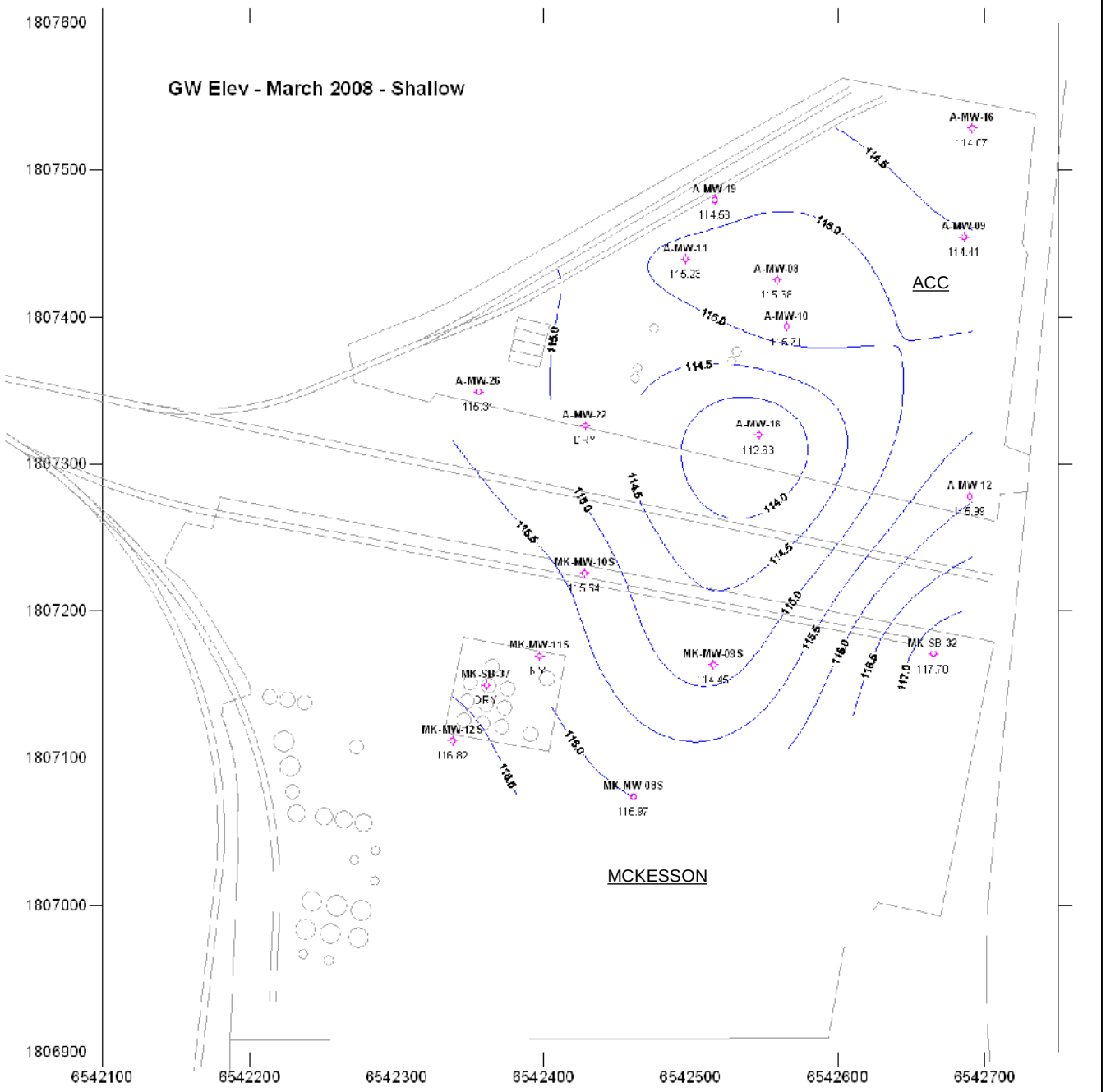

LEGEND

- 114 GROUNDWATER CONTOUR
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD

NOTE: ACC = ANGELES CHEMICAL COMPANY

N
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SCALE IN FEET

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SANTA FE SPRINGS, CALIFORNIA

SHALLOW GROUNDWATER ELEVATION MAP - MARCH 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 11

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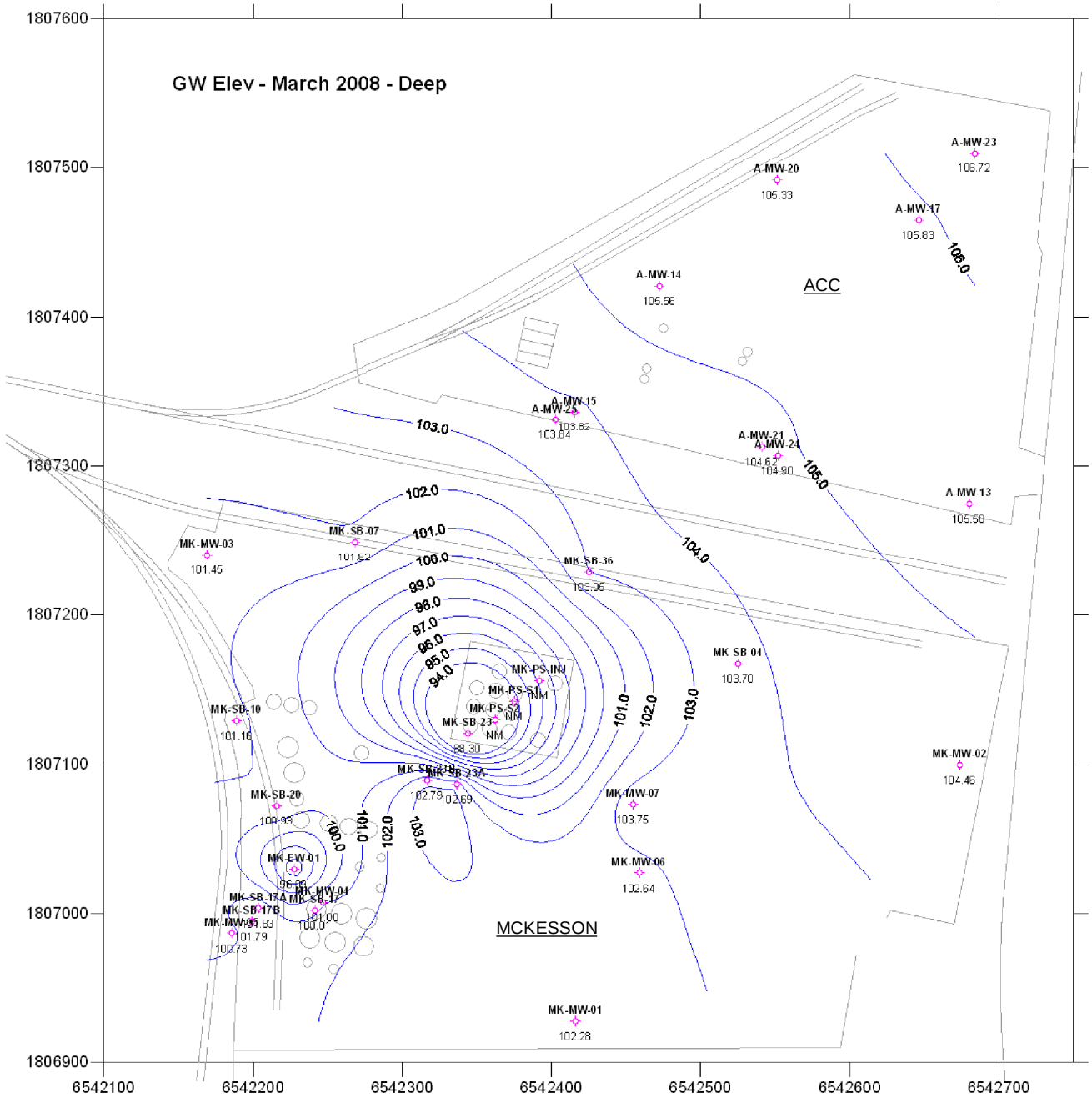

LEGEND

114 GROUNDWATER CONTOUR

UNLINED CHANNEL

FENCE

RAILROAD

ROAD

N
W
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SCALE IN FEET

NOTE: ACC = ANGELES CHEMICAL COMPANY

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SANTA FE SPRINGS, CALIFORNIA

DEEP GROUNDWATER
ELEVATION MAP - MARCH 2005

SCALE: AS SHOWN
AUGUST 2008

FIGURE 12

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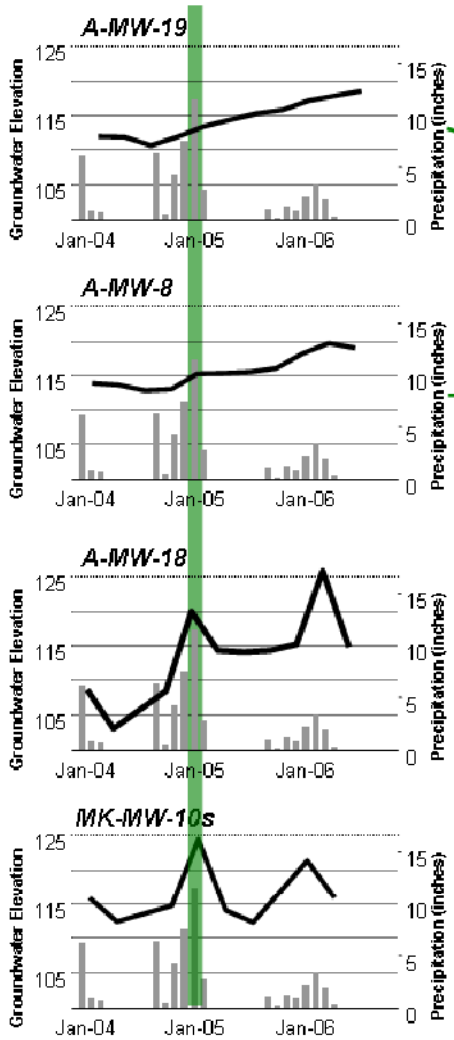
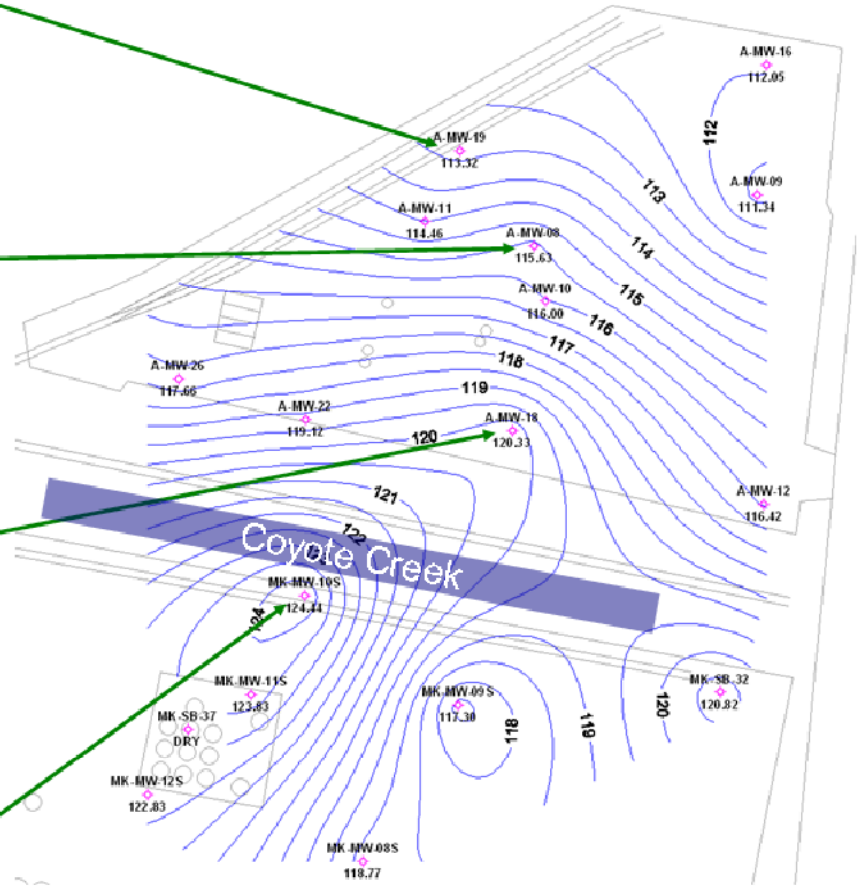
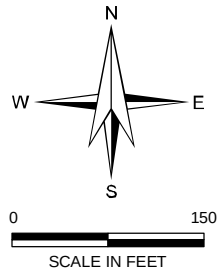
G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0013-PRSHGW.mxd



Bars show monthly precipitation totals for Los Angeles

March 2005 Shallow Groundwater Elevation





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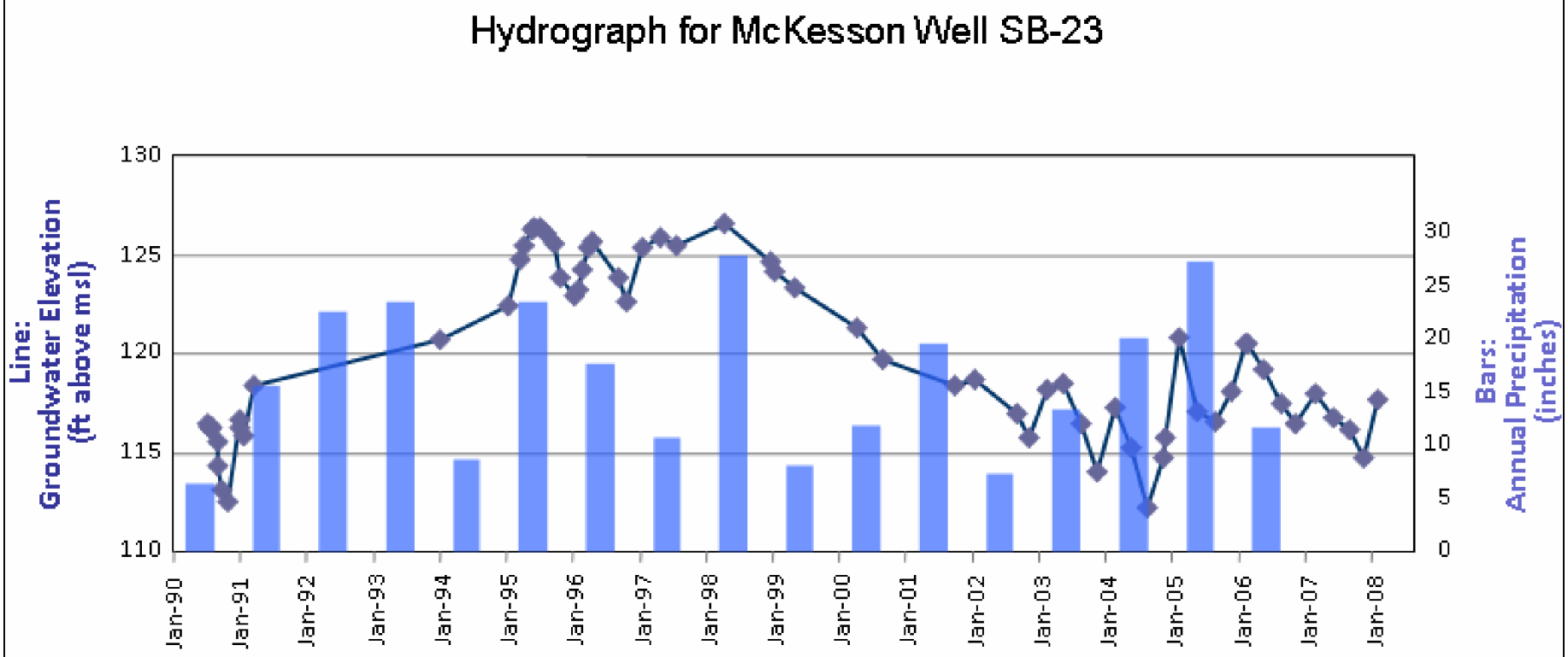
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

EFFECT OF PRECIPITATION ON SHALLOW GROUNDWATER

SCALE: AS SHOWN
AUGUST 2008

FIGURE 13

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0014-GWSB32.mxd



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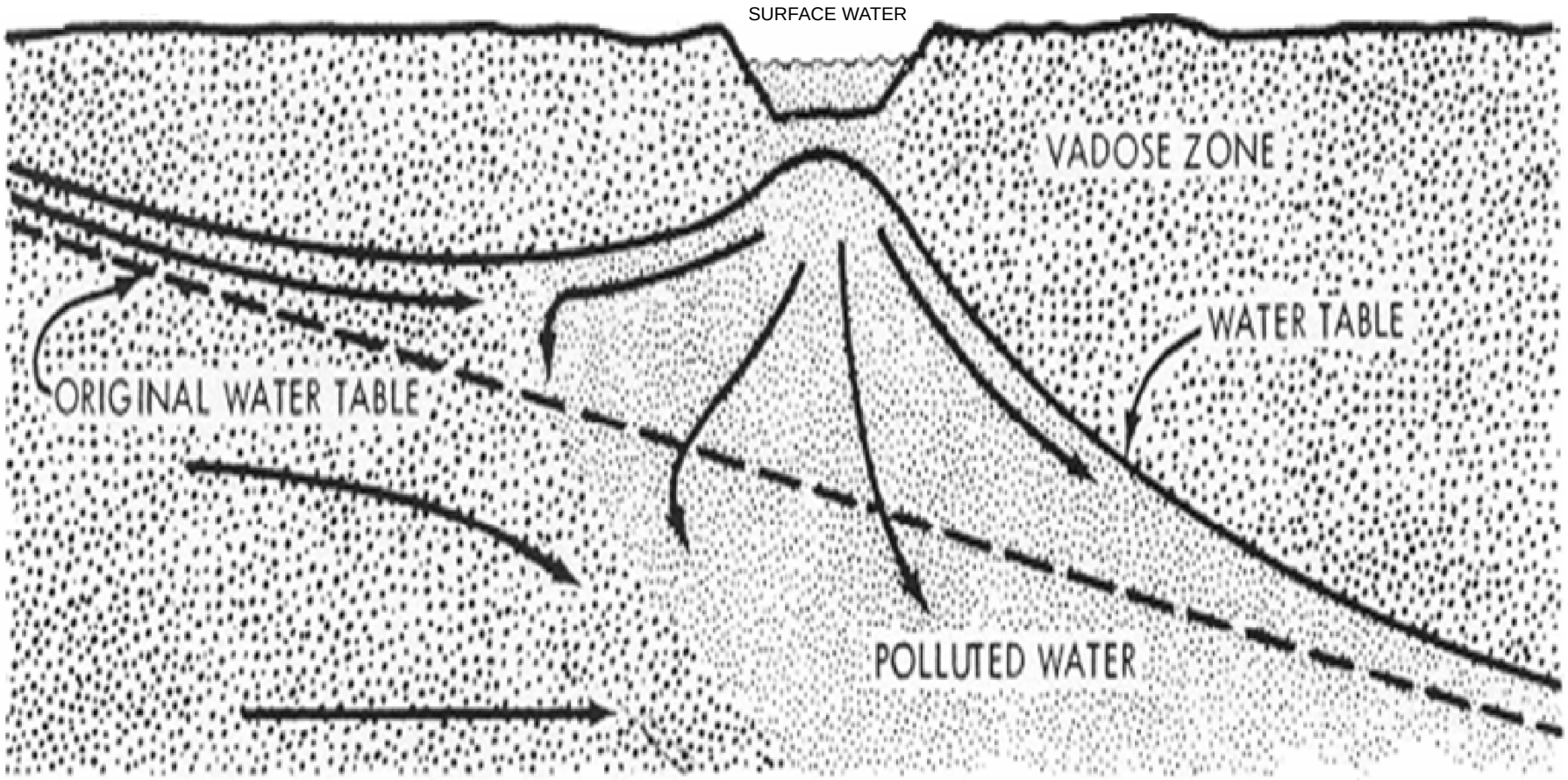
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

SEASONAL PRECIPITATION
EFFECT ON SB-32
GROUNDWATER LEVELS

AUGUST 2008

FIGURE 14

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0015-GWMOUND.mxd



NOTE: DIAGRAMS SHOWING LINES OF FLOW OF POLLUTANTS FROM A RECHARGE POND ABOVE A SLOPING WATER TABLE (FROM EVERETT, 1980)

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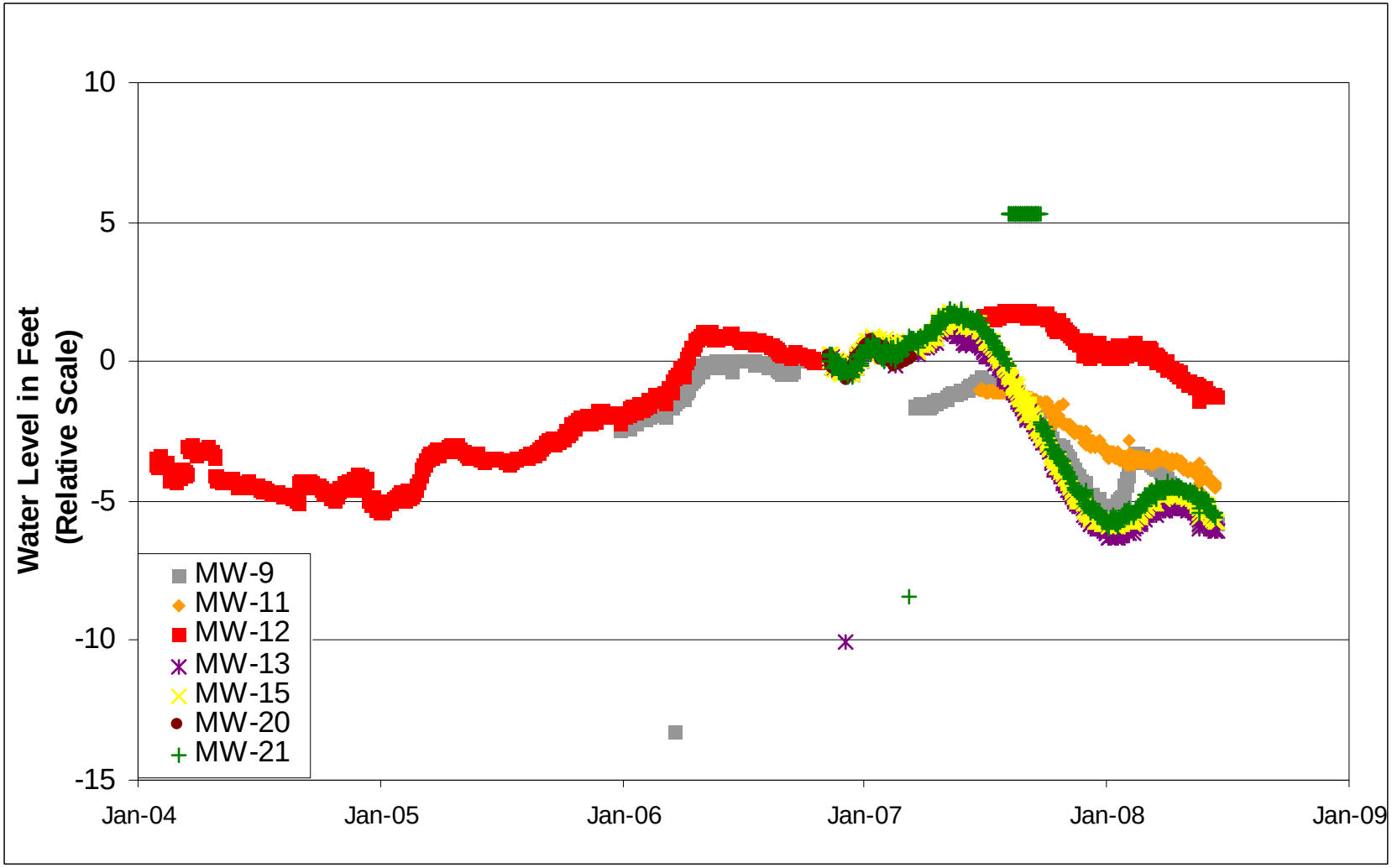
SANTA FE SPRINGS, CALIFORNIA

GROUNDWATER MOUNDING UNDER AREA OF SURFACE WATER INFILTRATION

AUGUST 2008

FIGURE 15

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0016-GWTRANS.mxd



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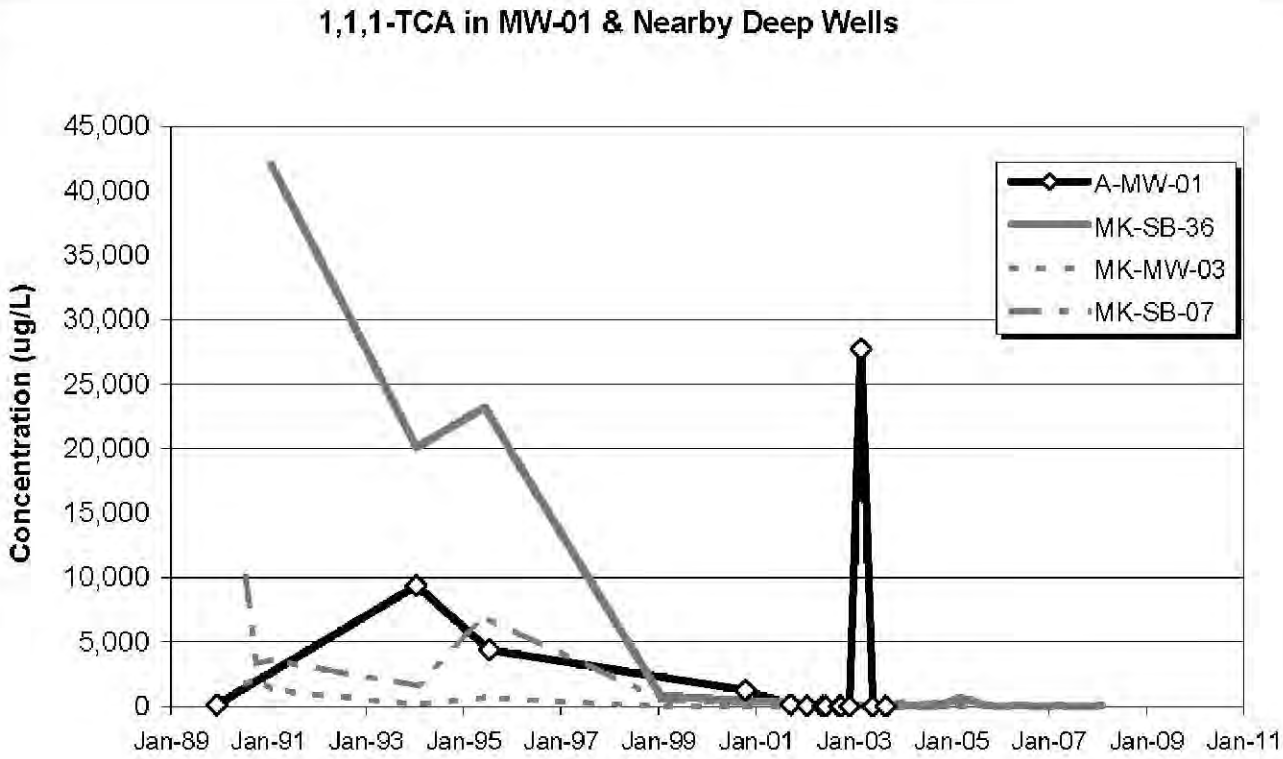
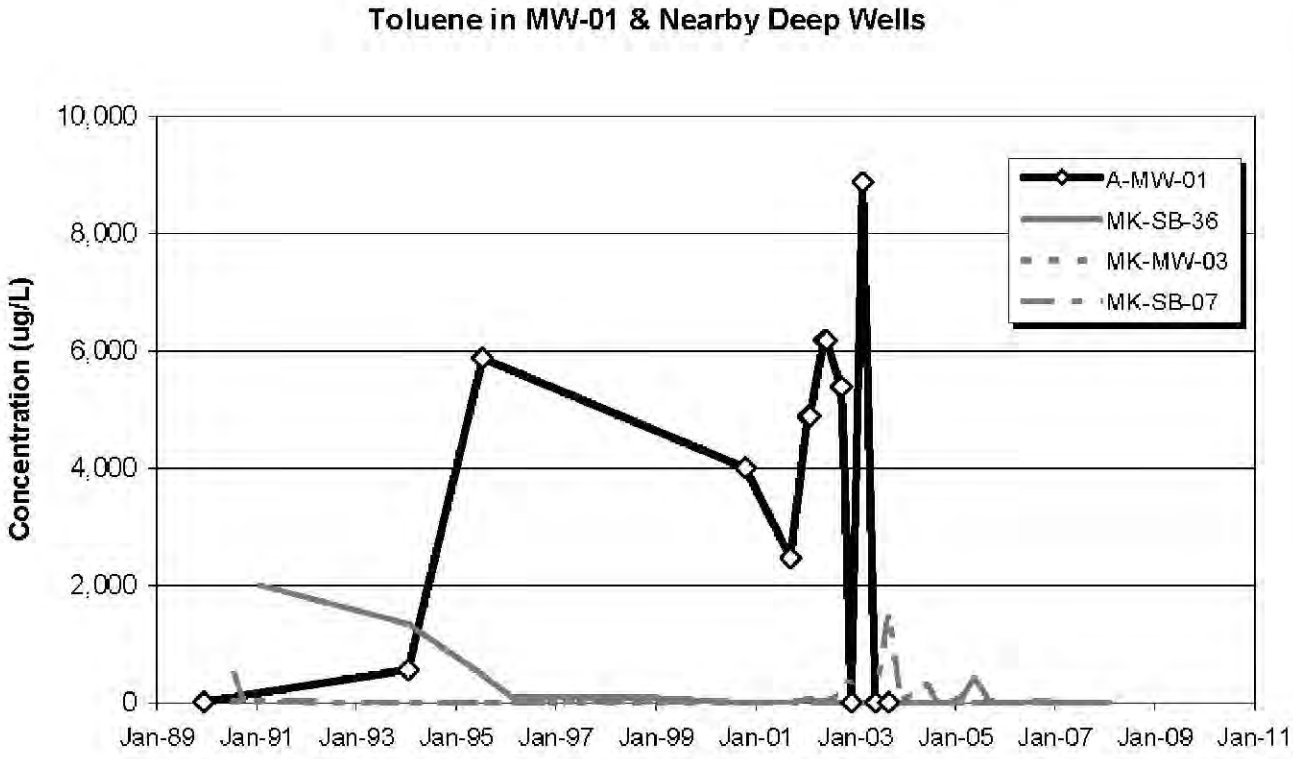
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

ACC TRANSDUCER DATA

AUGUST 2008

FIGURE 16





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SANTA FE SPRINGS, CALIFORNIA

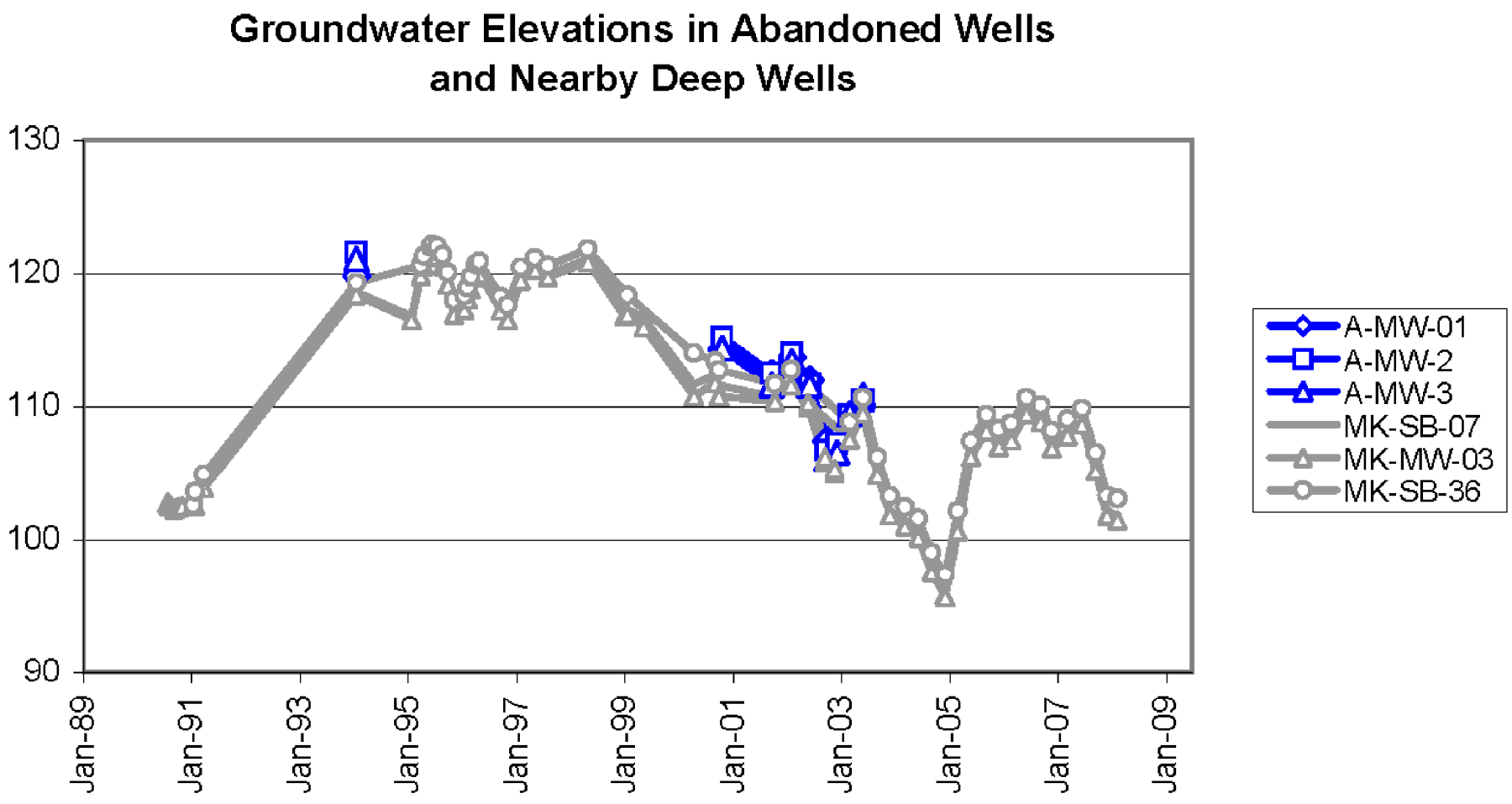
HISTORICAL GROUNDWATER ANALYTICAL TRENDS FOR ABANDONED MONITORING WELL MW-1 AND DOWNGRADIENT WELLS

AUGUST 2008

FIGURE 17

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0017-GWTRENDS.mxd

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0018-GWELAB.mxd



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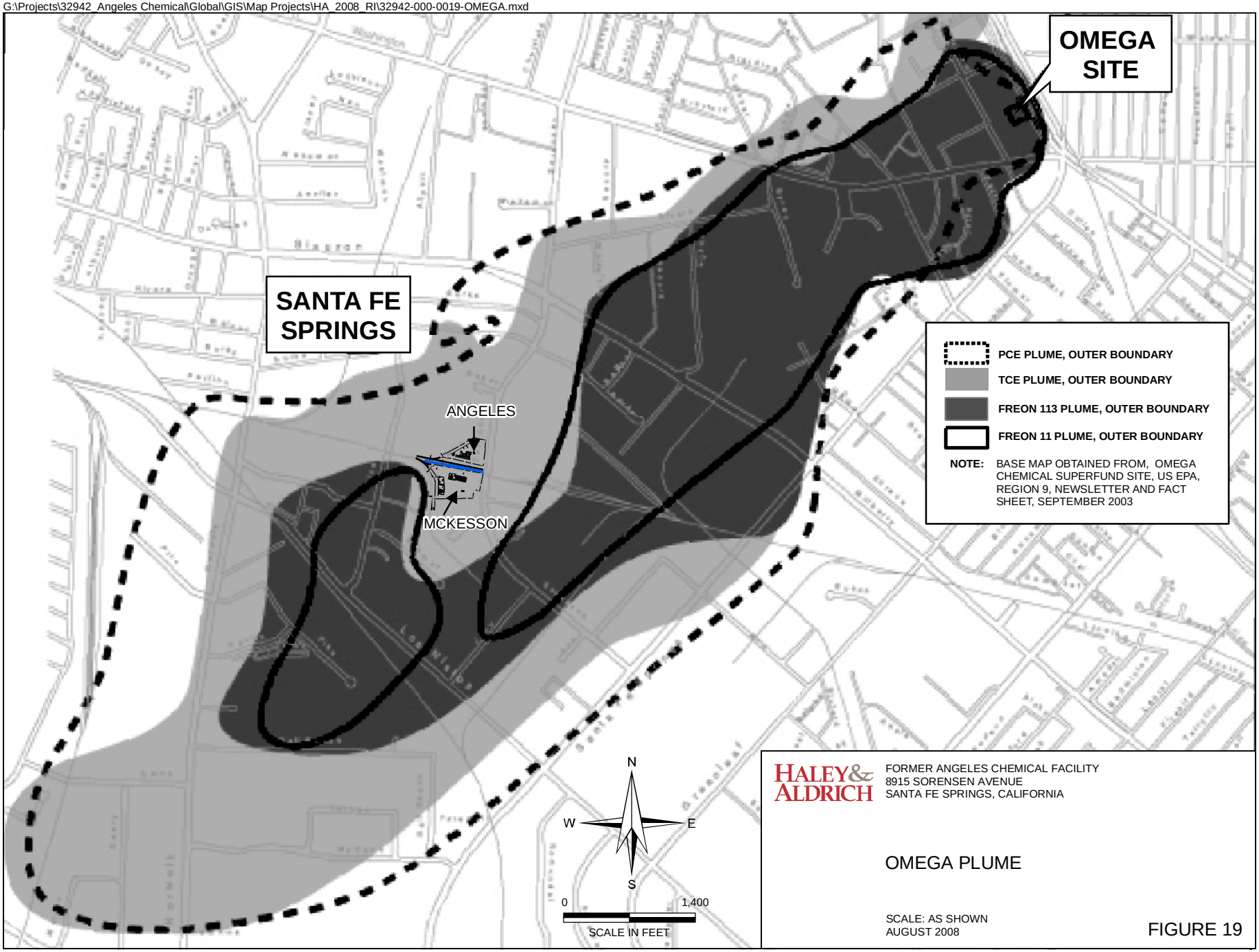
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

VARIATIONS OF GROUNDWATER ELEVATIONS IN ABANDONED WELLS AND NEARBY DEEP WELLS

AUGUST 2008

FIGURE 18

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0019-OMEGA.mxd



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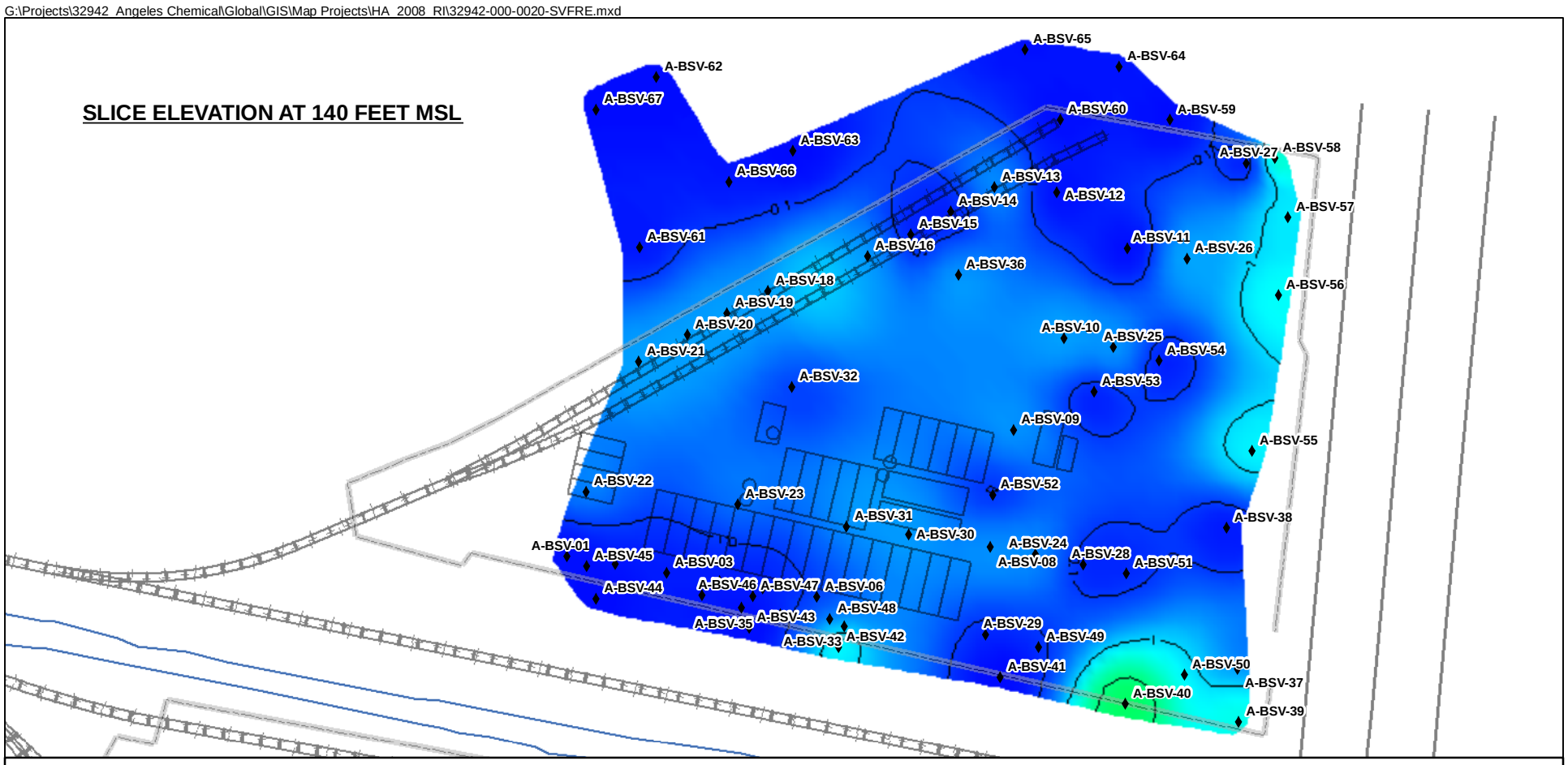
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

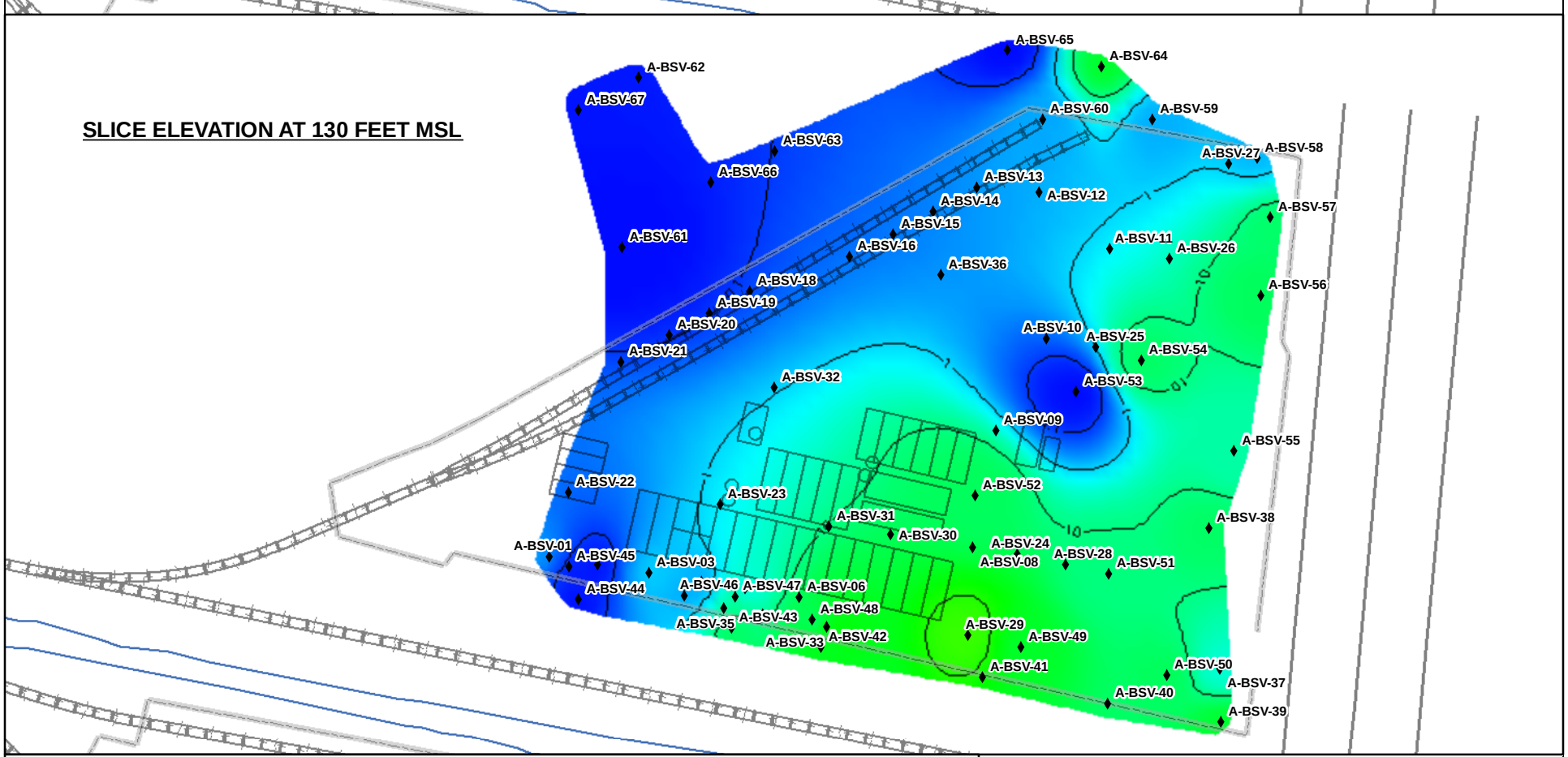
OMEGA PLUME

SCALE: AS SHOWN
AUGUST 2008

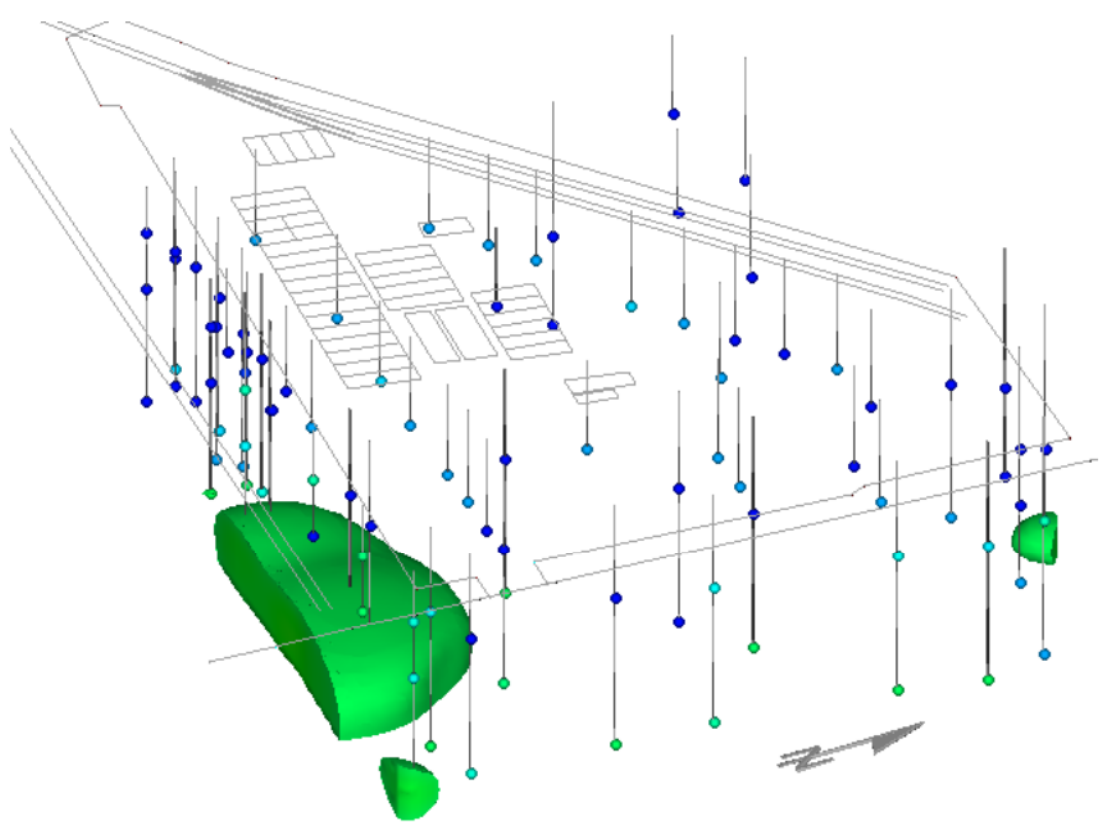
FIGURE 19

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0020-SVFRE.mxd





VOLUME CONCENTRATION EXCEEDING 20 UG/L



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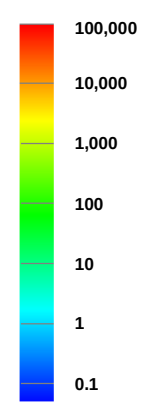
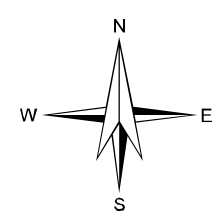


- SOIL VAPOR LOCATION
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD



0 75 150

SCALE IN FEET

NOTES:
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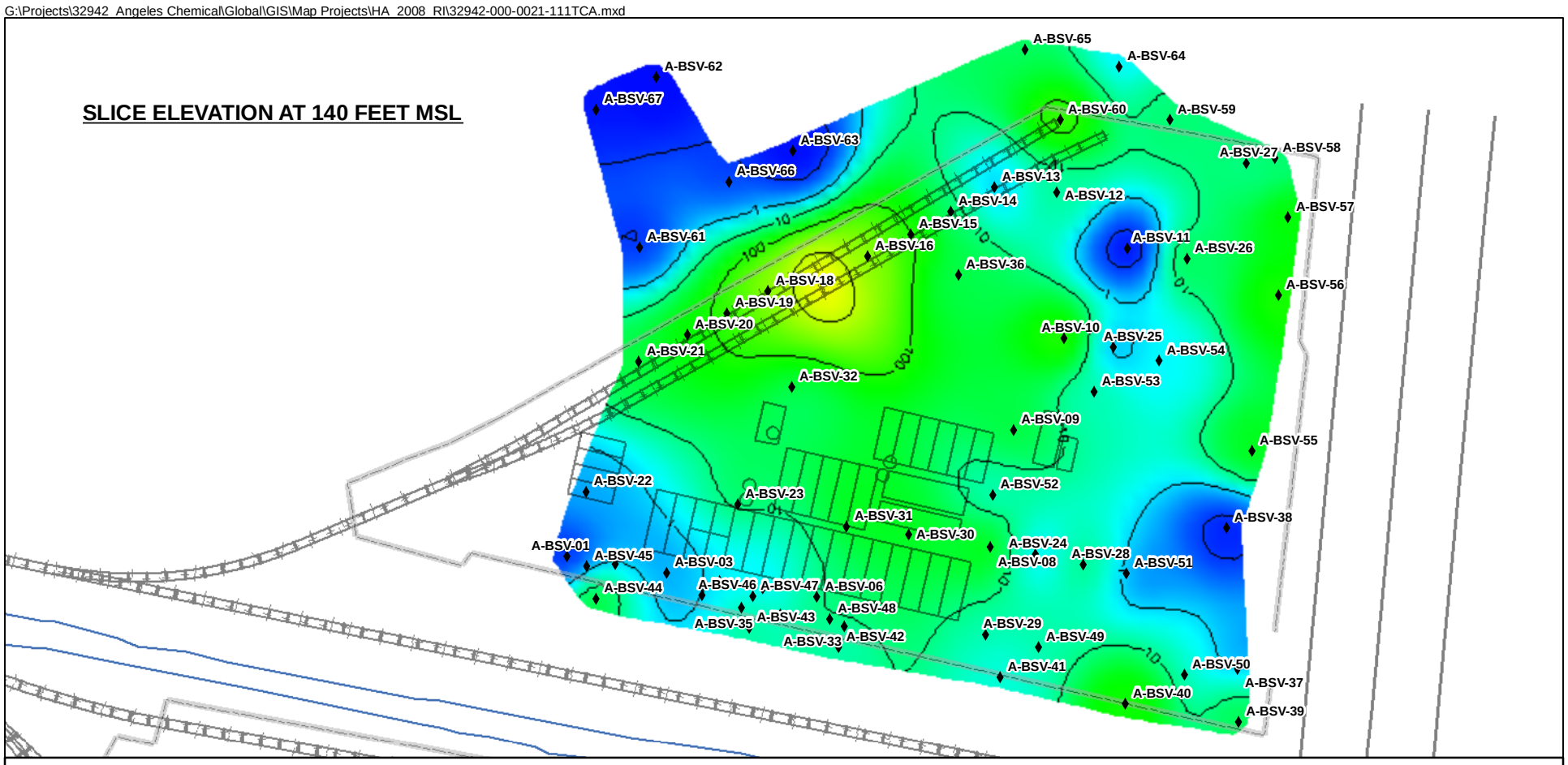
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

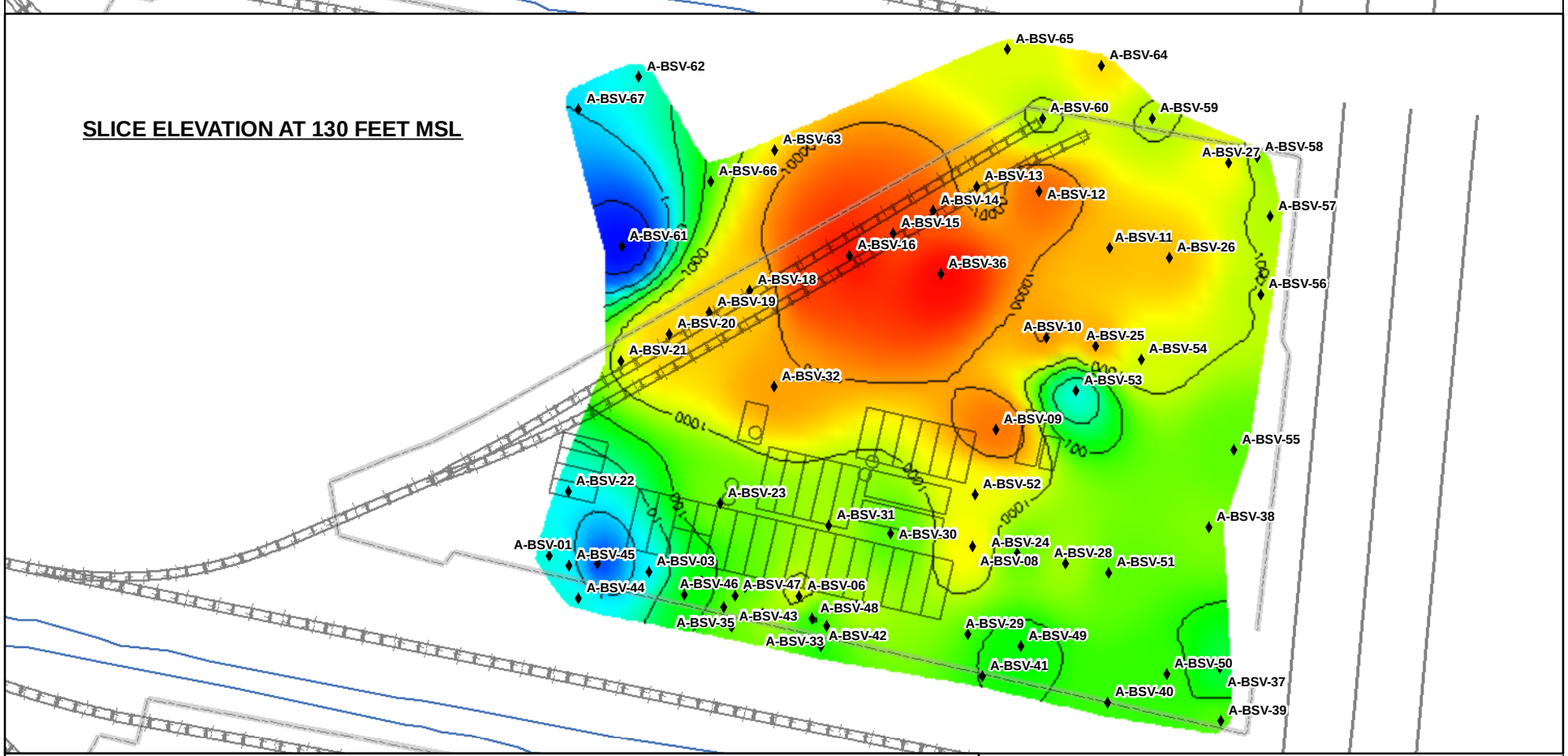
FREON 113 IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

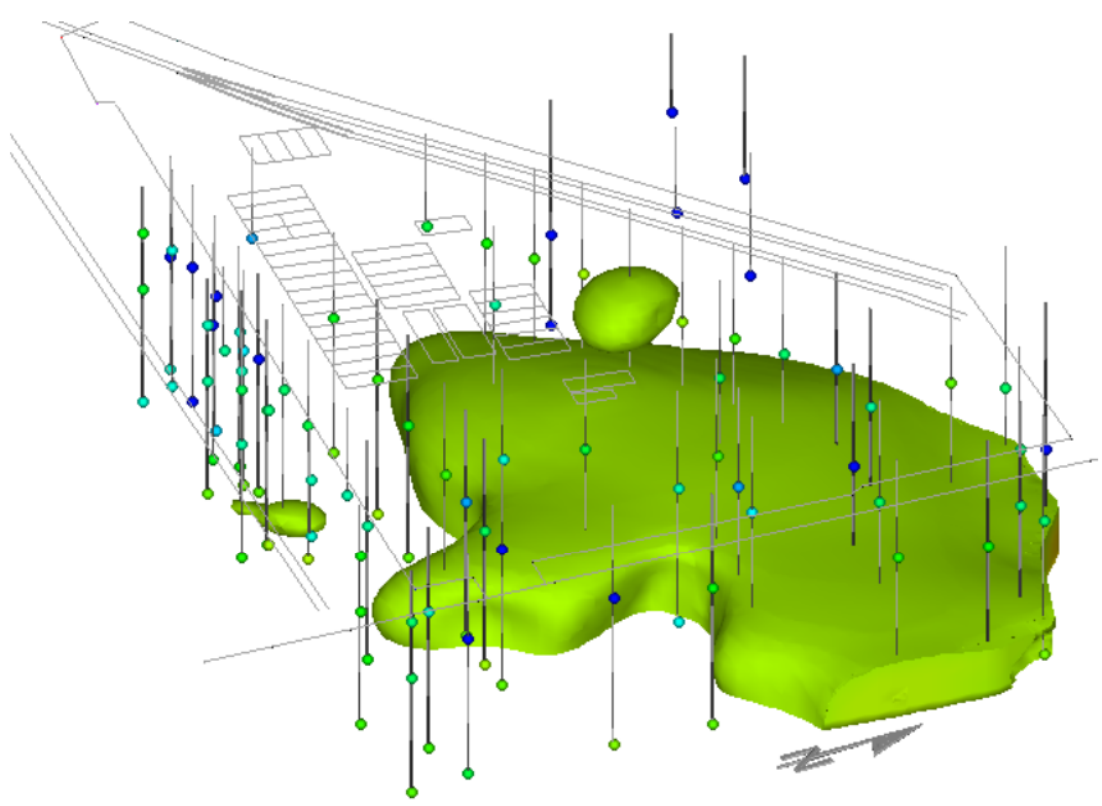
FIGURE 20

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0021-111TCA.mxd





VOLUME CONCENTRATION EXCEEDING 800 UG/L



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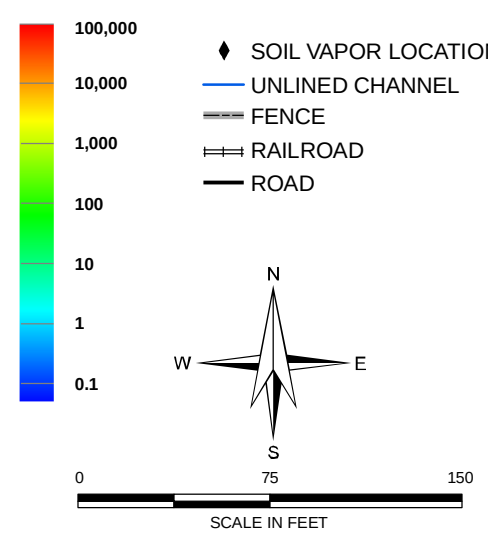

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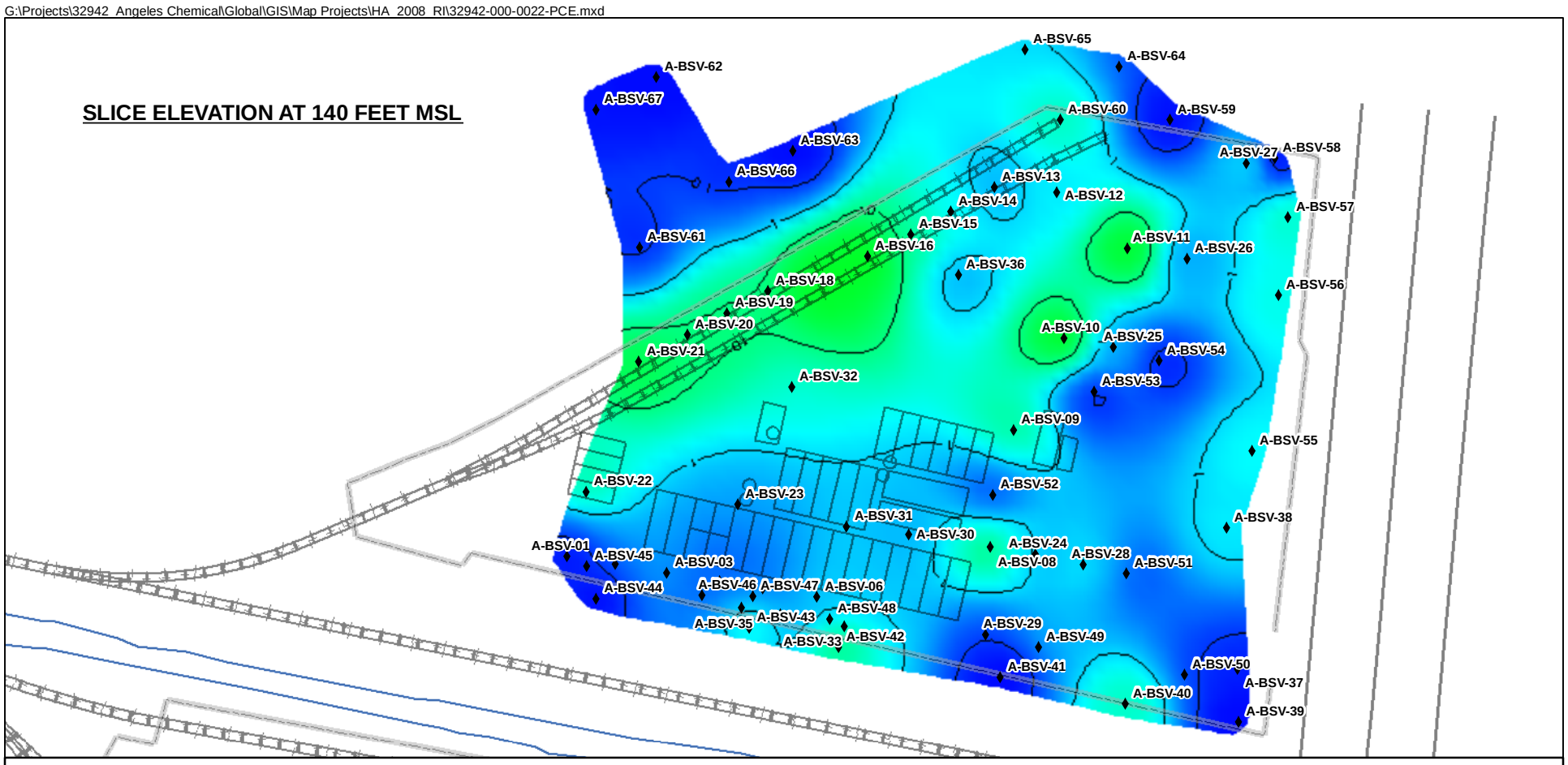
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

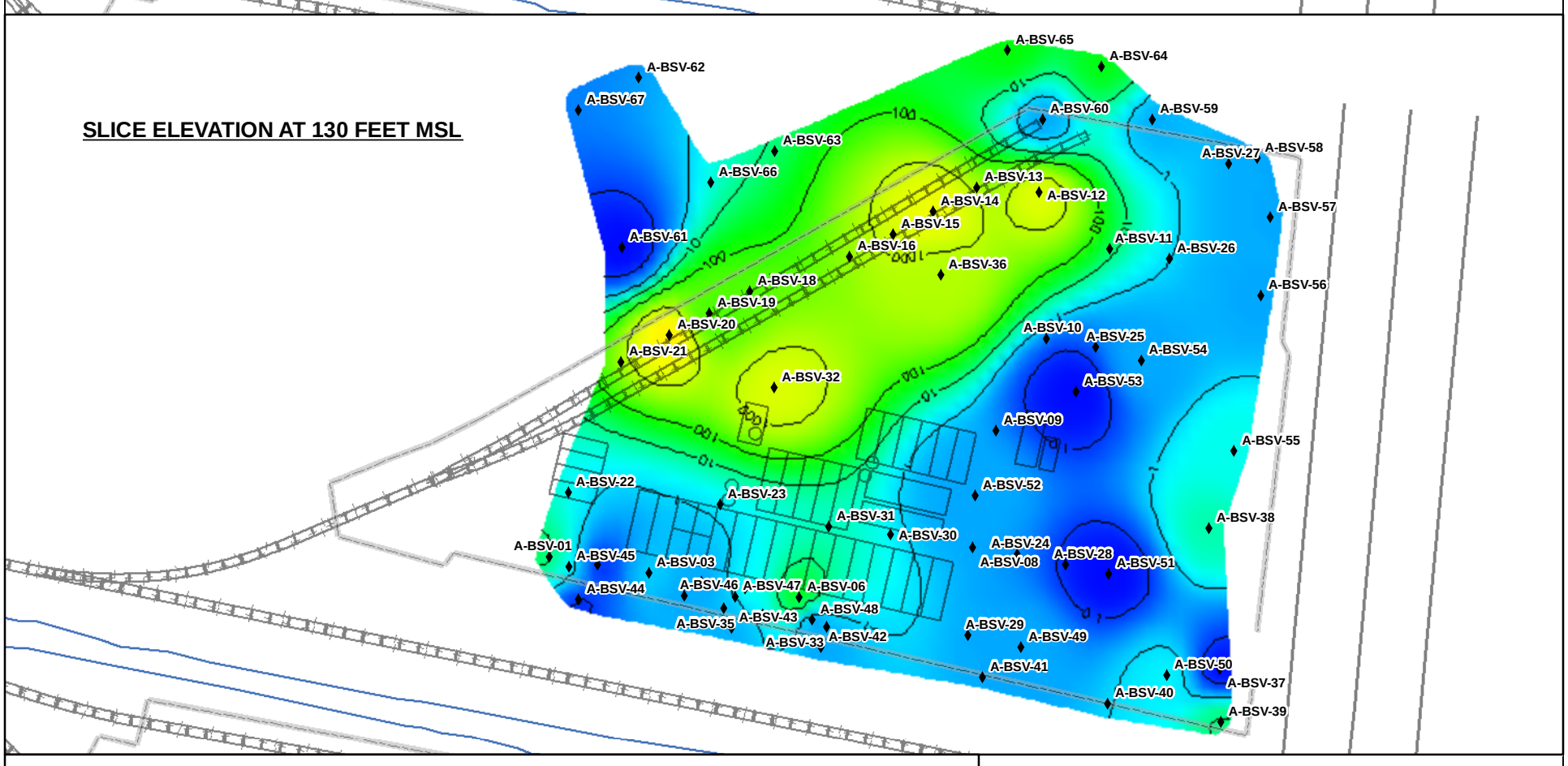
1,1,1-TCA IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

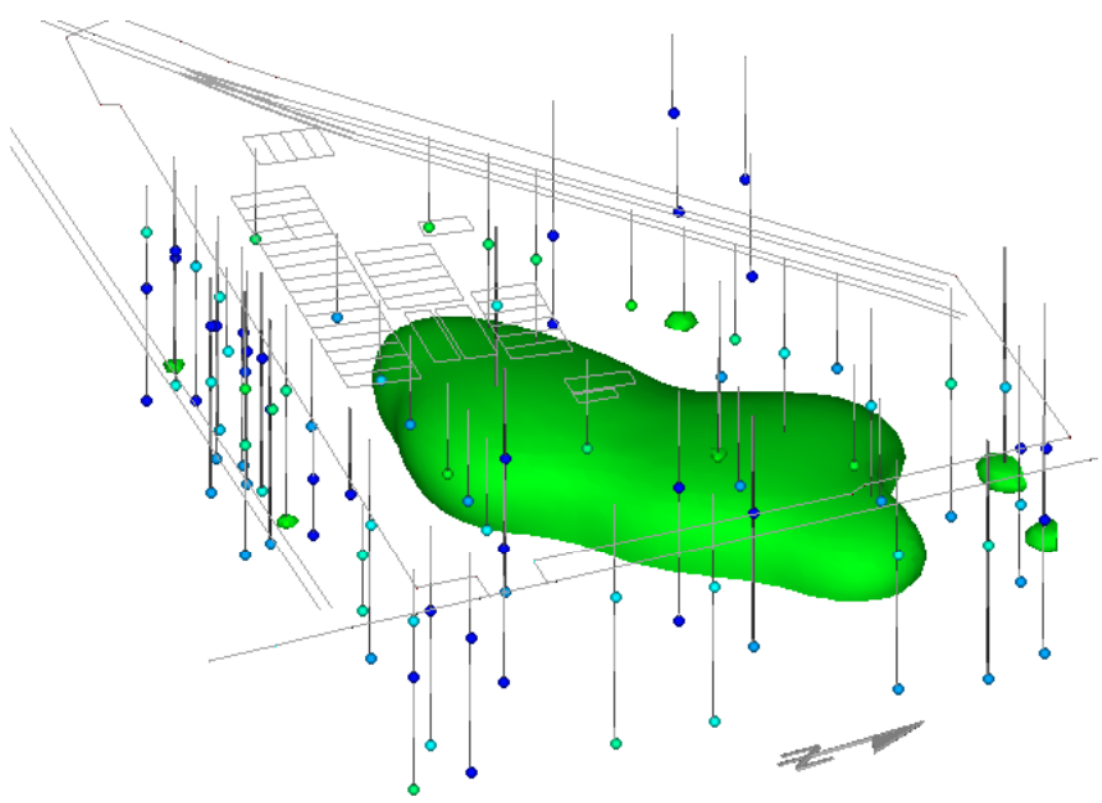
FIGURE 21

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0022-PCE.mxd





VOLUME CONCENTRATION EXCEEDING 50 UG/L



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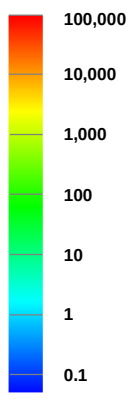
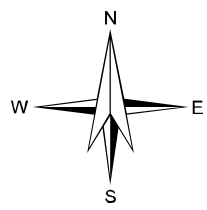


- SOIL VAPOR LOCATION
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD



0 75 150

SCALE IN FEET

NOTES:
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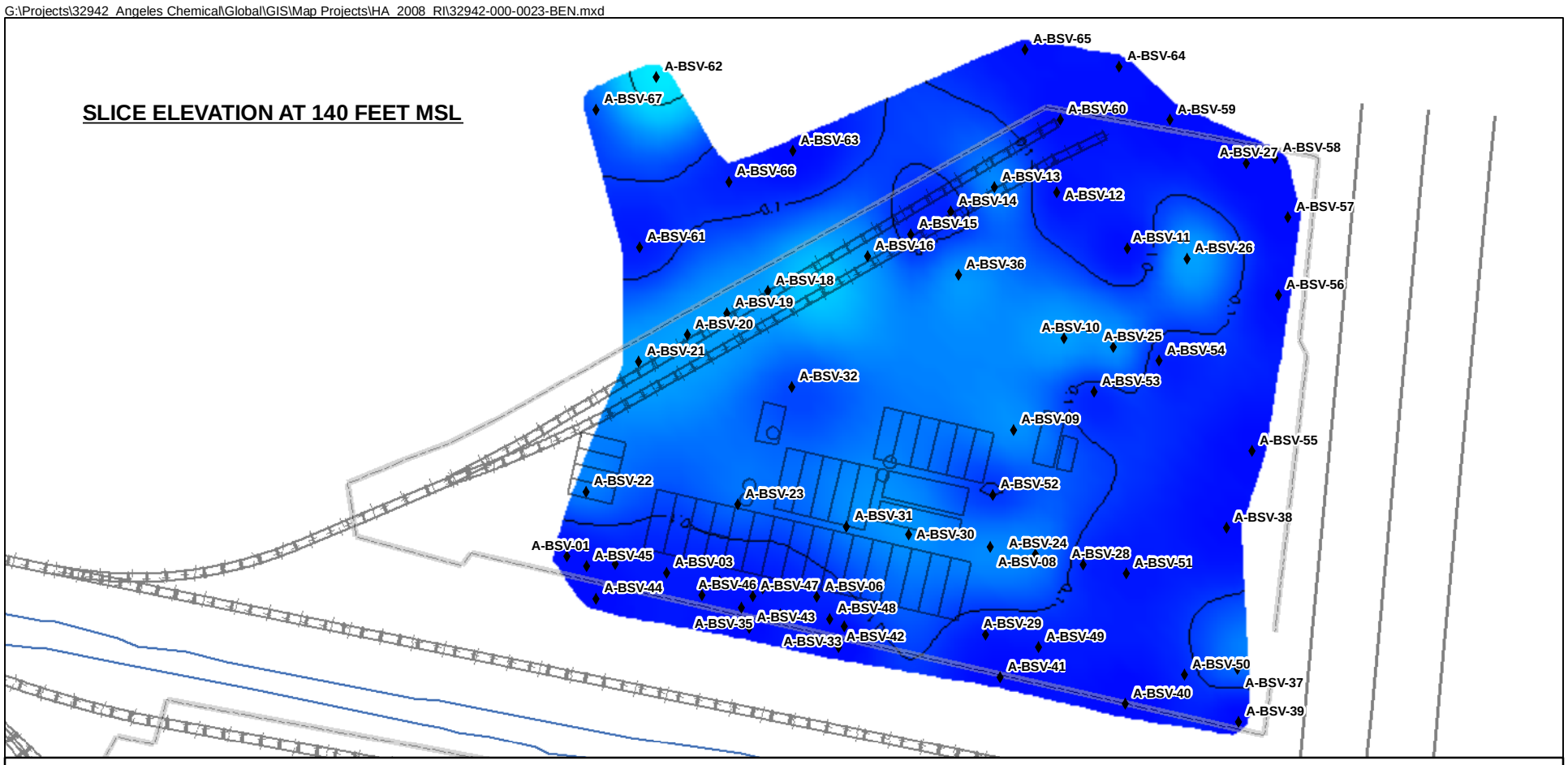
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

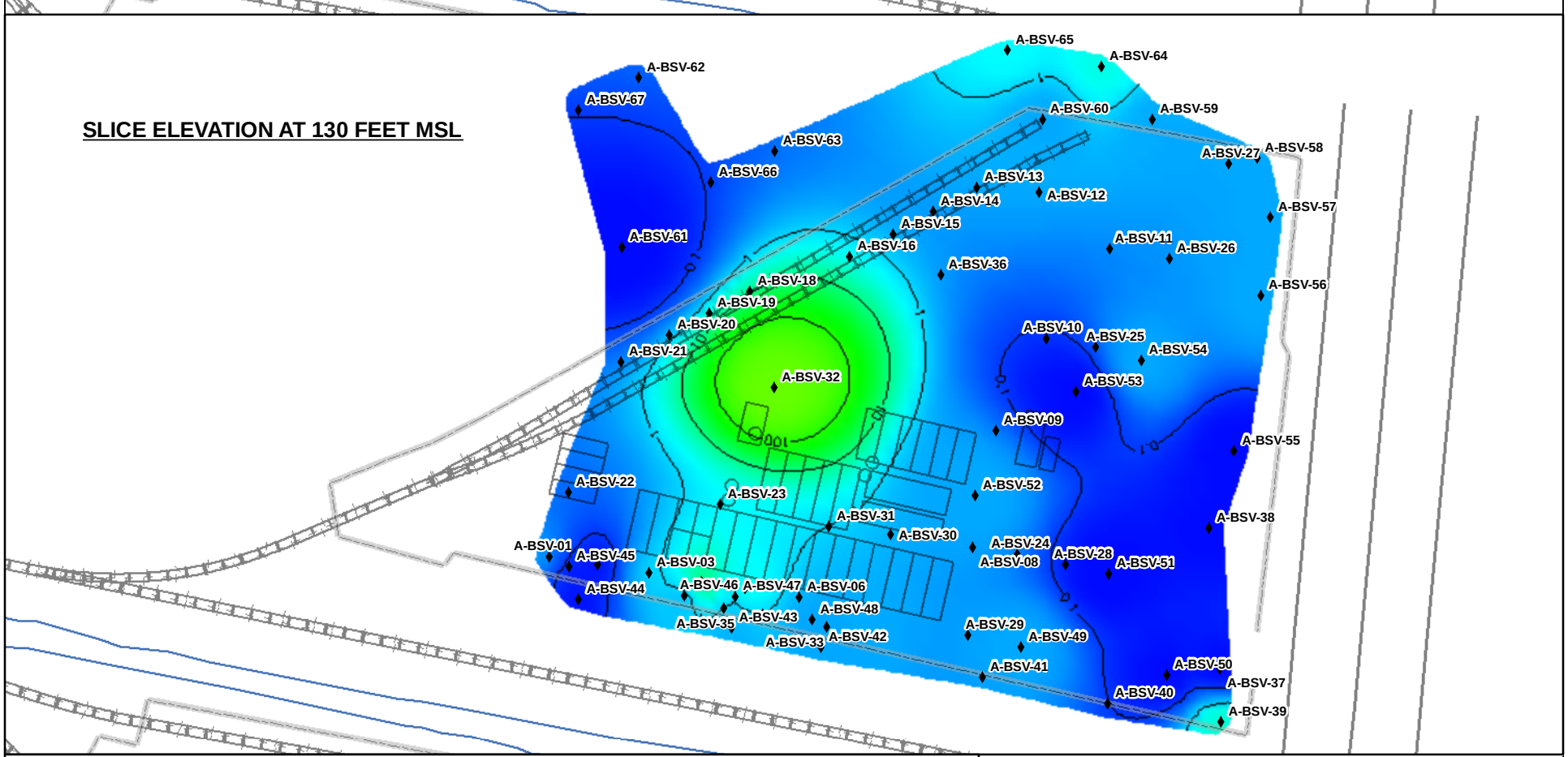
PCE IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

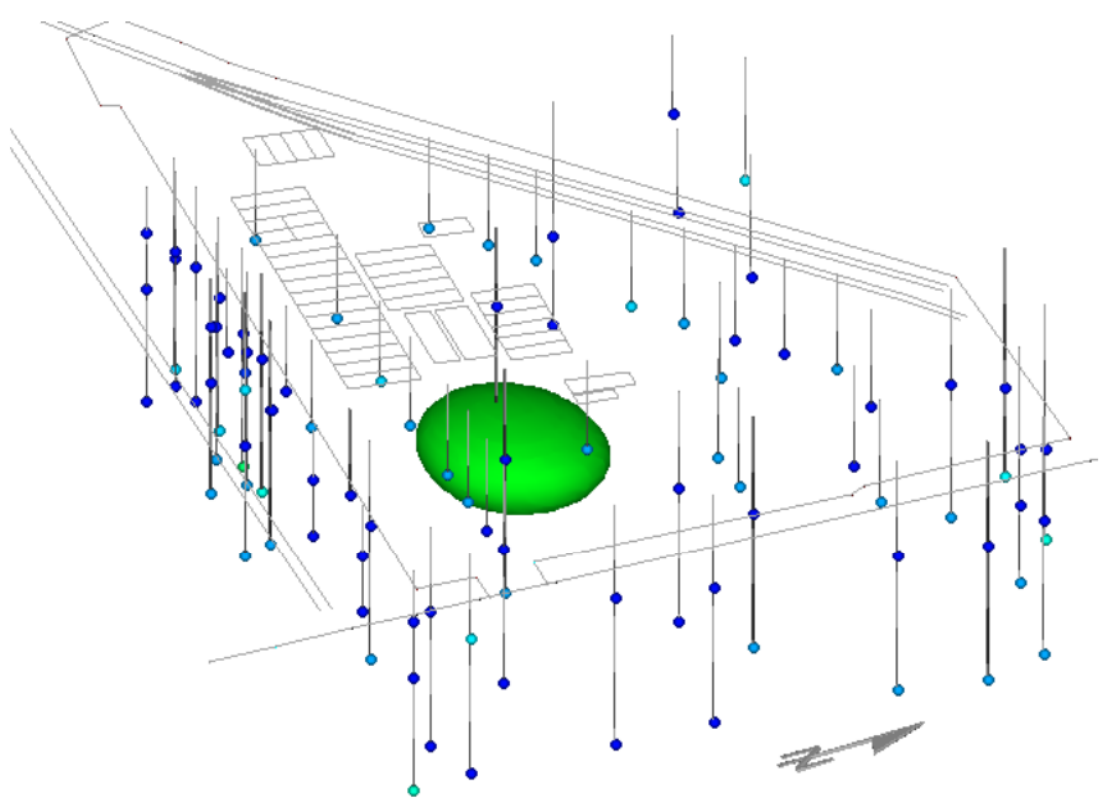
FIGURE 22

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0023-BEN.mxd





VOLUME CONCENTRATION EXCEEDING 50 UG/L



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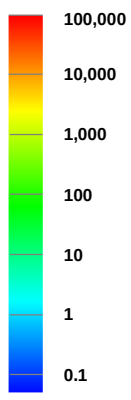
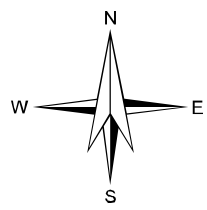


SOIL VAPOR LOCATION
UNLINED CHANNEL
FENCE
RAILROAD
ROAD



0 75 150
SCALE IN FEET

NOTES:
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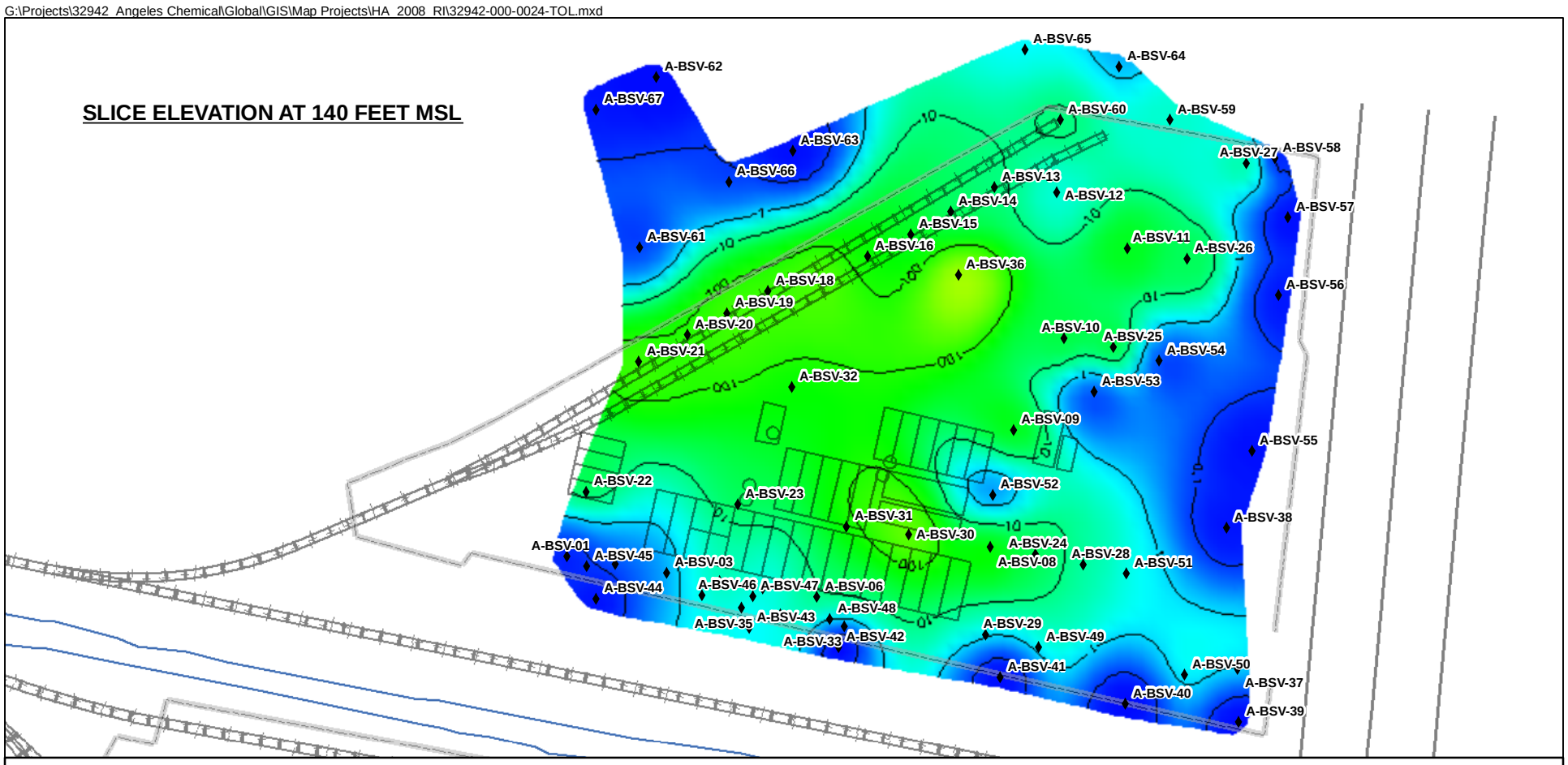
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

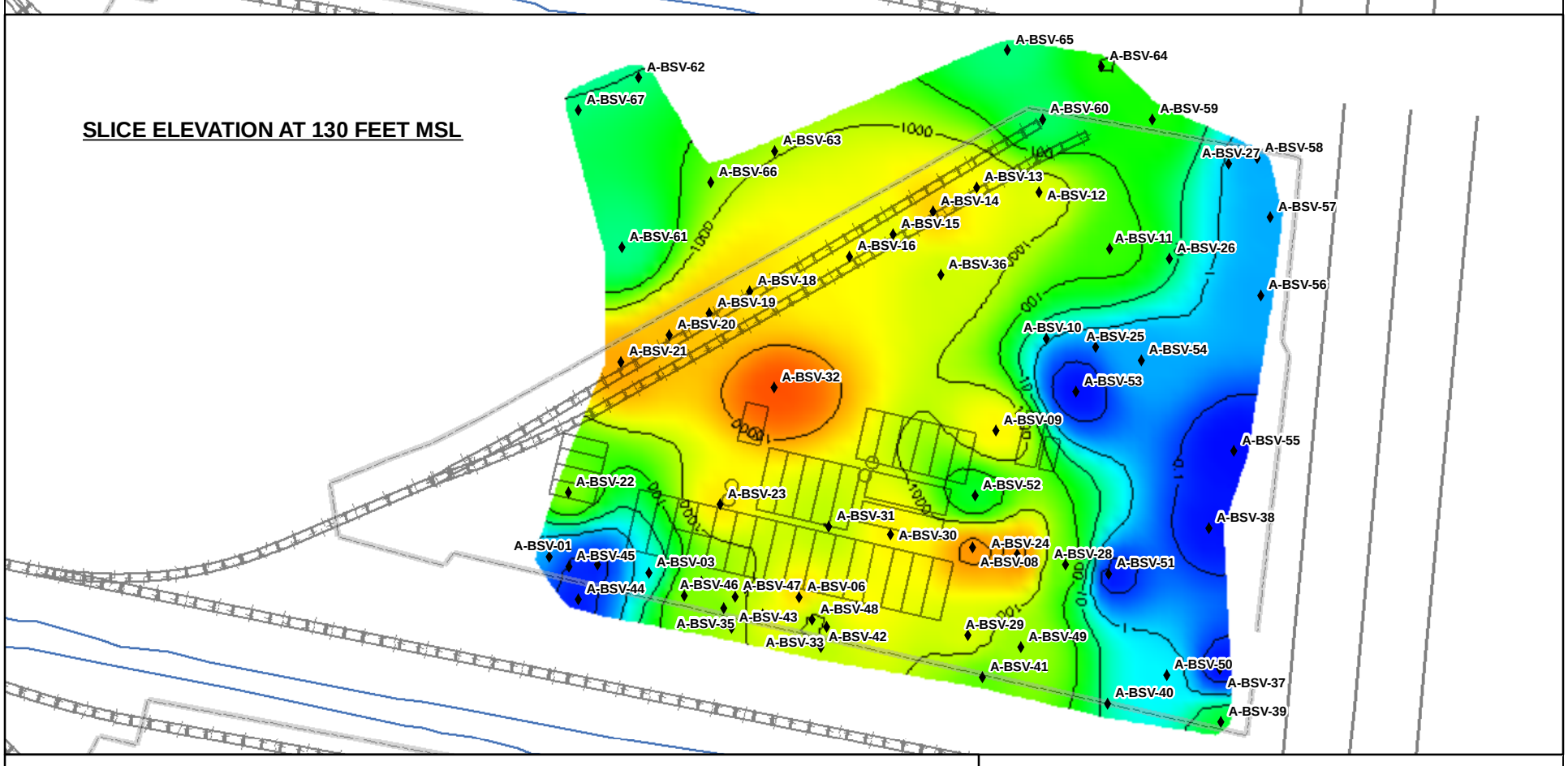
BENZENE IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

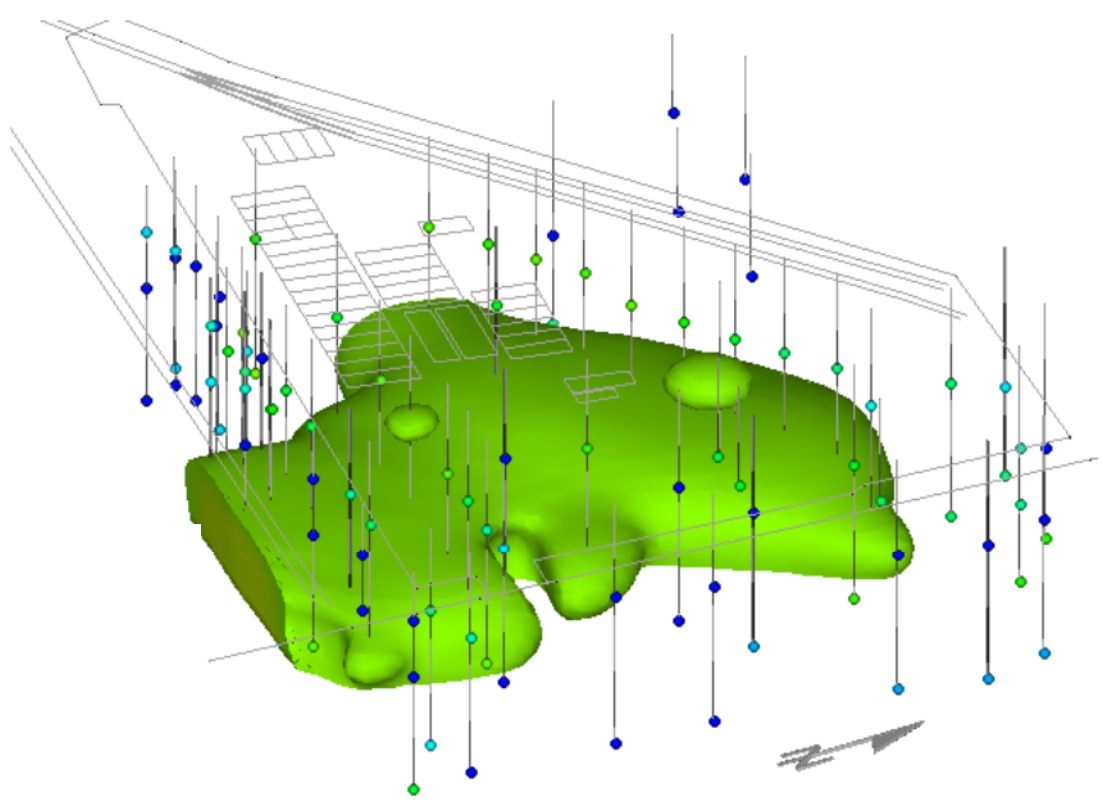
FIGURE 23

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0024-TOL.mxd





VOLUME CONCENTRATION EXCEEDING 500 UG/L



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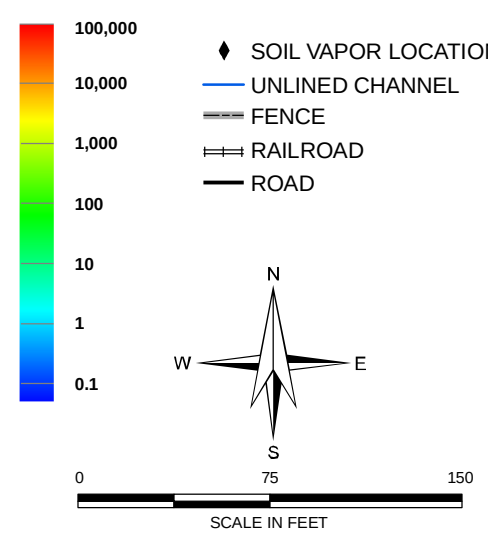

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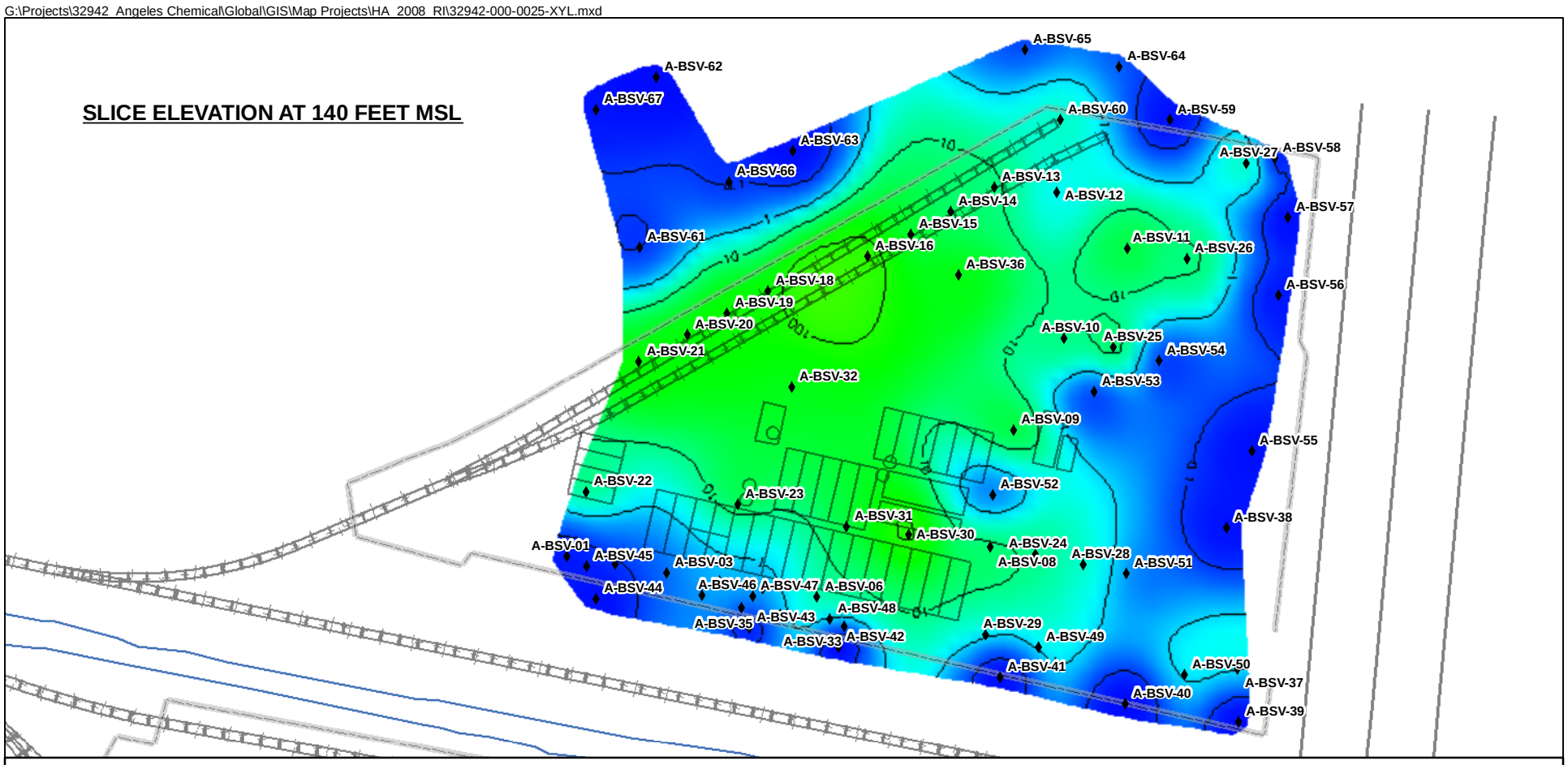
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

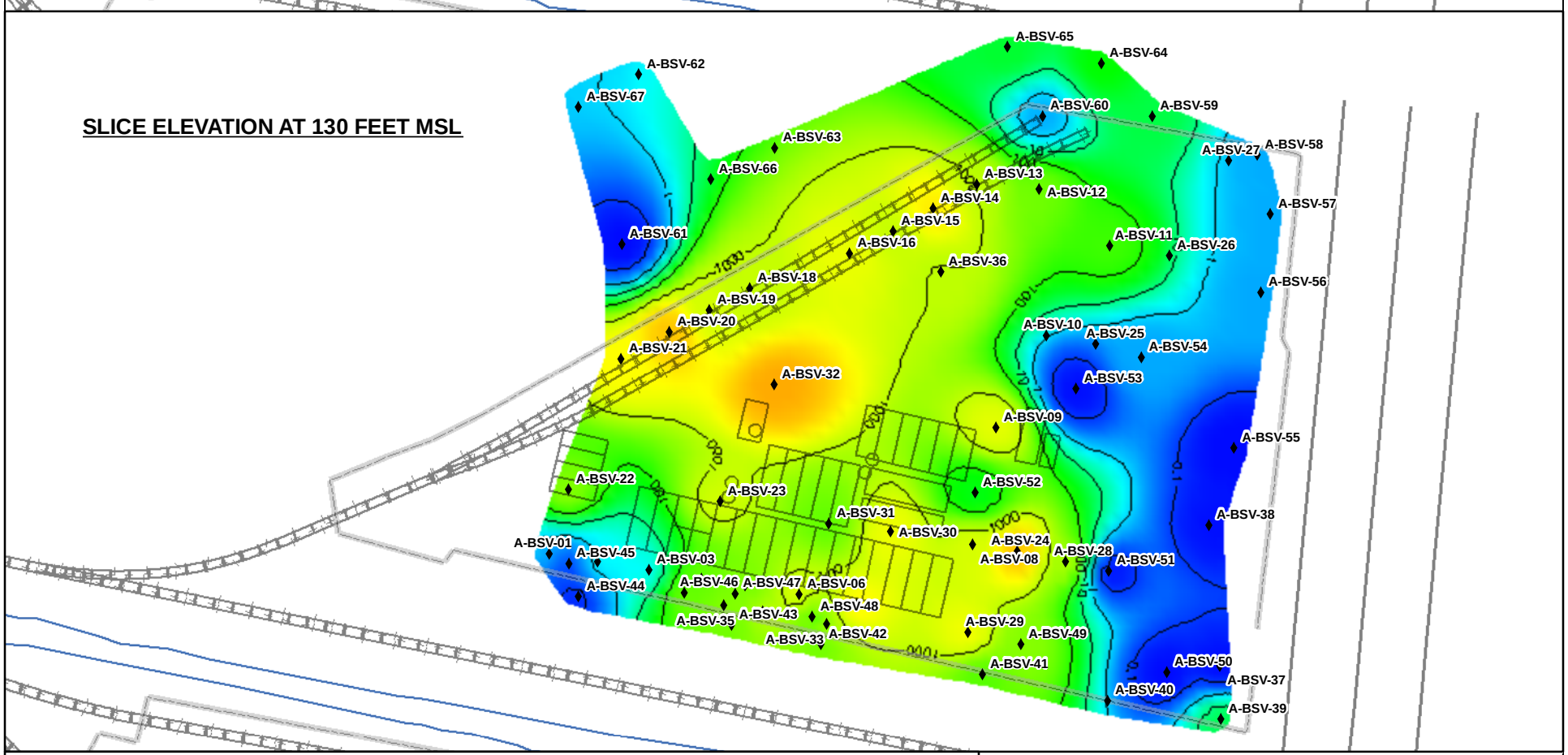
TOLUENE IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

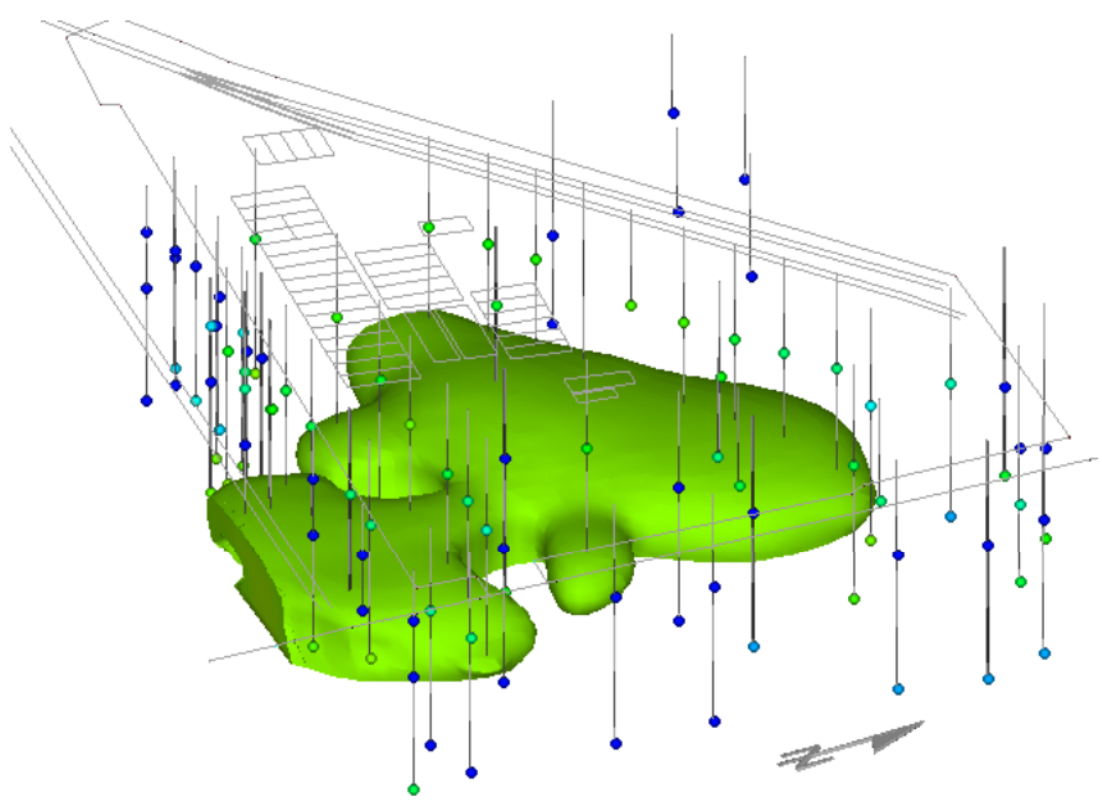
FIGURE 24

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0025-XYL.mxd





VOLUME CONCENTRATION EXCEEDING 500 UG/L



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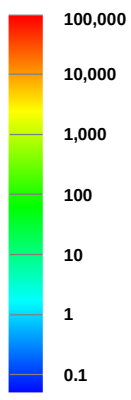
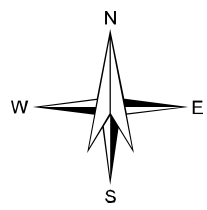


- SOIL VAPOR LOCATION
- UNLINED CHANNEL
- FENCE
- RAILROAD
- ROAD



0 75 150

SCALE IN FEET

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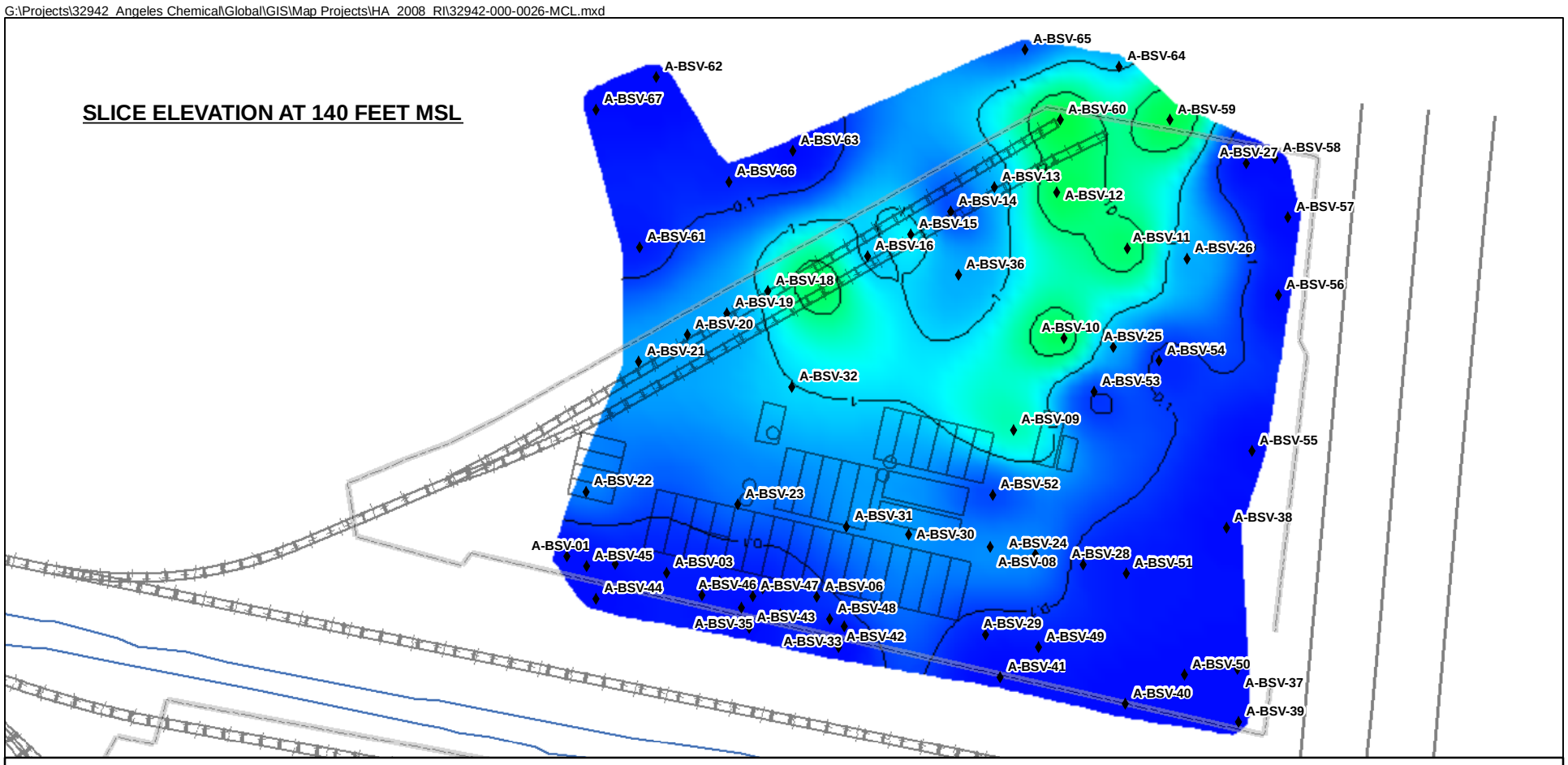
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

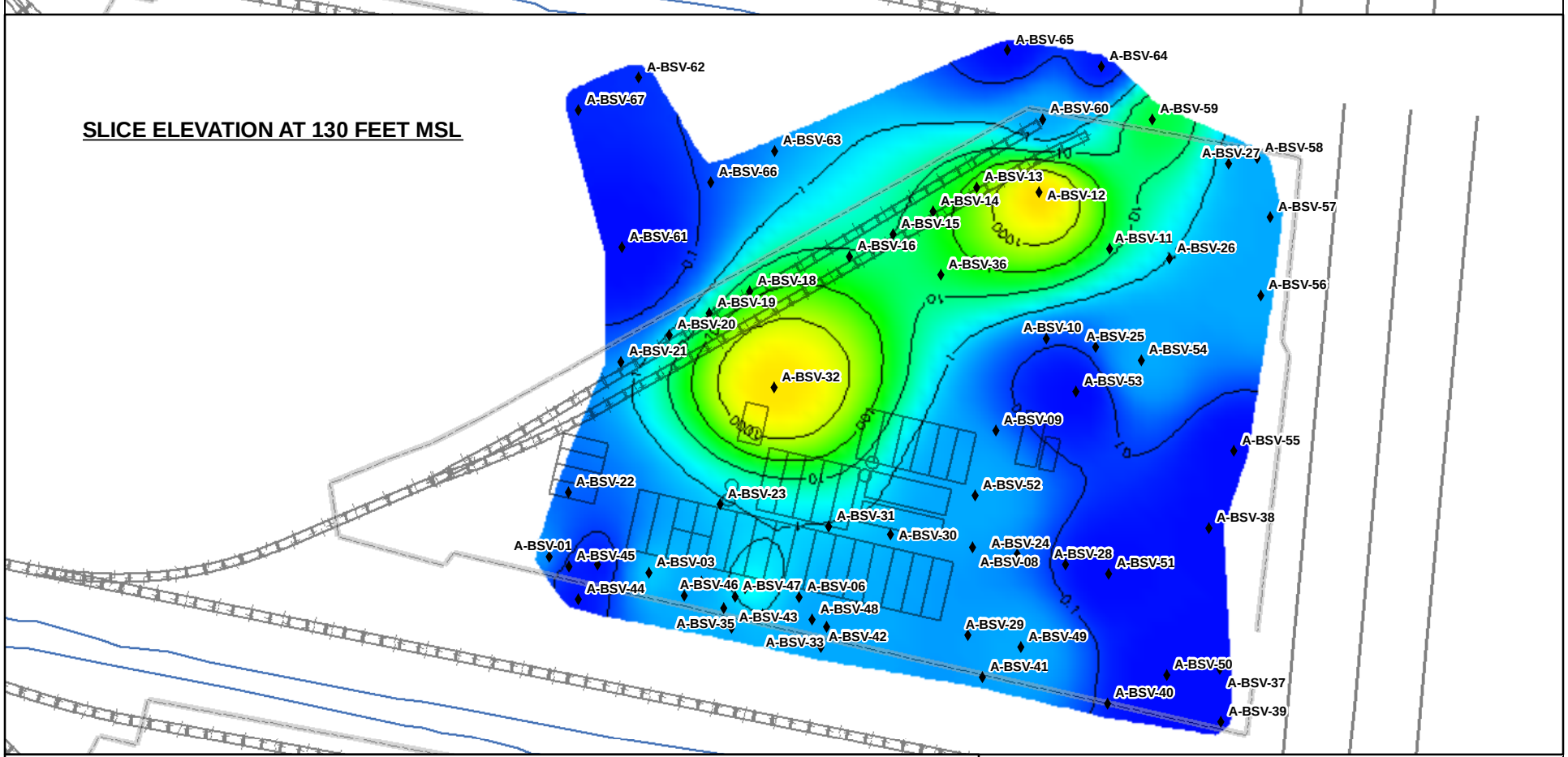
TOTAL XYLENES IN SOIL VAPOR
2000-2002 DATA

SCALE: AS SHOWN
AUGUST 2008

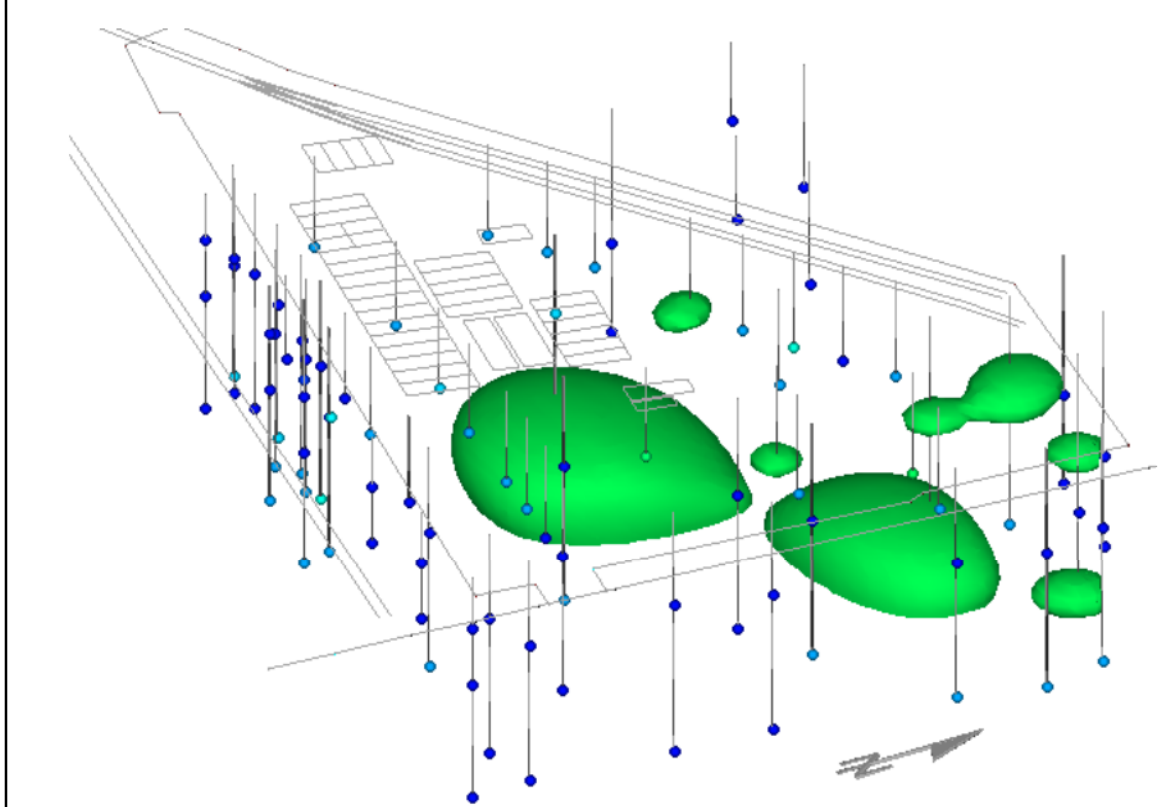
FIGURE 25

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0026-MCL.mxd

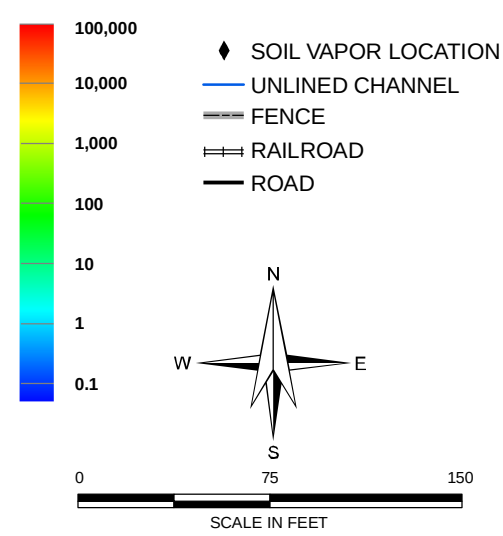




VOLUME CONCENTRATION EXCEEDING 20 UG/L



LEGEND



NOTES:
1. ALL VALUES REPORTED IN UNITS OF ug/L.
2. RESULTS REPORTED AS NON DETECT WITH VALUES <50 WERE INCLUDED IN THE INTERPOLATION OF CONCENTRATIONS AT 1/10 THE REPORTED NON DETECT VALUE.
3. RESULTS REPORTED AS NON DETECT WITH VALUES AT OR ABOVE 50 WERE NOT INCLUDED IN THE INTERPOLATION OF CONCENTRATIONS.

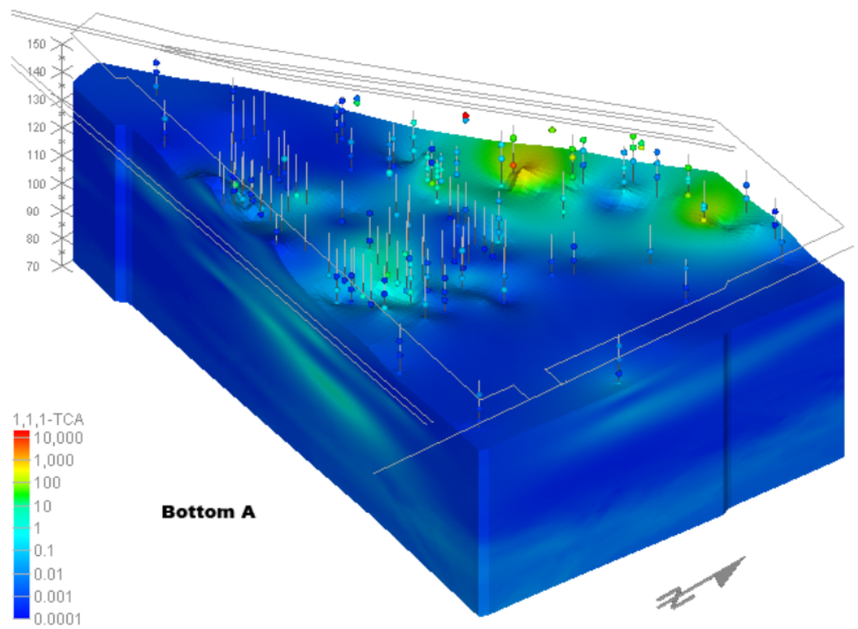
HALEY & ALDRICH

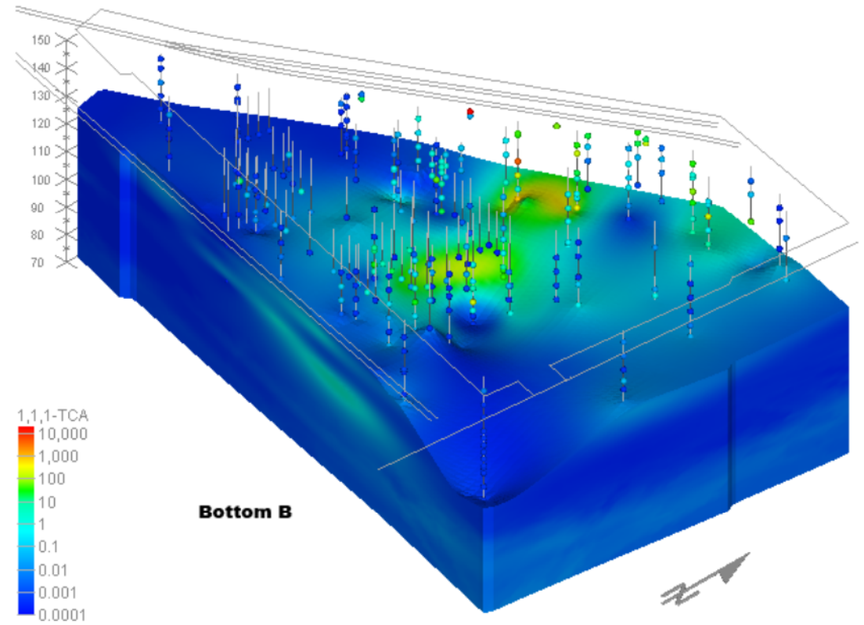
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

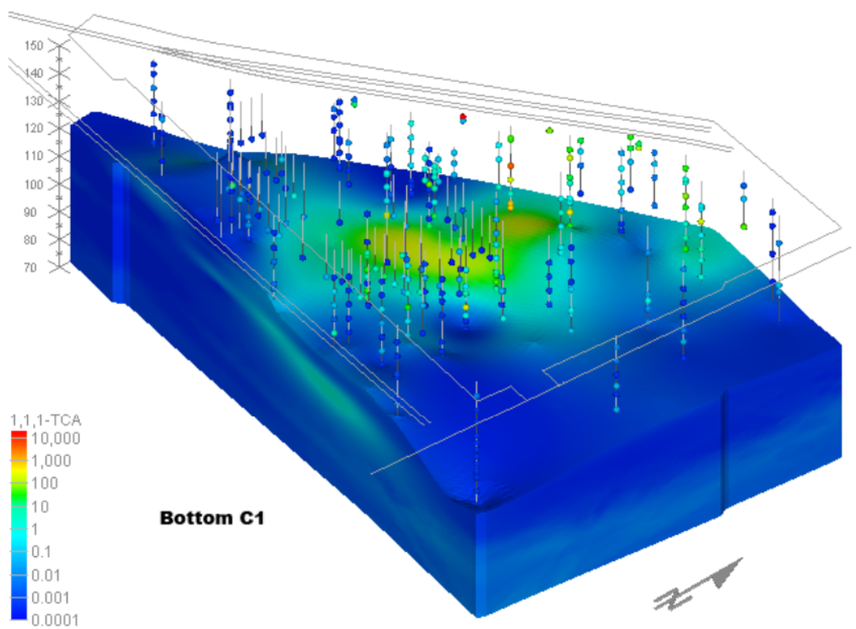
METHYLENE CHLORIDE
IN SOIL VAPOR
2000-2002 DATA

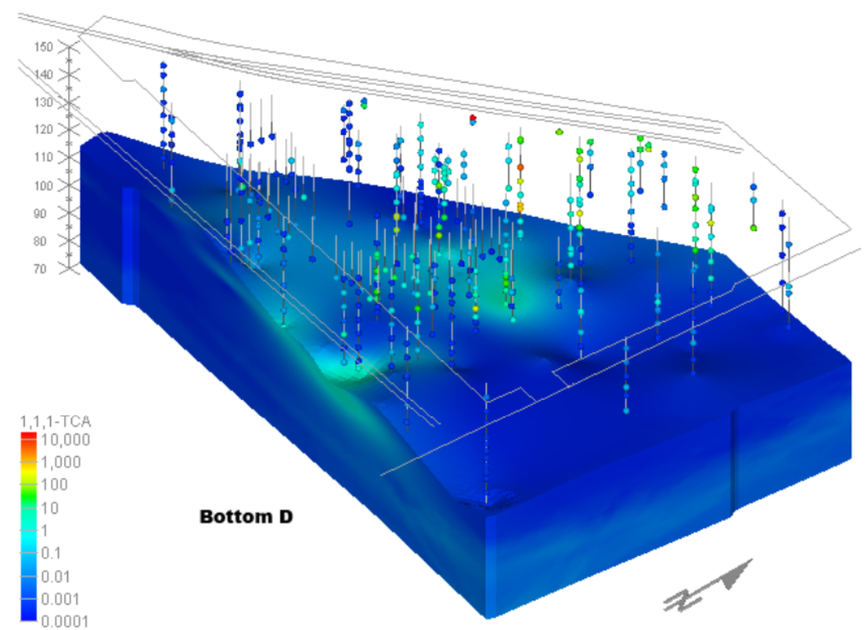
SCALE: AS SHOWN
AUGUST 2008

FIGURE 26









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

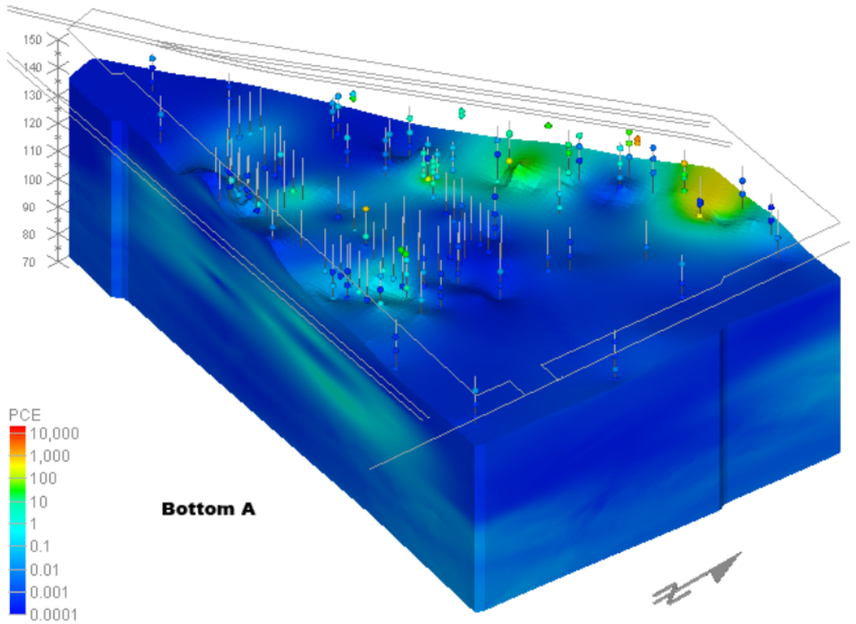
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

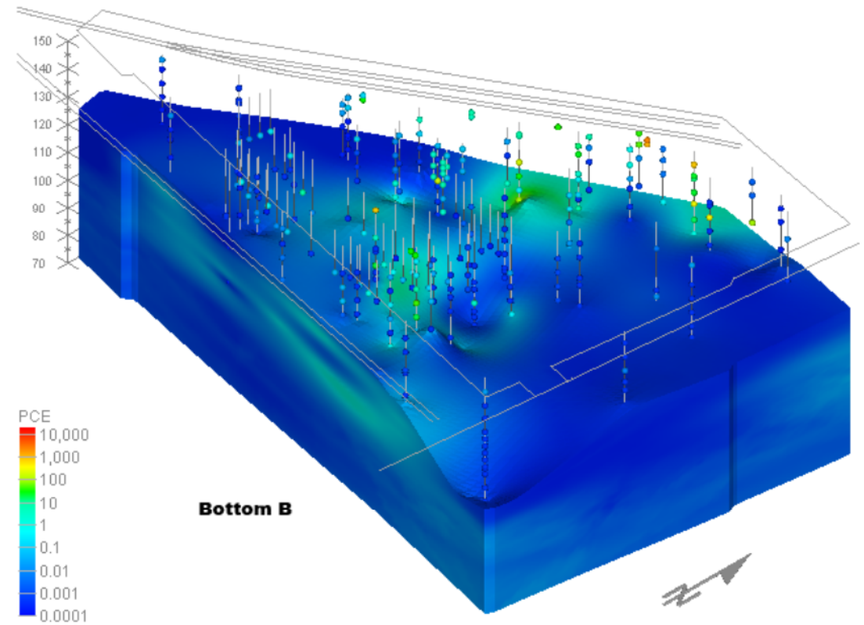
1,1,1-TCA IN SOIL

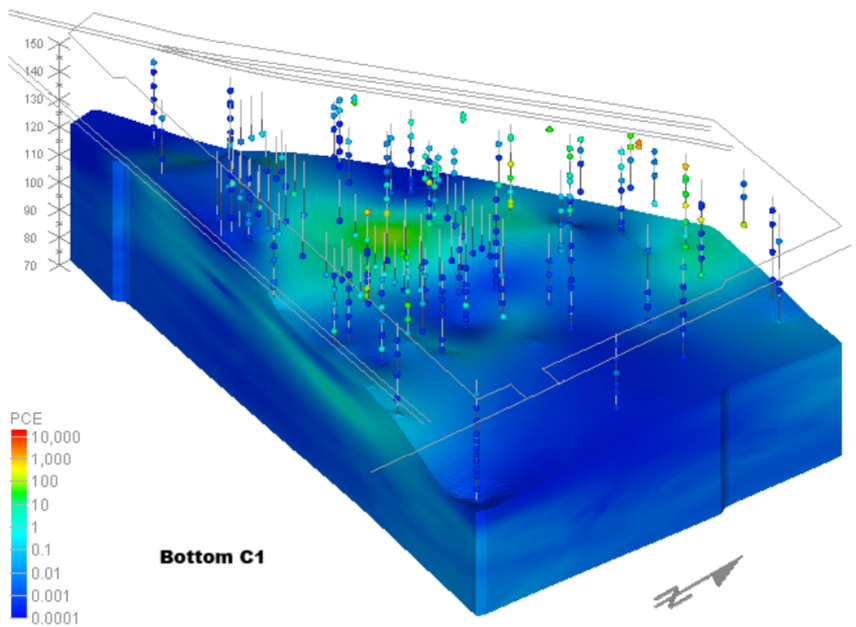
SCALE: AS SHOWN
AUGUST 2008

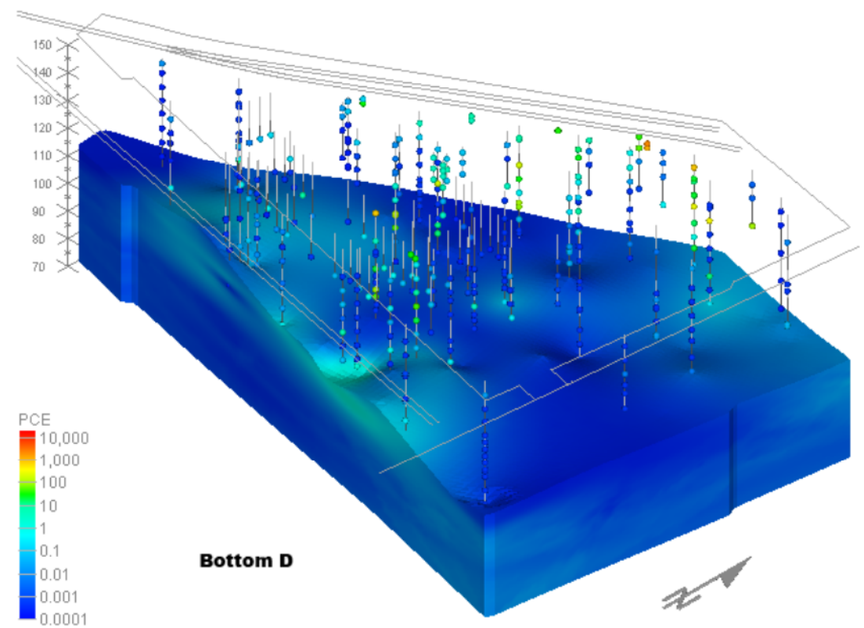
FIGURE 27

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_Rl\32942-000-0027-TCA_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

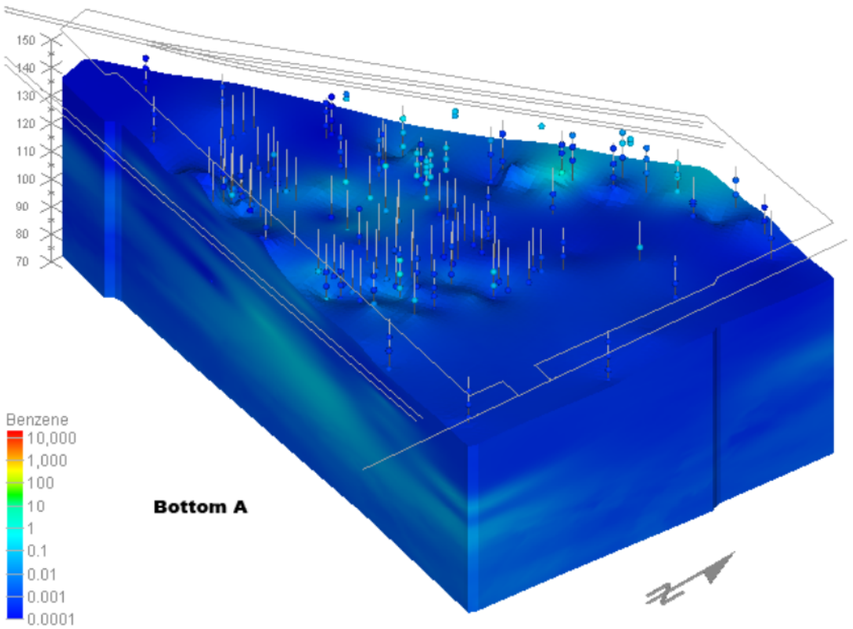
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

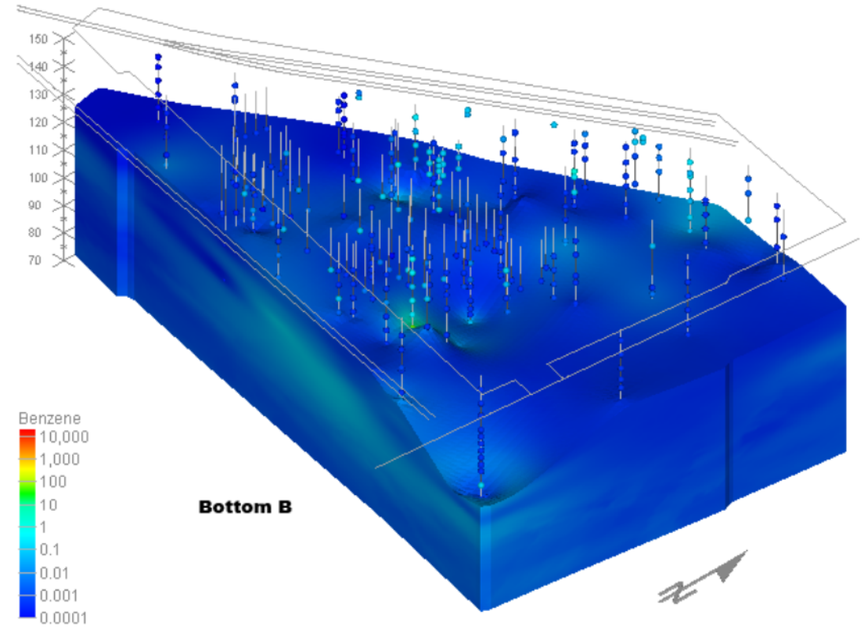
PCE IN SOIL

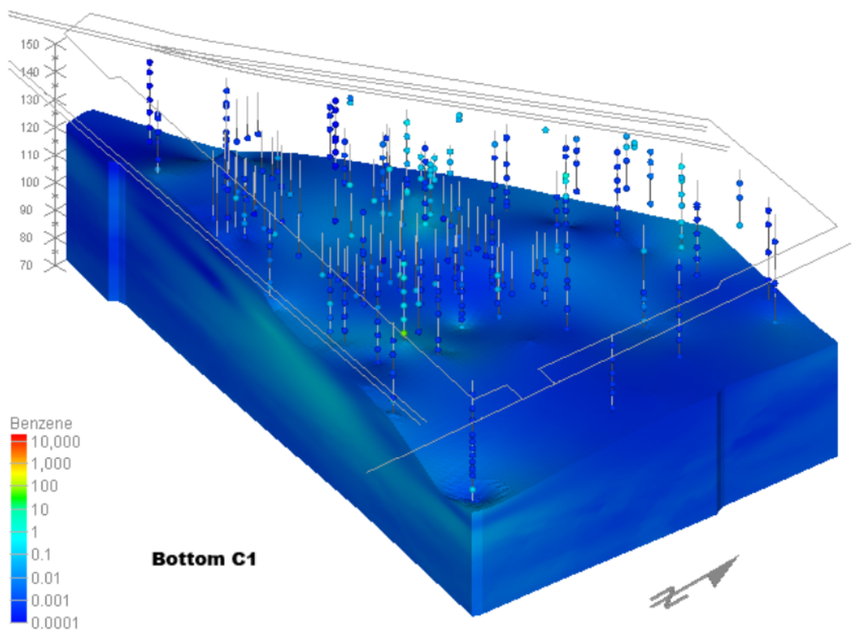
SCALE: AS SHOWN
AUGUST 2008

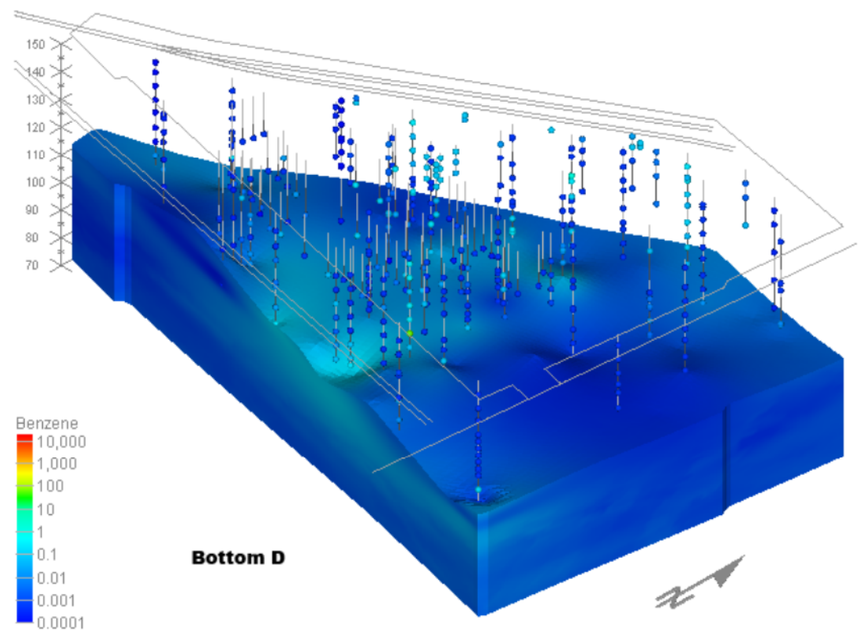
FIGURE 28

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0028-PCE_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

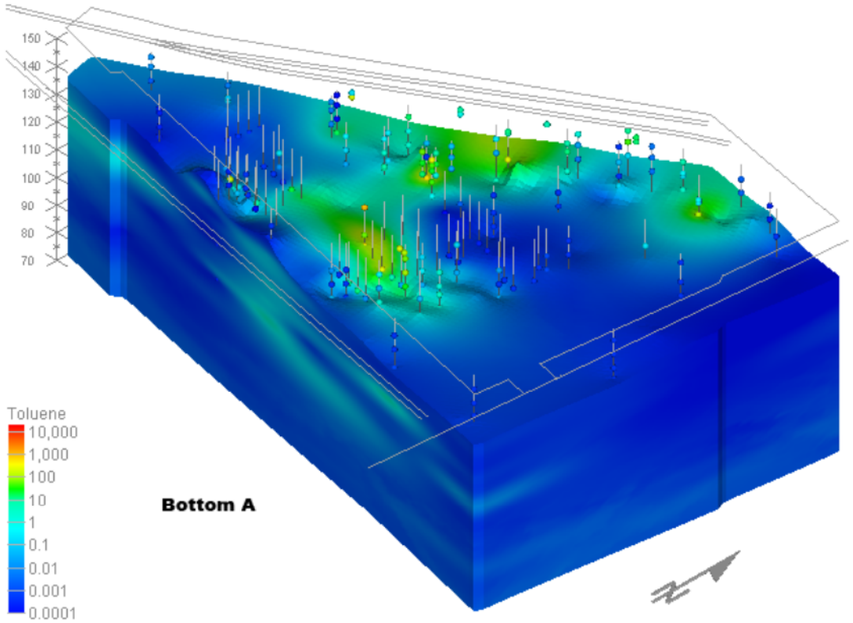
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

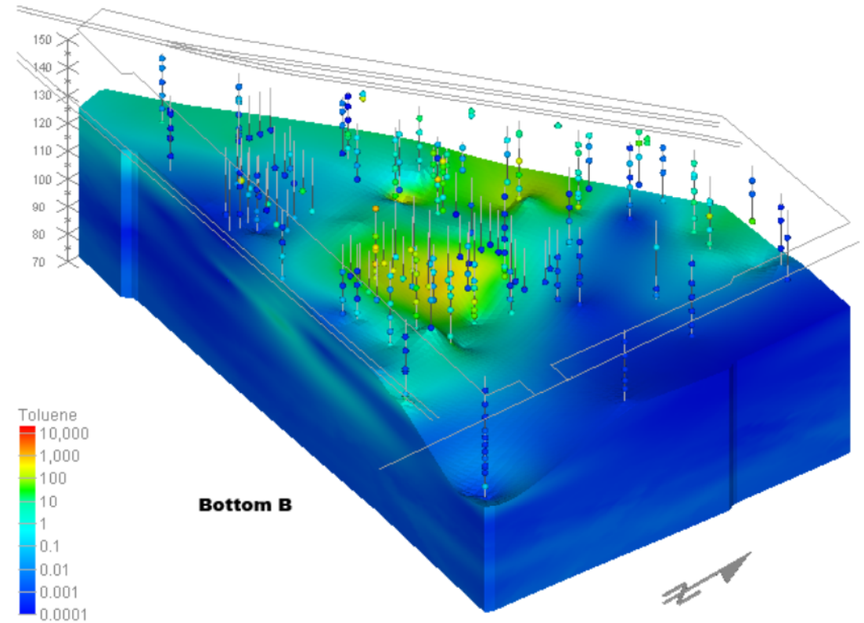
BENZENE IN SOIL

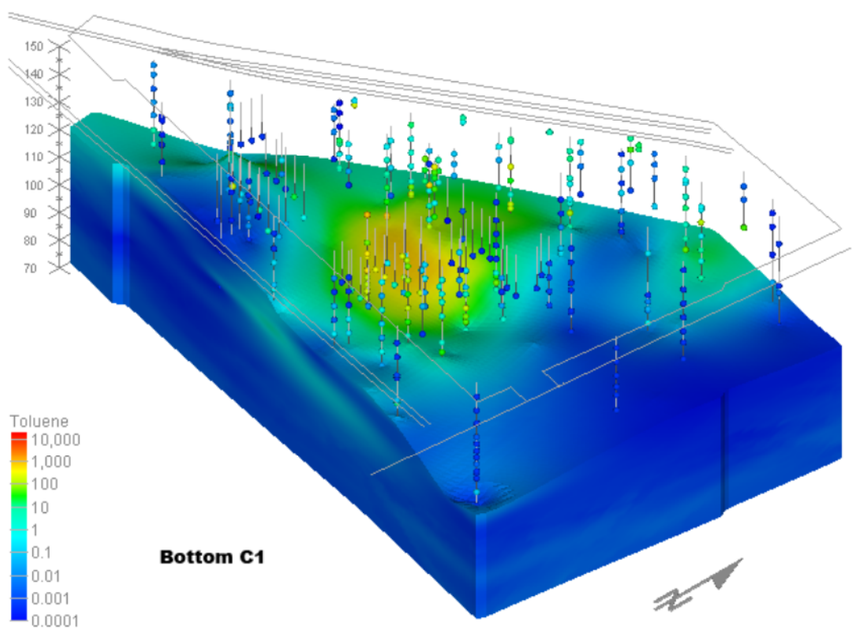
SCALE: AS SHOWN
AUGUST 2008

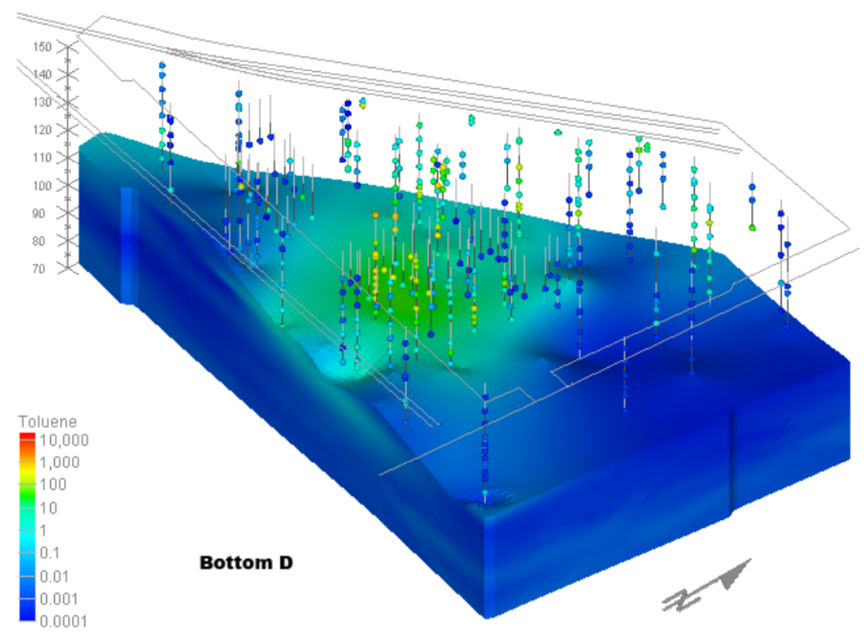
FIGURE 29

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0029-BEN_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

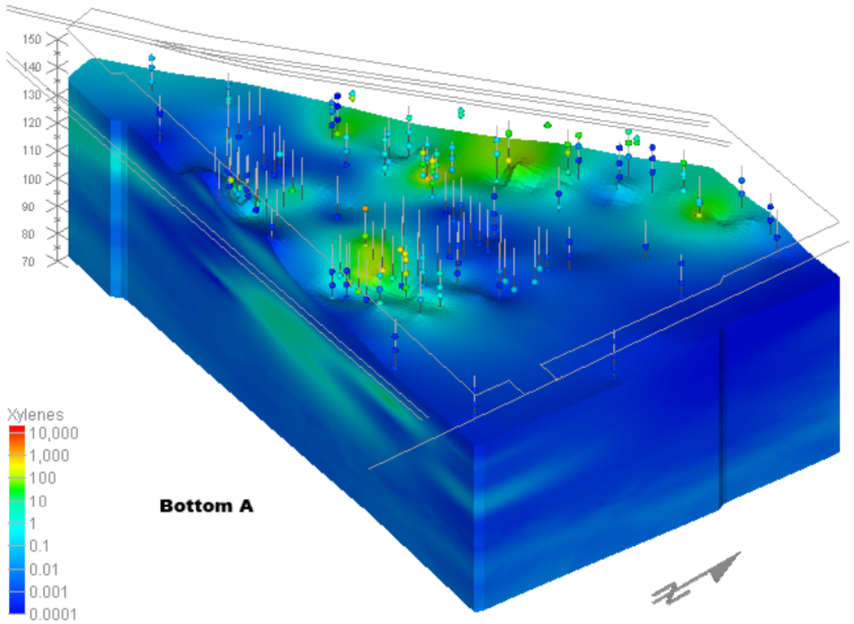
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

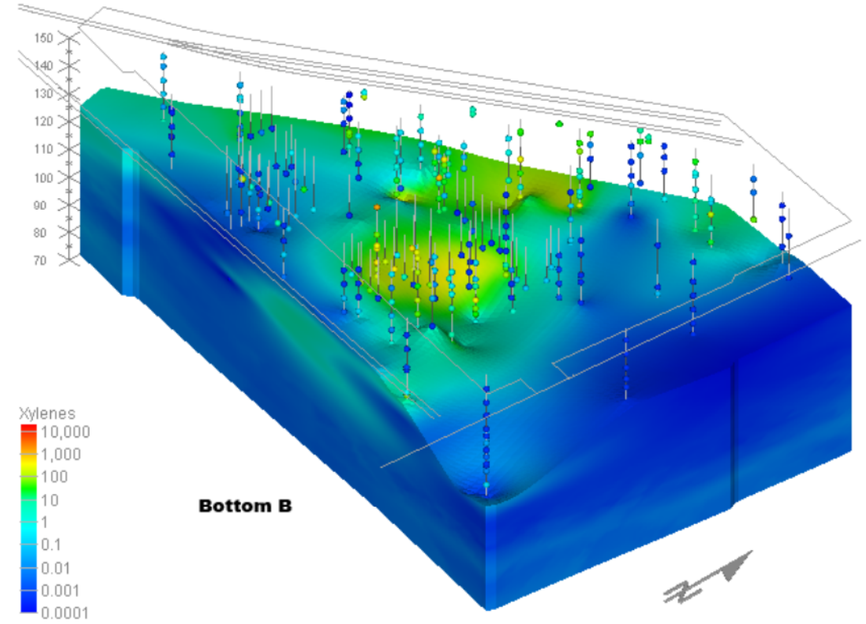
TOLUENE IN SOIL

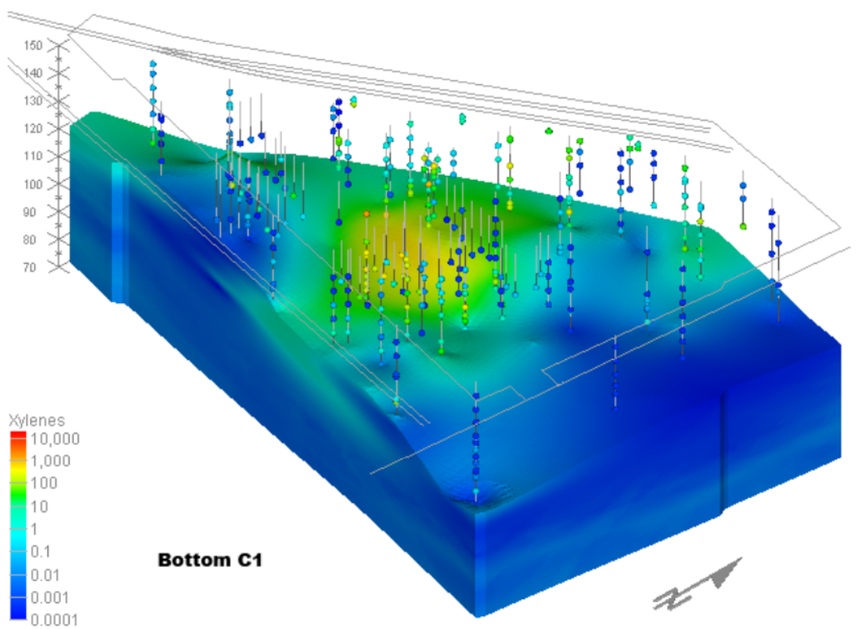
SCALE: AS SHOWN
AUGUST 2008

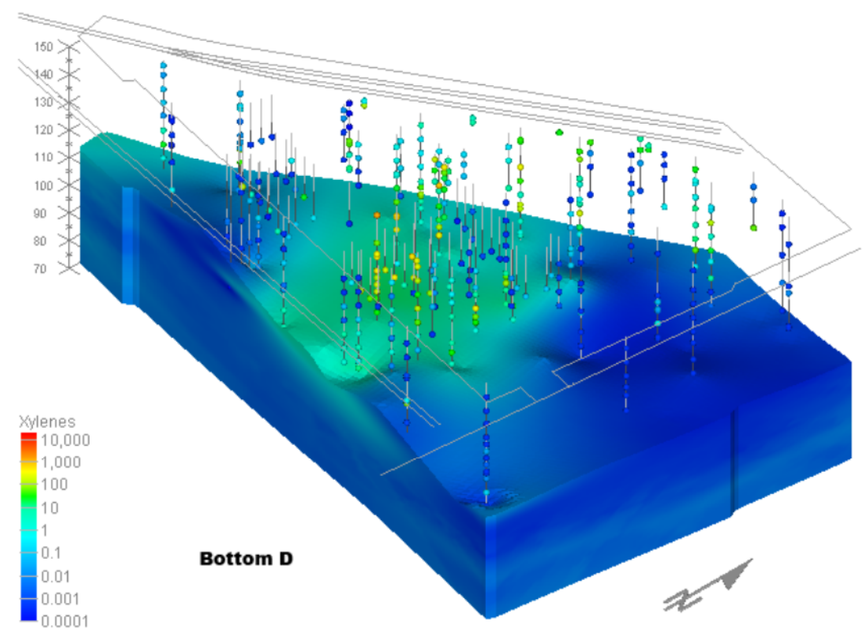
FIGURE 30

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0030-TOL_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

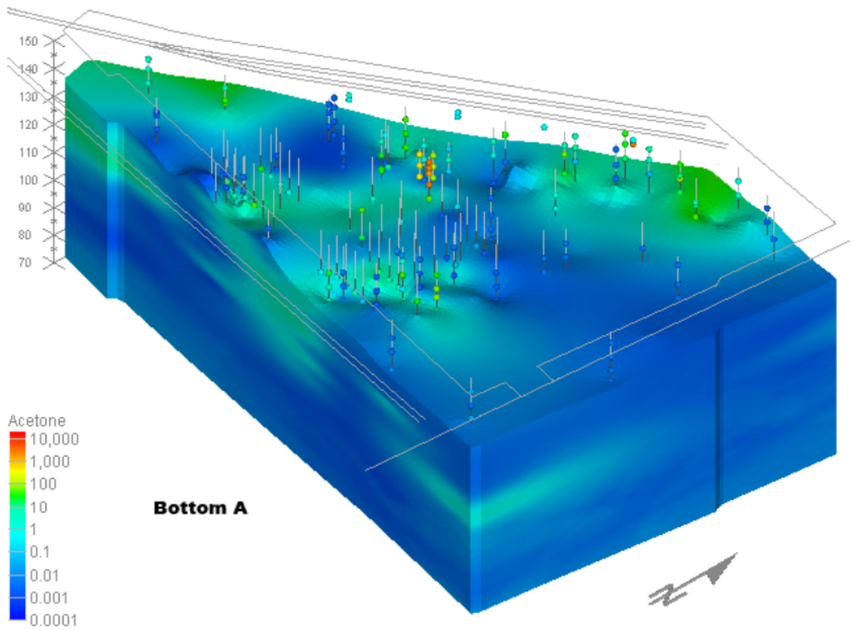
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

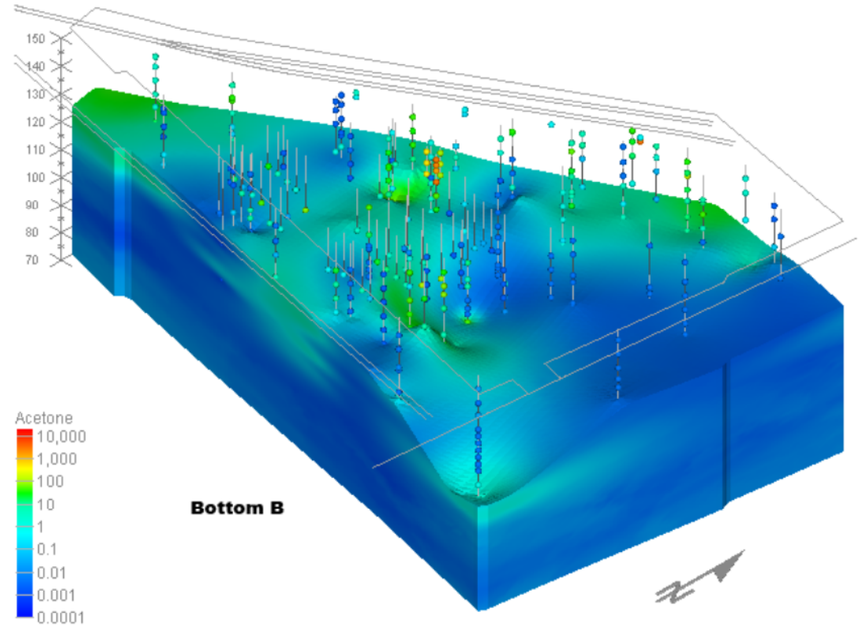
TOTAL XYLENES IN SOIL

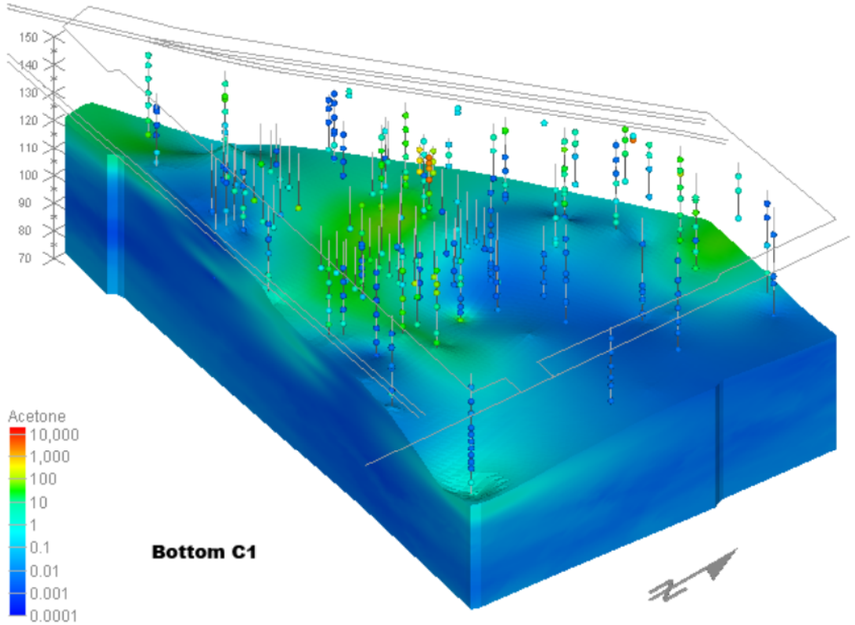
SCALE: AS SHOWN
AUGUST 2008

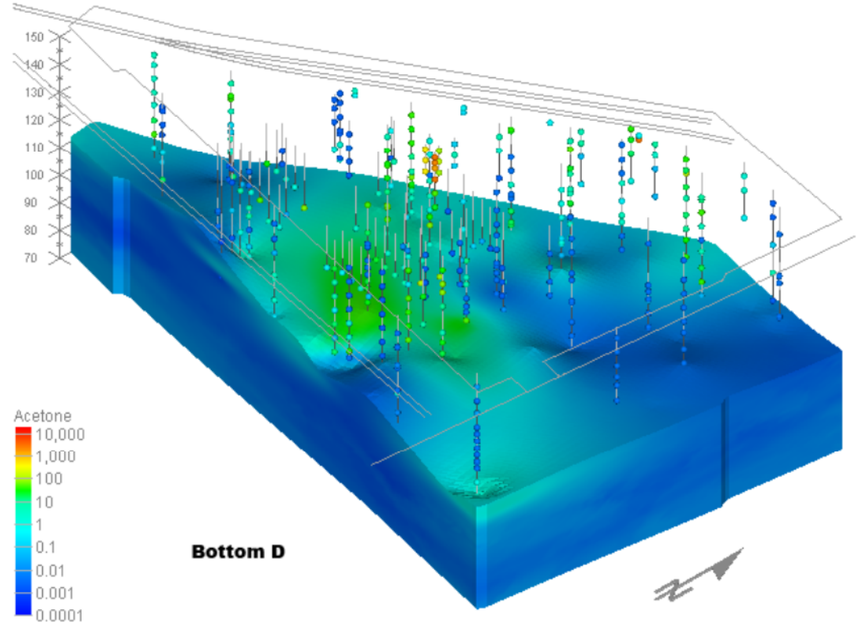
FIGURE 31

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0031-XYL_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

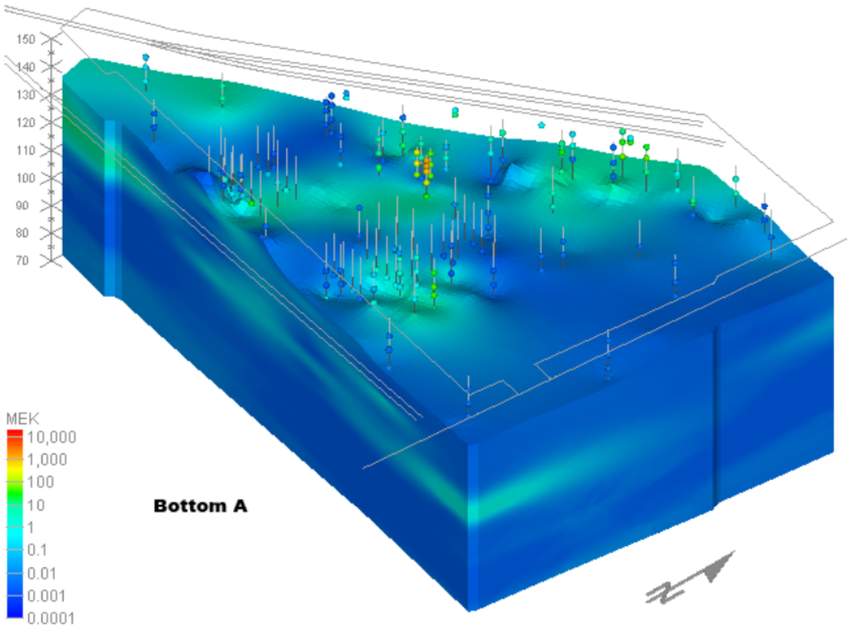
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

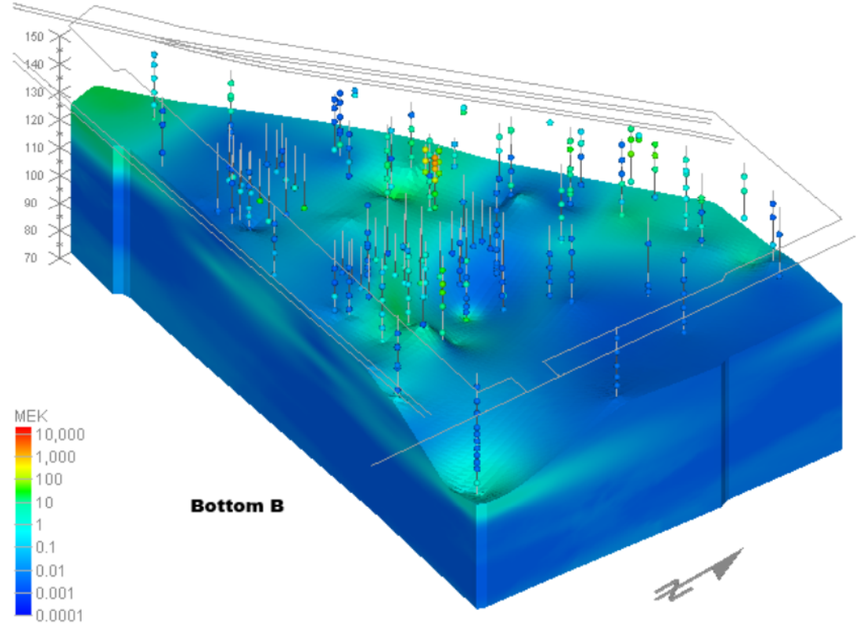
ACETONE IN SOIL

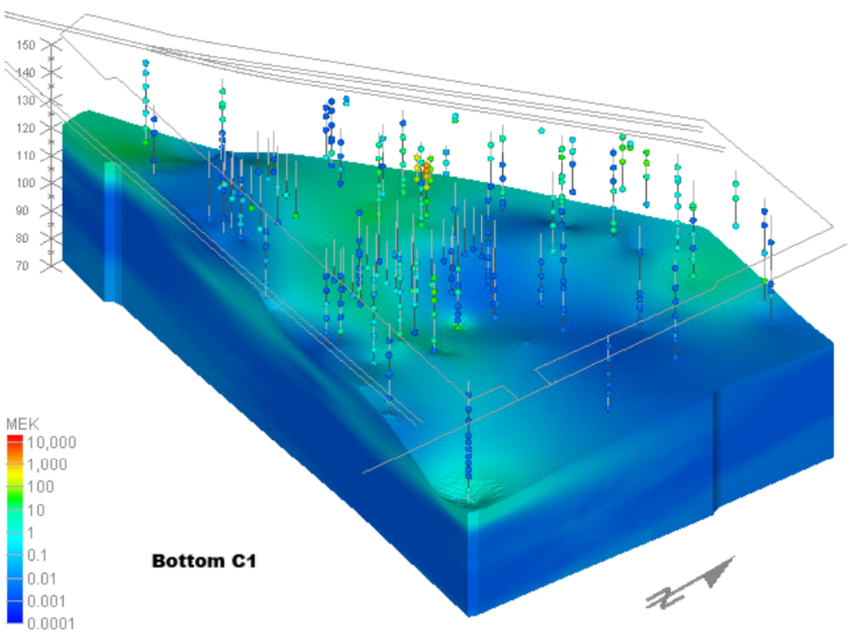
SCALE: AS SHOWN
AUGUST 2008

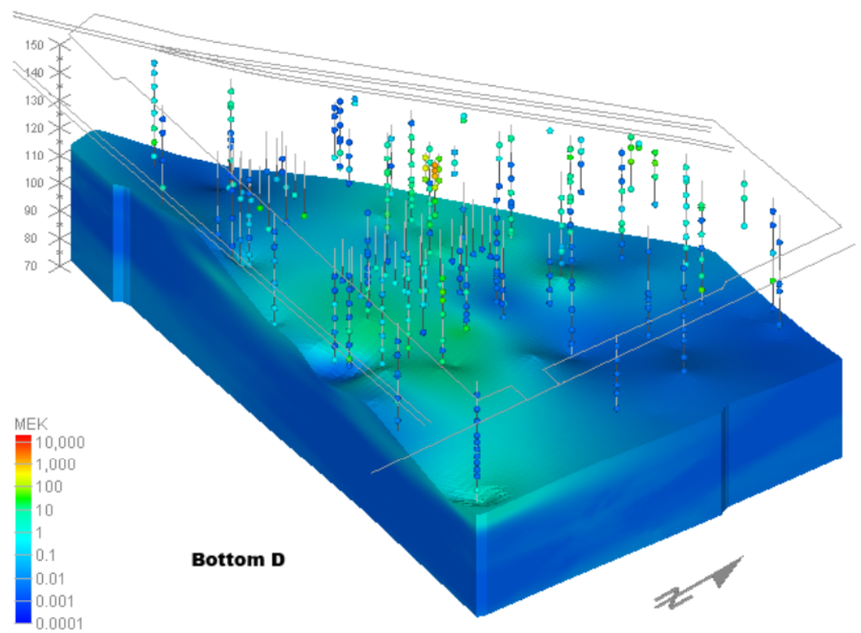
FIGURE 32

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0032-ACE_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

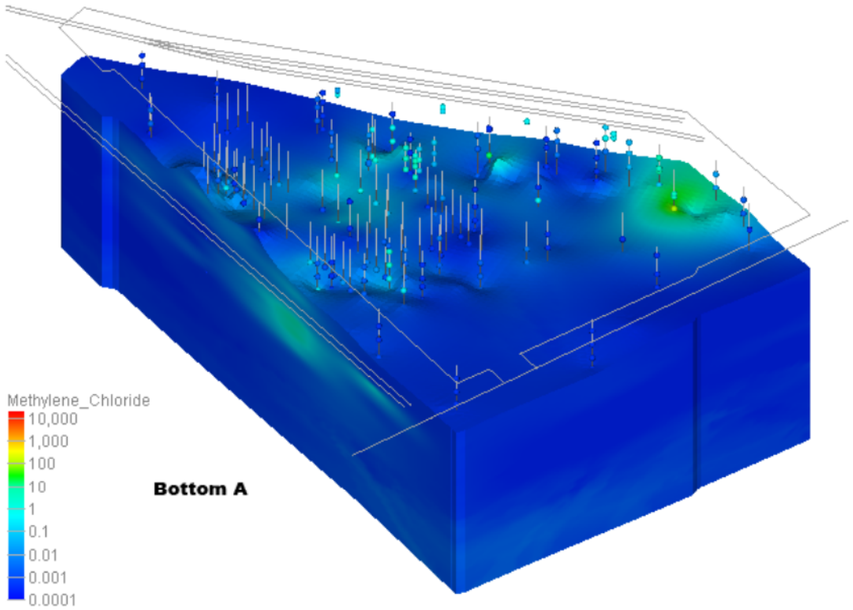
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

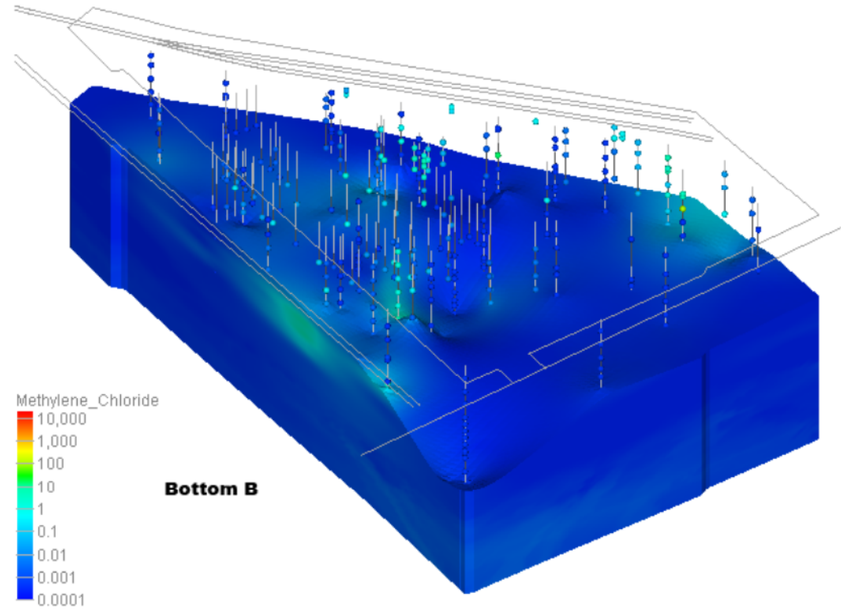
METHYL ETHYL KETONE
(MEK) IN SOIL

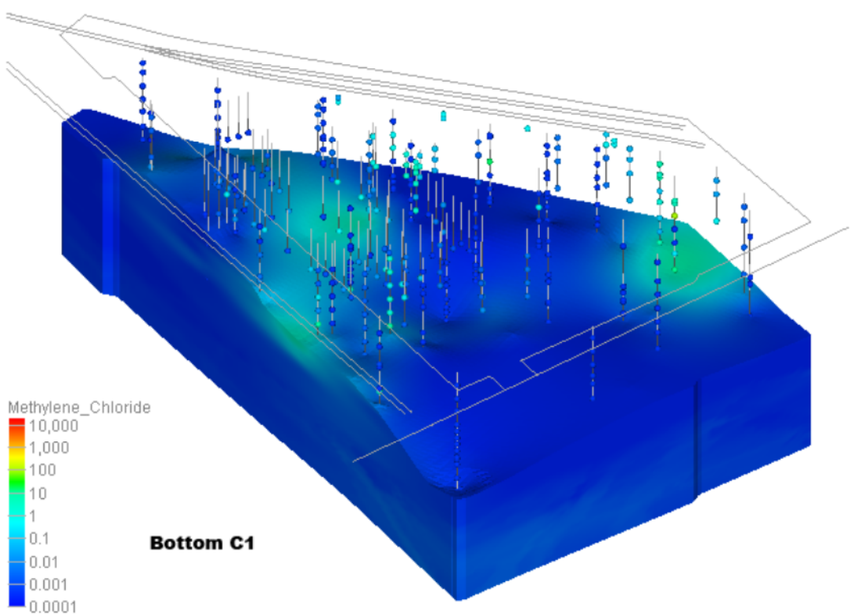
SCALE: AS SHOWN
AUGUST 2008

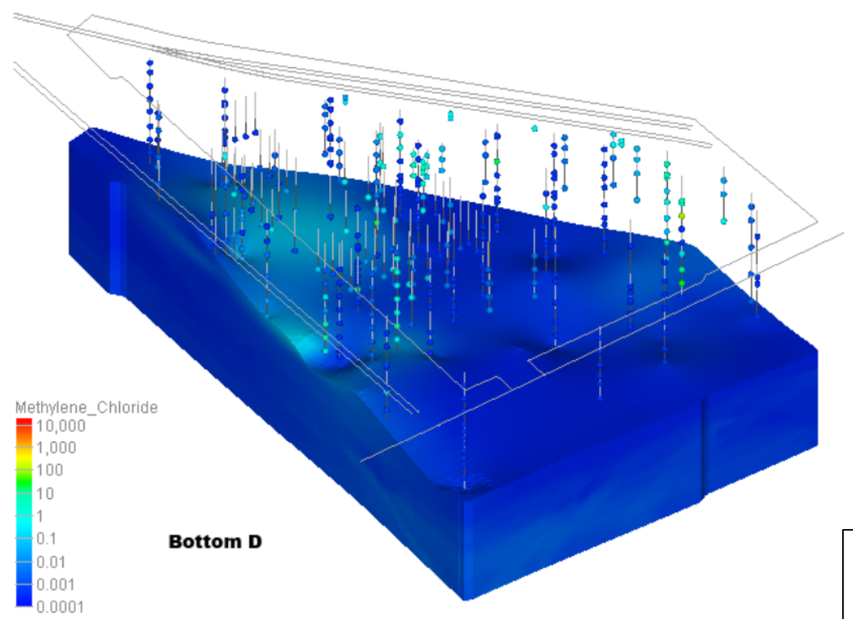
FIGURE 33

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0033-MEK_SO.mxd









NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. VIEWS ARE TOWARDS THE NORTHWEST.
3. VERTICAL SCALE REPORTED IN ELEVATION ABOVE MEAN SEA LEVEL, IN FEET.
4. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

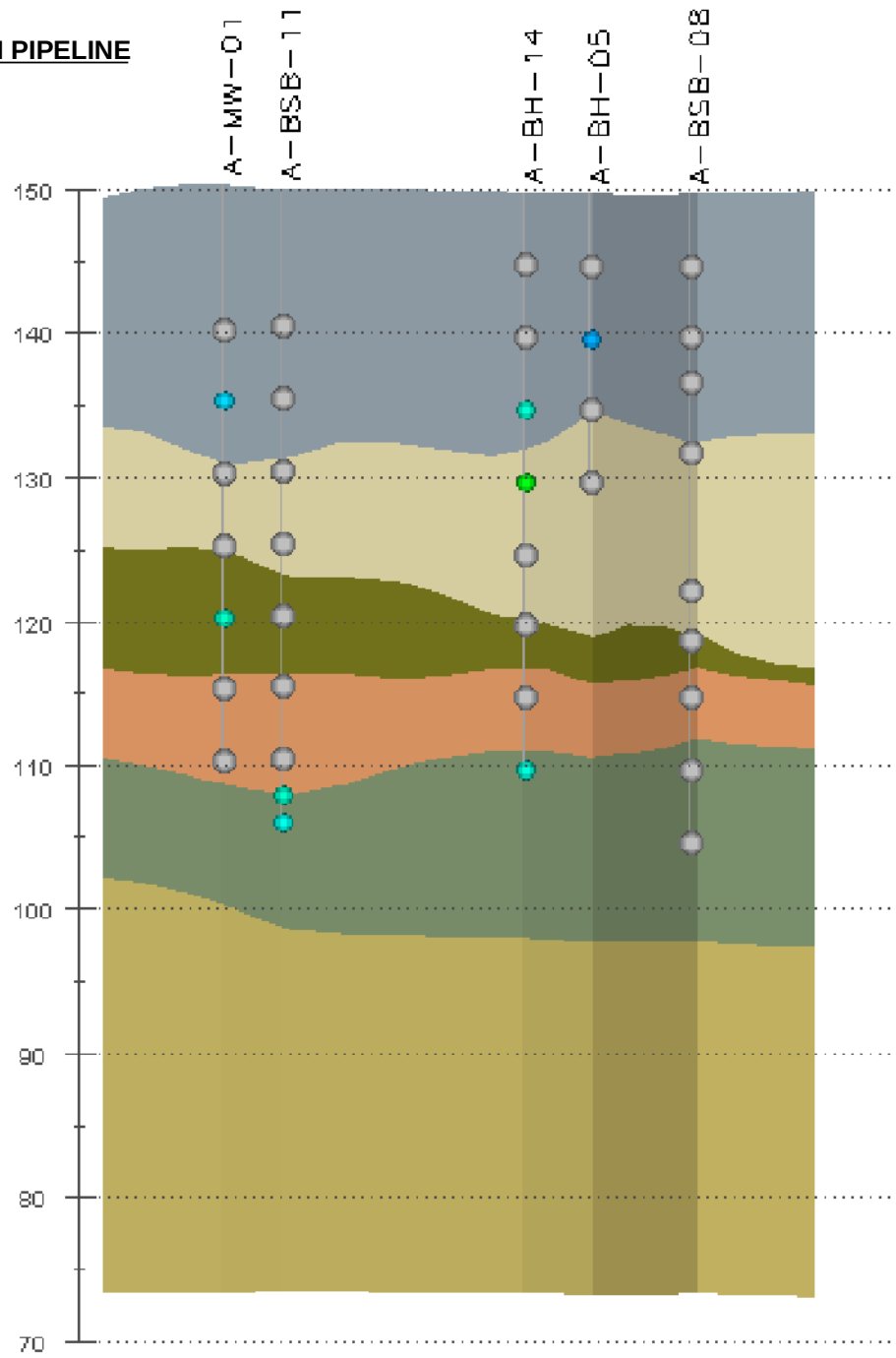
METHYLENE CHLORIDE IN SOIL

SCALE: AS SHOWN
AUGUST 2008

FIGURE 34

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_Rl\32942-000-0034-MCL_SO.mxd

BROKEN PIPELINE



LEGEND

Hydrogeologic Units

- Unit A Fill to silty sand to clayey silt
- Unit B Sand
- Unit C1 Silt
- Unit D Silty sand
- Unit C2 Clayey silt
- Unit E Sand

Concentration (mg/KG)

1,1,1-TCA

10,000
1,000
100
10
1
0.1
0.01
0.001
0.0001

NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. GREY DOTS CORRESPOND TO NON-DETECT RESULTS THAT ARE REPORTED BELOW THE LABORATORY DETECTION LIMIT.
3. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

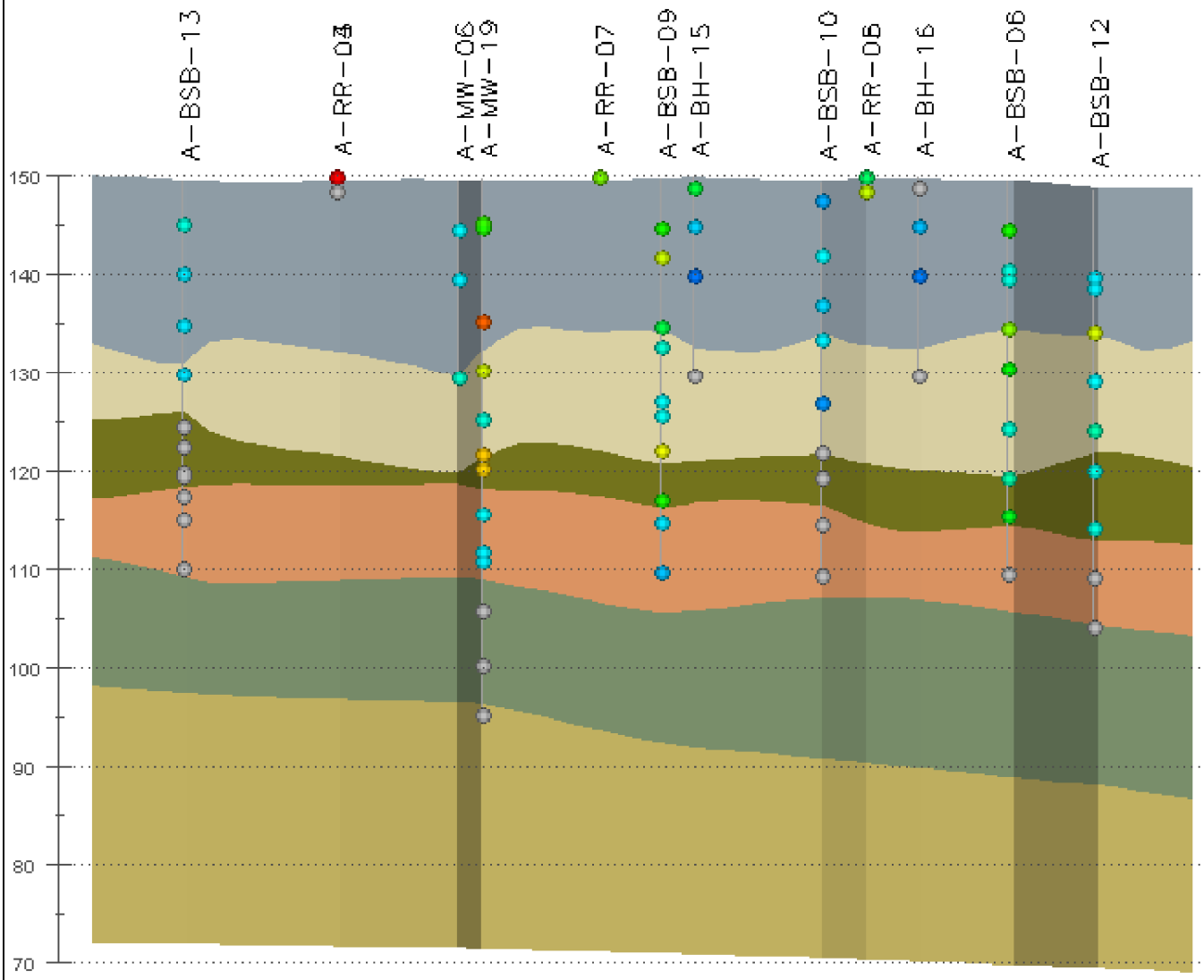
VERTICAL PROFILE OF 1,1,1-TCA
IN THE BROKEN PIPELINE AREA

SCALE: UNKOWN
AUGUST 2008

FIGURE 35

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0035-PLTCA.mxd

RAILROAD TRACKS



LEGEND

Hydrogeologic Units

- Unit A Fill to silty sand to clayey silt
- Unit B Sand
- Unit C1 Silt
- Unit D Silty sand
- Unit C2 Clayey silt
- Unit E Sand

Concentration (mg/KG)

1,1,1-TCA

10,000
1,000
100
10
1
0.1
0.01
0.001
0.0001

NOTES:
1. ALL VALUES REPORTED IN UNITS OF mg/Kg.
2. GREY DOTS CORRESPOND TO NON-DETECT RESULTS THAT ARE REPORTED BELOW THE LABORATORY DETECTION LIMIT.
3. VERTICAL EXAGGERATION IS 2:1.

HALEY & ALDRICH

FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

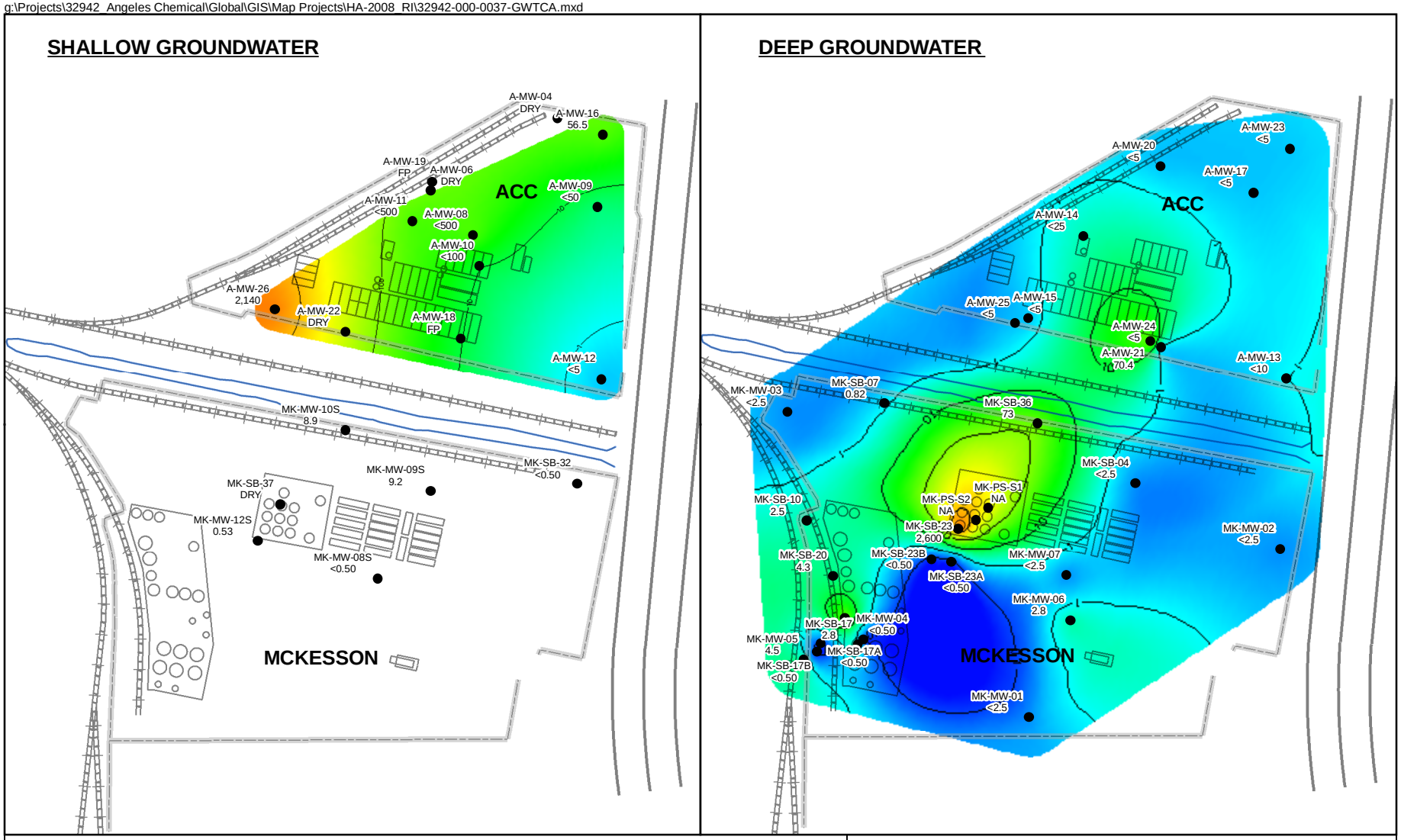
VERTICAL PROFILE OF 1,1,1-TCA ALONG THE RAILRROAD TRACKS

SCALE: UNKOWN
AUGUST 2008

FIGURE 36

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0036-RRTCA.mxd

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0037-GWTCA.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W
E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

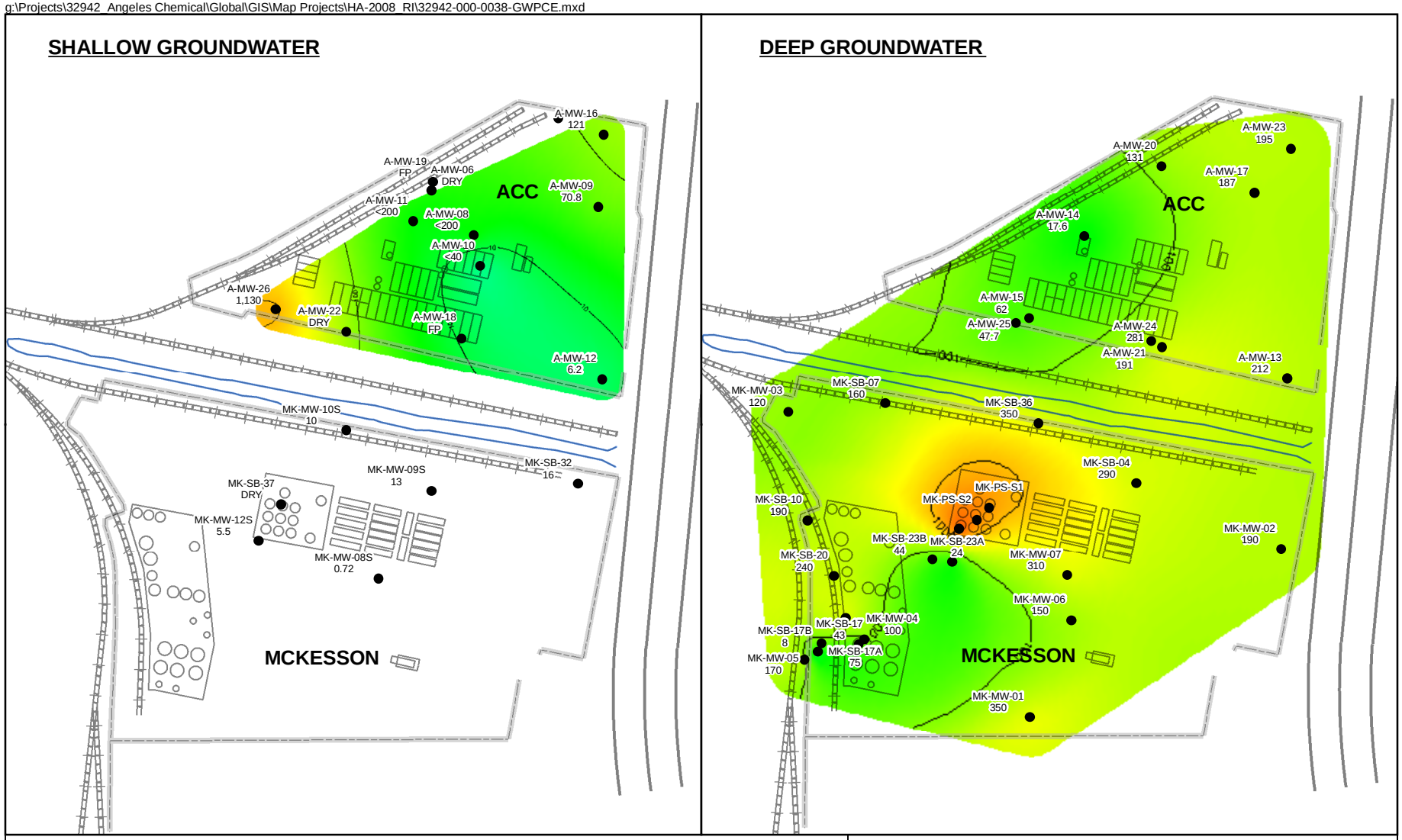
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

1,1,1-TCA IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 37

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0038-GWPCE.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W
E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

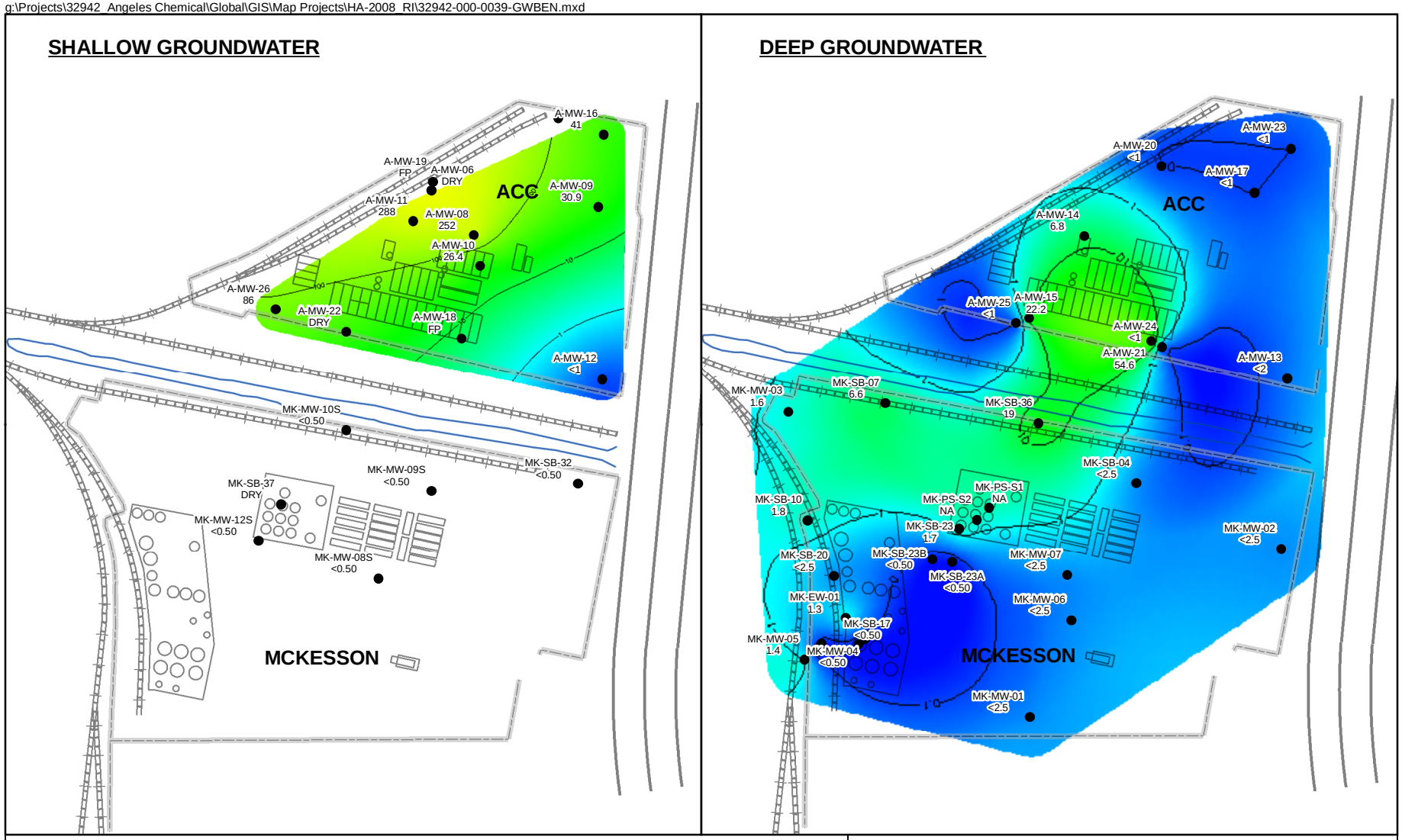
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

TETRACHLOROETHENE (PCE)
IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 38

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0039-GWBEN.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:
1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

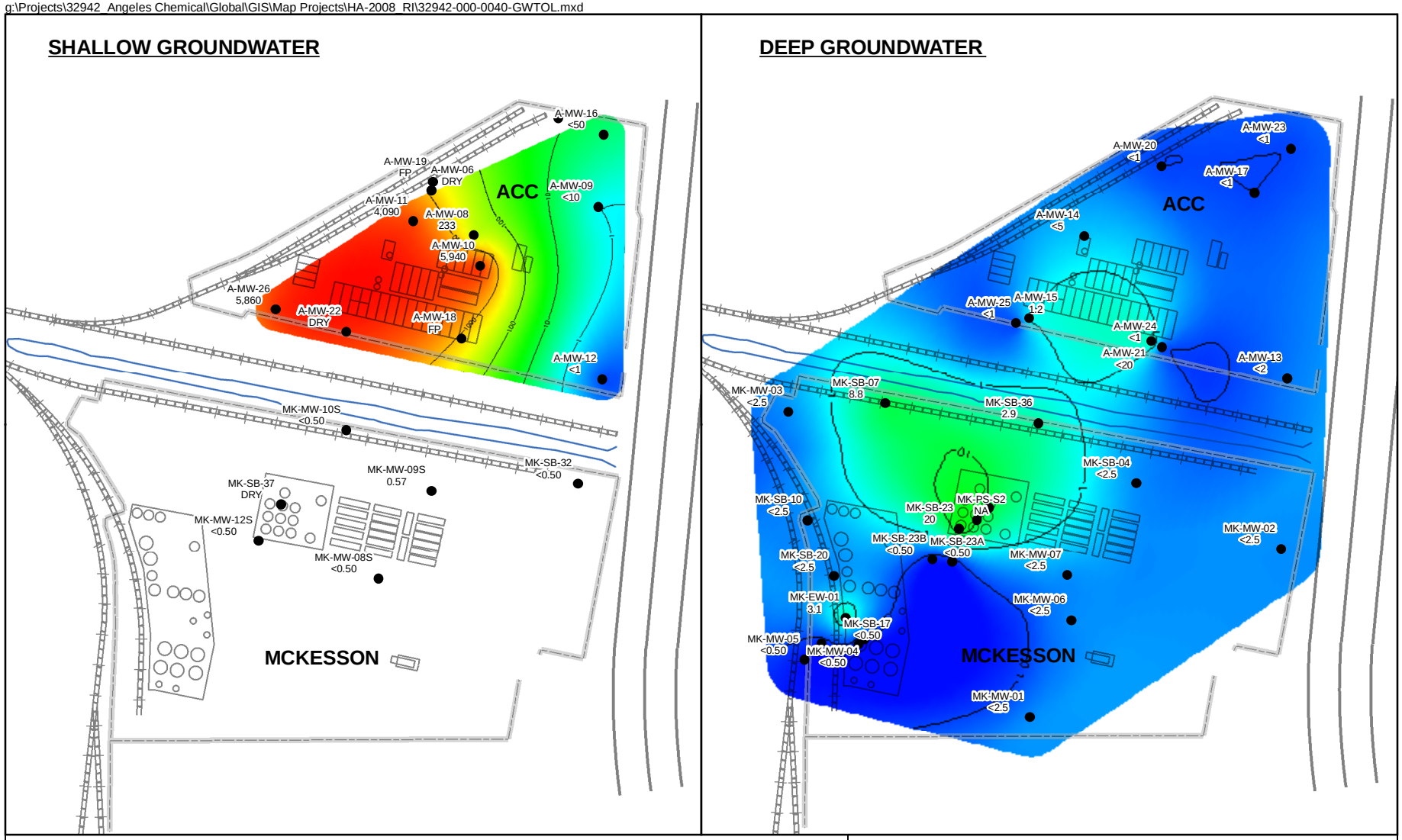
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

BENZENE IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 39

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0040-GWTOL.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

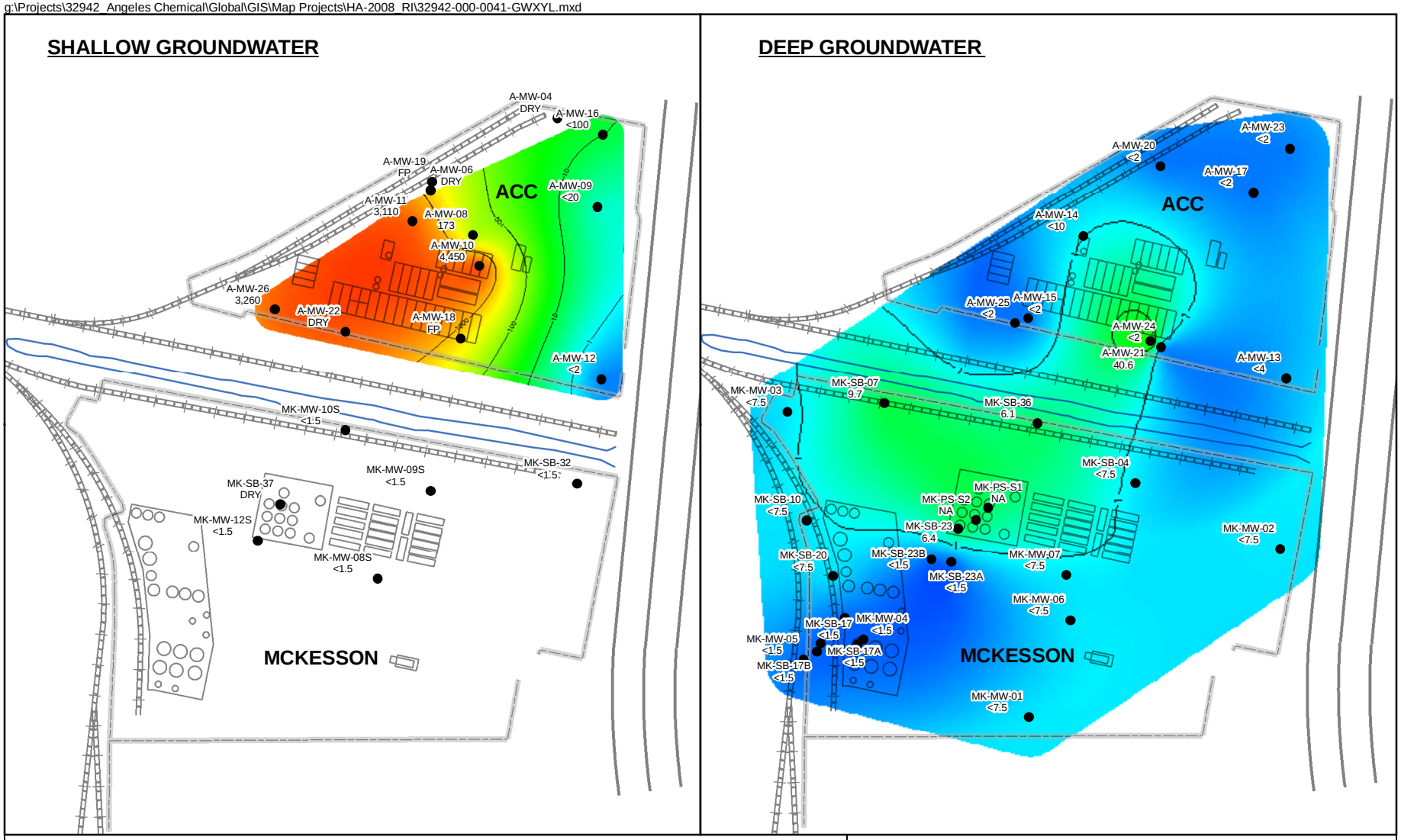
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

TOLUENE IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 40

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0041-GWXYL.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W
E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

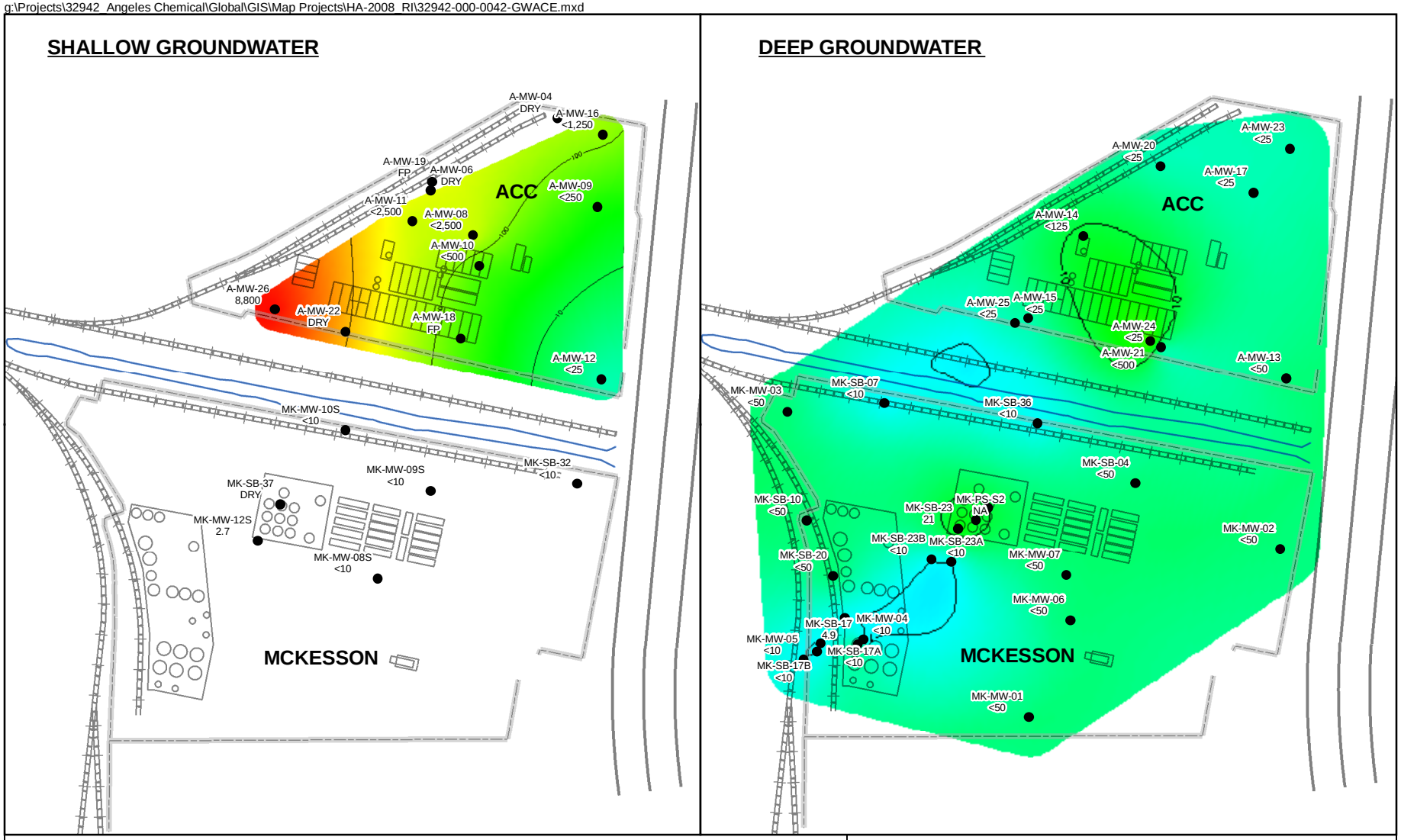
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

TOTAL XYLENES IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 41

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0042-GWACE.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

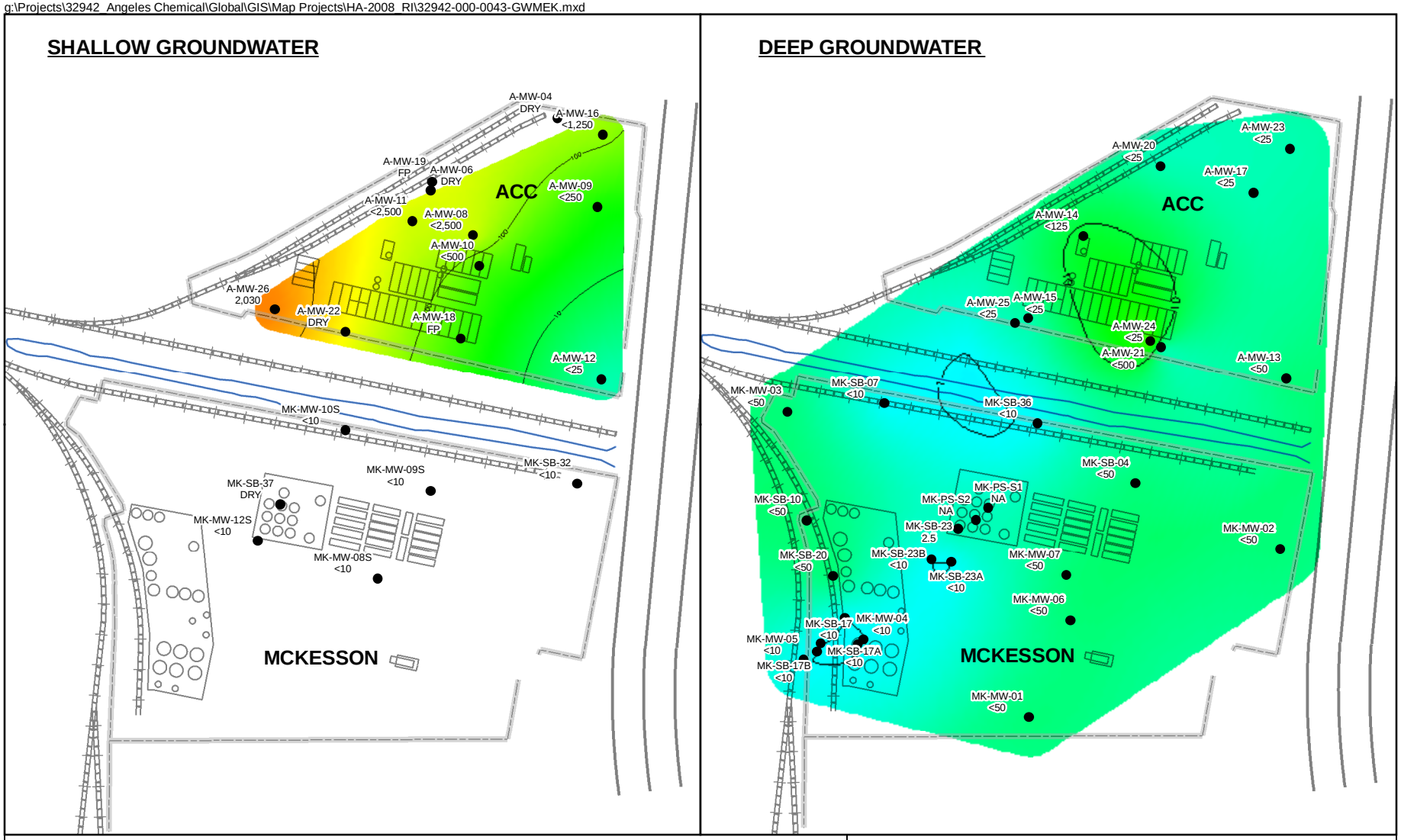
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

ACETONE IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 42

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0043-GWMEK.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:
1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

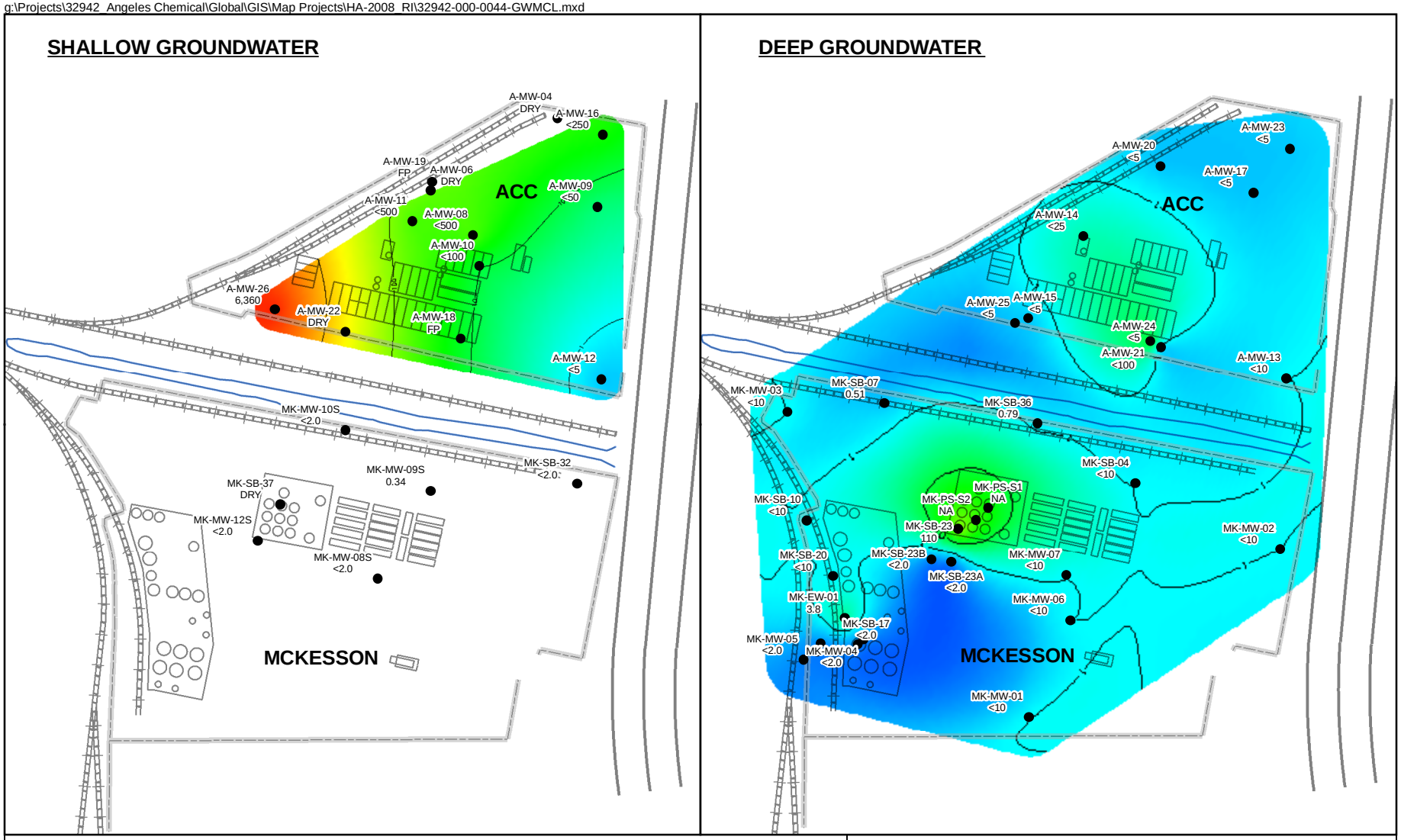
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

METHYL ETHYL KETONE (MEK)
IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 43

g:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA-2008_RI\32942-000-0044-GWMCL.mxd



LEGEND

10,000
1,000
100
10
1
0.1

UNLINED CHANNEL
FENCE
RAILROAD
ROAD
MONITORING WELL

NOTES:

1. **ALL VALUES REPORTED IN UNITS OF ug/L.**
2. **INTERPOLATION OF CONTOUR DISTRIBUTION PERFORMED AT 1/10 OF THE LABORATORY REPORTED DETECTION LIMIT FOR NONDETECT SAMPLES.**
3. **FP = FREE PRODUCT**
   NS = NOT SAMPLED

N
W E
S

0 150
SCALE IN FEET

HALEY & ALDRICH

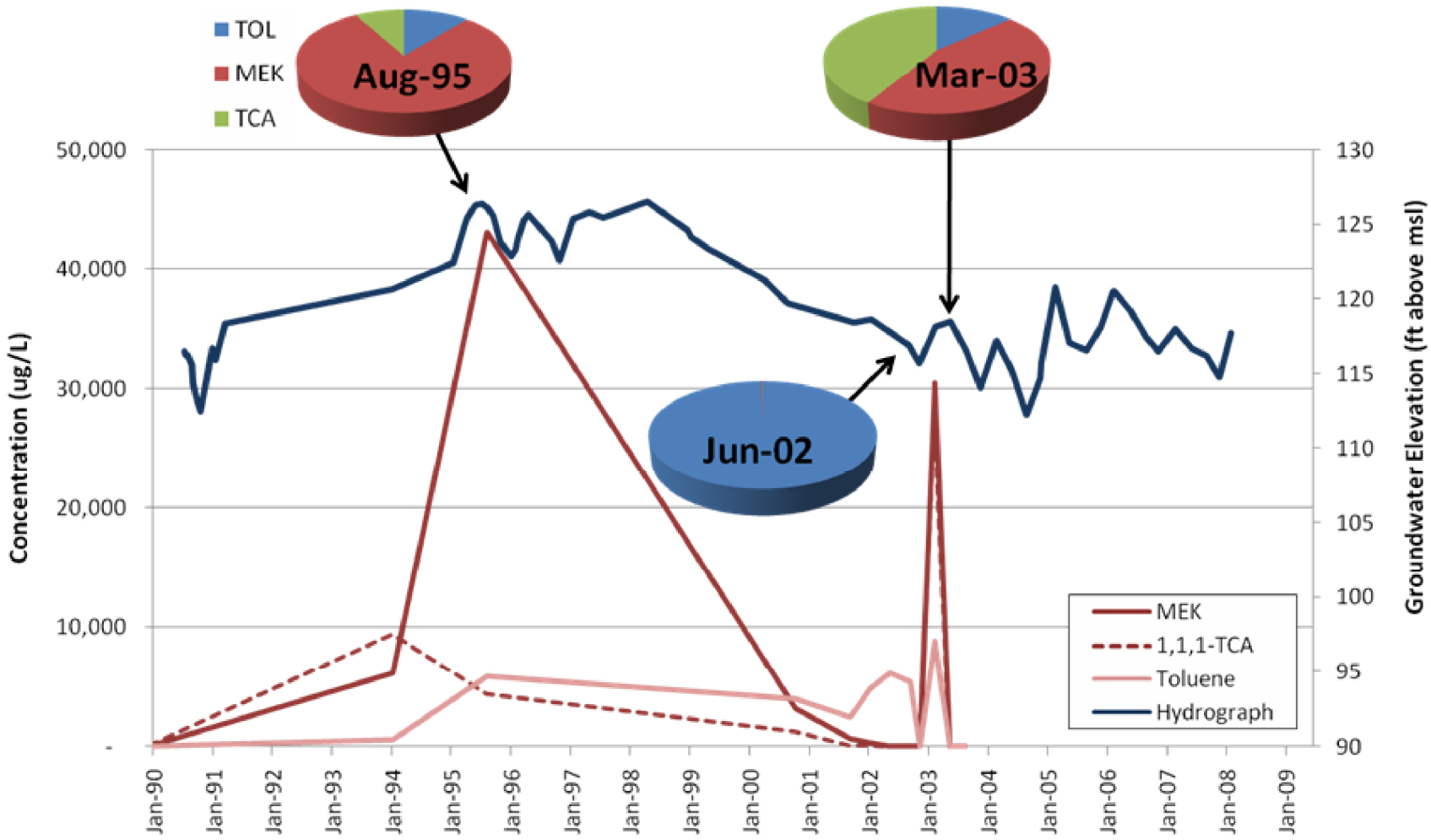
FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

METHYLENE CHLORIDE
IN GROUNDWATER
FIRST QUARTER, 2008

SCALE: AS SHOWN
AUGUST 2008

FIGURE 44

G:\Projects\32942_Angeles Chemical\Global\GIS\Map Projects\HA_2008_RI\32942-000-0045-SHTOL.mxd



HALEY & ALDRICH

FORMER ANGELES CHEMICAL FACILITY
8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

RELATIVE PROPORTIONS OF TOLUENE MEK AND 1,1,1-TCA AND HYDROGRAPH FOR ACC/MCKESSON SHALLOW GROUNDWATER

AUGUST 2008

FIGURE 45

PRIMARY SOURCES	SECONDARY SOURCES	TRANSPORT MECHANISMS	EXPOSURE PATHWAY	EXPOSURE ROUTES	RECEPTORS: Current On-Site Commerical/ Industrial Worker	RECEPTORS: Future On-Site Construction Worker	RECEPTORS: Future On-Site Resident
Product Storage Piping / Distribution Operations Potential Applications ☒ Onsite Sources	☒ Affected Surface Soils/ Soil Gas	☒ Wind Erosion And Atmospheric Dispersion	☒ Soil Dermal Contact/ Ingestion	Ingestion	+	+	+
				Inhalation	0	0	0
				Dermal	+	+	+
	Affected Subsurface Soils (> 10 ft depth)	☒ Volatilization and Atmospheric Dispersion	☒ Air Inhalation of Vapor or Dust	Ingestion	0	0	0
				Inhalation	+	+	+
				Dermal	0	0	0
		☒ Volatilization and Enclosed Space Accumulation	☒ Air Inhalation of Vapors into Buildings	Ingestion	0	0	0
				Inhalation	+	0	+
				Dermal	0	0	0
	☒ Dissolved Groundwater Plume	Leaching And Groundwater Transport	Groundwater Potable/Non-Potable Water Use	Ingestion	0	0	0
				Inhalation	0	0	0
				Dermal	0	0	0
	Free-Phase Liquid Plume	Mobile Free-Liquid Migration					
	Affected Surface Soils, Sediments, or Surface Water	Stormwater Surface Water Transport	Surface Water Recreational Use / Sensitive Habitat	Ingestion	0	0	0
				Inhalation	0	0	0
				Dermal	0	0	0

0 indicates incomplete pathway

+ Indicates complete pathway

HALEY & ALDRICH

ANGELES CHEMICAL PLANT

SANTA FE SPRINGS
CALIFORNIA
CONCEPTUAL SITE MODEL

FIGURE 46

Consultant	Investigation	Soil Borings , CPTs & Soil samples	Monitoring Wells & Groundwater Samples	Vapor Wells & Vapor samples	Excavations
SCS	1985 Tank Integrity Testing				
SCS	1986-1989 Subsurface Investigation Work Plan				
SCS	Jan 1990 Soil Investigation	BH-01 – BH-08 Soil borings at depths of 20-50-ft in vicinity of USTs and ASTs Samples every 5-ft (analyzed for VOC by EPA 8240)			
SCS	April 1990 Soil Excavation and Sampling	SS-01 and SS-02 (originally marked as S-1 and S-2) Grab samples from shallow excavation: 2-3 ft from pipeline break			Shallow excavation around spill drains and traps (to 3-ft bgs)
SCS	June 1990 Soil and Groundwater Investigation	BH-09 – BH-14, Soil borings at depths of 20.5-60-ft Samples every 5-ft, (including from MW-01) (analyzed for VOC by EPA 8240)	MW-01 GW well near S property line		
SCS	October 1992 Railroad Spur Soil Investigation	RR-01 – RR-07 Near surface grab soil samples along railroad spur (pairs at 0 and 1.5-ft except RR-07) (analyzed for VOC by EPA 8240 and for TRPH by EPA 418.1)			
SCS	1993-1994 Soil, Groundwater, and CPT Investigation – First RI Report	CPT 1,3, 4, 5, 6, and 8 (only to 23 ft bgs for CPT 3, 4, 5, and 6) BH15 – BH-17 Soil borings to 25-ft bgs Samples every 5-ft, including from each MW location (analyzed for VOC by EPA 8240)	MW-02 – MW-07 (no GW well installed in MW-05 since it was dry)		
SCS	1995 Baseline Risk Assessment				
SCS	January 1996 Soil Vapor Survey			SV-01 – SV-23 vapor samples from northern and central ACC areas (collected at 5-ft and some also at 15-ft bgs) SV-9 and SV-23 – wells installed	

Consultant	Investigation	Soil Borings , CPTs & Soil samples	Monitoring Wells & Groundwater Samples	Vapor Wells & Vapor samples	Excavations
SCS	June 1996 Soil Vapor Extraction Pilot Study			E-1 vapor extraction well in railroad spur area to 22-ft bgs VP-1 – VP-3 vapor monitoring wells along railroad tracks approx. 80, 40, and 20-ft from E1 Test samples collected: · from the active tests S-1 – S-4 · from passive test (VP samples)	
SCS	November 1997 Additional Soil Vapor Survey			SV-24 – SV-35 Soil vapor samples from S & central ACC areas (collected at 5-ft and some also at 15-ft bgs) SV-24 – SV-35 from southern and central ACC areas (collected at 5-ft and some also at 15-ft bgs)	
SCS	1997-1998 Feasibility Studies				
SCS	1999 Soil Vapor Extraction Pilot Study			Samples from tests: · I1 and I2 (June 1999) - O (outet) and I (inlet) samples · T1 - T5 (Oct. 1999 -THOX inlet and outlet samples	
SCS	1999 Removal Action Plan				
SCS	1999 Sampling in Former AST areas at ACC	T-01 – T-04 Soil borings located beneath the center of former ASTs 8 soil samples (5 and 10-ft bgs) were analyzed by EPA 8260 and by EPA 8015 modified (for TPH)			

Consultant	Investigation	Soil Borings , CPTs & Soil samples	Monitoring Wells & Groundwater Samples	Vapor Wells & Vapor samples	Excavations
SCS	Februry 2000 Soil Investigation	BH-15 – BH-18 Soil borings in the area NW of canopy, where Samples collected at depths up to 20-ft bgs - Note that BH-15 – BH-17 are in distinct location as compared to 1994 samples with same name			
SCS	April-May 2000 Vapor Extraction Testing			E-2 – E-4 Vapor extraction wells in railroad spur area to approx. 25-ft bgs E-5 – E-9 Vapor extraction wells in canopy and former spill drain areas to approx. 25-ft bgs VP4 – VP-10 Vapor monitoring wells to 26-ft bgs	
EREMCO	Dec. 1998 Removal of gasoline and diesel USTs	A-1, A-2 and B-1, B-2 Grab soil samples below removed USTs Samples SW-1-2' (from tank pit excavation) and SP-1 (from stockpile) Analyzed for BTEX, MTBE, gasoline and diesel range TPH			Excavation of soil around gasoline and diesel USTs – excavated soil analyzed and put back in place along with imported based material
EREMCO	June 1999 Tank Removal / Abandonment in Place (removal of 10 USTs and slurry in place of 12 USTs)	SPA and SPB (preceded by the number of the tank) Grab soil samples from beneath each excavated tank and analyzed for VOCs Samples taken between 14-16 ft bgs			2 excavations (tank pits) around USTs removed: USTs No. 1, 2, 3, 4, 18, 19, 20, 21, 22, and 23 - excavated soil analyzed and put back in place along with imported based material

Consultant	Investigation	Soil Borings , CPTs & Soil samples	Monitoring Wells & Groundwater Samples	Vapor Wells & Vapor samples	Excavations
EREMCO	July 2001 Tank Removal / Abandonment in Place (removal of 6 tanks and slurry in place of 4 USTs)	Grab soil samples were collected beneath each excavated tank and analyzed for VOCs (noted with TK followed by tank number, also noted with A, B, and C followed by tank number for some tanks) The samples from USTs 17, 24, 25 and 29 were collected between 18-21 ft while the other samples at about 16-ft bgs Soil samples were also collected with geoprobes (marked as G samples) close to the slurried-in-place tanks			Two separate excavation areas around removed USTs: USTs No. 17, 24, 25, 29, 30, and 31 - excavated soil analyzed and put back in place along with imported based material
BEII	Nov.-Dec. 2000 Soil Vapor Survey			SV-1 – SV-36 Soil vapor samples (at 8-ft and 20-ft bgs in each location, except SV-1 was collected at 10-ft) Note that although with similar name, these are distinct locations compared to SV samples taken by SCS in 1996 and 1997	
BEII	2001 Investigation of Solvent Discharges from McKesson Facility				
BEII	2002 Soil Vapor Survey			SV-37 – SV-67 Soil vapor samples (at 5, 7-12, and 20-ft bgs)	

Consultant	Investigation	Soil Borings , CPTs & Soil samples	Monitoring Wells & Groundwater Samples	Vapor Wells & Vapor samples	Excavations
BEII	2002 Soil and Groundwater Investigation	BSB-01 and BSB-02 Soil borings advanced to 50-ft and 30-ft bgs, respectively, in June 2002 BSB-03 – BSB-10 Soil borings advanced to 45-ft in Aug. 2002 BSB-11 – BSB-17 Soil borings advanced to 49.5-ft in Nov. and Dec. 2002 Samples were taken at multiple depths (including from each new MW location)	MW-08 and MW-09 GW wells installed in June 2002 MW-10 - MW-21 GW wells installed in Nov.-Dec. 2002 (wells MW-10, MW-11, MW-12, MW-16, MW-18, MW-19 were screened in shallow GW) Abandonment of MW-01		
BEII	2002 CPT Testing	CPT-01 – CPT-11 in Aug 2002 CPT-12 – CPT-26 in Nov-Dec 2002			
BEII	June 2003 Soil and Groundwater Investigation	BSB-18 Soil samples collected from BSB-18 and each new MW location	MW-22 - MW-26 GW wells installed Abandonment of MW-02, MW-03, and MW-07		
BEII	Groundwater Monitoring (2002-2004)		Quarterly sampling and analysis of groundwater monitoring wells		
Shaw	2002-2003 Shaw Site Characterization				
The Leu Group	Groundwater Monitoring (from 2004)		Quarterly sampling and analysis of groundwater monitoring wells		
The Leu Group	2005 Draft Removal Action Plan				
Clean Soil, Inc.	Groundwater Monitoring and SVE Operation (starting in September 2007)				
Clean Soil, Inc.	RI/FS Study				
Haley & Aldrich, Inc.	2007 Updated Remedial Investigation				

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (1,1,1-TCA)	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,1,2-Trichloroethane	1,1-Dichloroethane (1,1-DCA)	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Acetone	Benzene	Carbon Tetrachloride	Chloroethane	Chloroform	cis-1,2-Dichloroethene (cis-1,2-DCE)	Dichlorodifluoromethane (Freon 12)	Ethylbenzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone (MIBK)	Methylene Chloride	Tetrachloroethene (PCE)
A-SV-01	12-Jan-96	5	<1	1.3	<1	<1	<1	1.7	3.5	<1	<1	<1	<1	<1	<1	4	<1	<1	<1	<1	1.3	<1
A-SV-01	12-Jan-96	15	<1	2.2	<1	<1	<1	1.9	4.3	<1	<1	<1	<1	<1	<1	5.2	<1	<1	<1	<1	<1	<1
A-SV-02	11-Jan-96	5	<1	215	<1	<1	<1	30	177	<1	<1	<1	<1	<1	<1	39	<1	<1	<1	<1	<1	10
A-SV-03	11-Jan-96	5	<1	203	<1	<1	<1	48	390	<1	<1	<1	<1	<1	<1	49	<1	<1	<1	<1	<1	<1
A-SV-04	11-Jan-96	5	<1	56.7	<1	<1	<1	151.8	212.5	<1	<1	1	<1	<1	<1	519	<1	1.4	<1	<1	2.7	<1
A-SV-05	11-Jan-96	5	<1	15.5	<1	<1	<1	91.7	56.3	<1	<1	<1	<1	<1	<1	400	<1	<1	<1	<1	1.8	<1
A-SV-06	11-Jan-96	5	<1	1282	<1	<1	<1	481	1385	<1	<1	1.3	<1	<1	<1	1194	<1	4.1	<1	<1	874	219
A-SV-07	12-Jan-96	5	<1	17	<1	<1	<1	16	104	<1	<1	<1	<1	<1	<1	78	<1	<1	<1	<1	<1	<1
A-SV-07	12-Jan-96	15	<1	23.1	<1	<1	<1	10.5	48.7	<1	<1	<1	<1	<1	<1	39.7	<1	<1	<1	<1	2.1	2.2
A-SV-08	11-Jan-96	5	<1	18	<1	<1	<1	51	267	<1	<1	<1	<1	<1	<1	52	<1	<1	<1	<1	25	<1
A-SV-09	11-Jan-96	5	<1	2883	<1	<1	<1	372	1307	<1	<1	2.3	<1	<1	<1	43.6	<1	2.7	<1	<1	505	54.8
A-SV-09	12-Jan-96	15	<1	61	<1	<1	<1	<1	63	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	16	<1
A-SV-10	12-Jan-96	5	<1	576	<1	<1	<1	231	1201	<1	<1	<1	<1	<1	<1	33	<1	<1	<1	<1	101	11
A-SV-10	12-Jan-96	15	<1	588	<1	<1	<1	244	1235	<1	<1	<1	<1	<1	<1	34	<1	<1	<1	<1	111	12
A-SV-11	11-Jan-96	5	<1	1382	<1	<1	<1	293	6	<1	<1	<1	<1	<1	<1	42	<1	<1	<1	<1	108	29
A-SV-12	11-Jan-96	5	<1	4316	<1	<1	<1	314	1962	<1	<1	89	<1	<1	<1	90	<1	<1	<1	<1	619	153
A-SV-13	12-Jan-96	5	<1	21.3	<1	<1	<1	13.4	24.2	<1	<1	<1	<1	<1	<1	7.5	<1	<1	<1	<1	3.3	2.1
A-SV-13	12-Jan-96	15	<1	26	<1	<1	<1	20.1	26.4	<1	<1	<1	<1	<1	<1	8.5	<1	<1	<1	<1	27.1	1.9
A-SV-14	12-Jan-96	5	<1	9.8	<1	<1	<1	36.5	68.2	<1	<1	1.4	<1	<1	<1	116.3	<1	2.8	<1	<1	3.9	2.6
A-SV-15	12-Jan-96	5	<1	<1	<1	<1	<1	<1	<1	<1	1.6	<1	<1	<1	<1	1.4	<1	<1	<1	<1	<1	<1
A-SV-15	12-Jan-96	15	<1	243	<1	<1	<1	90.3	64.9	<1	<1	<1	<1	<1	<1	578	<1	10.2	<1	<1	1.7	17.1
A-SV-16	12-Jan-96	5	<1	2.7	<1	<1	<1	1.2	3.2	<1	<1	<1	<1	<1	<1	4.5	<1	<1	<1	<1	<1	1.9
A-SV-17	11-Jan-96	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
A-SV-18	11-Jan-96	5	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	1.1	<1	<1	<1	<1	<1	<1
A-SV-19	12-Jan-96	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
A-SV-20	11-Jan-96	5	<1	844	<1	<1	<1	27	59.2	<1	<1	<1	<1	<1	<1	9.6	<1	<1	<1	<1	2.6	9.9
A-SV-21	11-Jan-96	5	<1	170	<1	<1	<1	4.4	11.6	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	1	2.5
A-SV-22	12-Jan-96	5	<1	89.6	<1	<1	<1	3.6	2.6	<1	<1	<1	<1	<1	<1	1.1	<1	<1	<1	<1	<1	1.3
A-SV-23	11-Jan-96	5	<1	41	<1	<1	<1	<1	5.6	<1	<1	<1	<1	<1	<1	4.4	<1	7.6	<1	<1	<1	<1
A-SV-23	12-Jan-96	15	<1	296	<1	<1	<1	<1	27	<1	<1	<1	<1	<1	<1	15	<1	<1	<1	<1	39	<1
A-SV-24	20-Nov-97	5	<1	6.5	<1	<1	<1	11		<1	<1	<1	<1	<1	<1	29	<1	<1	<1	<1	<1	41
A-SV-25	20-Nov-97	5	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1
A-SV-26	21-Nov-97	5	<1	133	<1	<1	<1	91		<1	115	1.8	<1	<1	<1	65	<1	2.8	<1	26	151	<1
A-SV-26	21-Nov-97	15	<1	2403	<1	<1	<1	1429		<1	853	<1	<1	19	<1	599	<1	40	249	95	1	50
A-SV-27	20-Nov-97	5	<1	528	<1	<1	<1	29		<1	<1	<1	<1	<1	<1	3.5	<1	<1	<1	<1	<1	16
A-SV-28	20-Nov-97	5	<1	111	<1	<1	<1	2.4		<1	<1	<1	<1	<1	<1	1.9	<1	<1	<1	<1	<1	3.2
A-SV-28	20-Nov-97	15	<1	1557	<1	<1	<1	1613		<1	<1	<1	<1	6.3	<1	1.198	<1	14	<1	80	7.9	9.8
A-SV-29	20-Nov-97	5	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.1	<1	3.8
A-SV-30	20-Nov-97	5	<1	37	<1	<1	<1	37		<1	<1	<1	<1	<1	<1	26	<1	<1	<1	1	<1	<1
A-SV-30	20-Nov-97	15	<1	9.1	<1	<1	<1	11		<1	<1	<1	<1	<1	<1	9.5	<1	<1	<1	<1	<1	<1
A-SV-31	20-Nov-97	5	<1	<1	<1	<1	<1	76		<1		3.7	<1	<1	<1	67	<1	6.3			<1	2.5
A-SV-31	20-Nov-97	15	<1	<1	<1	<1	<1	25		<1		<1	<1	2.8	<1	25	<1	2.6			<1	<1
A-SV-32	21-Nov-97	5		1959				522		<1			<1	<1	<1	149					8.3	67
A-SV-33	21-Nov-97	5	<1	110	<1	<1	<1	109		<1	<1	1.9	<1	<1	<1	53	<1	3.8	<1	15	13	8.3
A-SV-34	21-Nov-97	5	<1	1.017	<1	<1	<1	384		<1	<1	10	<1	<1	<1	74	<1	4.4	<1	21	209	74
A-SV-34	21-Nov-97	15	<1	2118	<1		<1	474		<1	<1	5	<1	<1	<1	119	<1	5.6	<1	16	523	62
A-SV-35	20-Nov-97	5	<1	28	<1	<1	<1	24		<1	<1	<1	<1	<1	<1	11	<1	<1	<1	<1	<1	1.5
A-BSV-01	27-Nov-00	10	<1	<1	<1	<1	<1	2.8	<1	<1		<1	<1	<1	<1	2.4	<1	<1			<1	<1
A-BSV-01	27-Nov-00	20	<20	3.3	<20	<20	<20	120	35	<20		<20	<20	<20	<20	370	<20	<20			<20	70
A-BSV-02	27-Nov-00	8	<1	<1	<1	<1	<1	3.3	<1	<1		<1	<1	<1	<1	3.2	<1	3.6			<1	1.2
A-BSV-02	27-Nov-00	20	<1	<1	<1	<1	<1	4.7	1.3	<1		<1	<1	<1	<1	14	<1	<1			<1	<1
A-BSV-03	27-Nov-00	8	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	3	<1	<1			<1	2.4
A-BSV-03	27-Nov-00	20	<20	<20	<20	<20	<20	270	75	<20		<20	<20	43	<20	520	<20	<20			<20	<20
A-BSV-04	27-Nov-00	8	<1	3.1	<1	<1	<1	3.2	<1	<1		<1	<1	<1	<1	7	<1	90			<1	<1
A-BSV-04	27-Nov-00	20	<10	65	<10	<10	<10	1700	190	<10		13	11	38	<10	2200	<10	90			<10	<10
A-BSV-05	28-Nov-00	8	<1	<1	<1	<1	<1	6.2	<1	<1		<1	<1	<1	<1	5.5	<1	<1			<1	<1
A-BSV-05	28-Nov-00	20	<50	230	<50	<50	<50	2000	220	<50		<50	<50	<50	<50	2300	<50	110			<50	<50
A-BSV-06	28-Nov-00	8	<1	14	<1	<1	<1	15	5.1	<1		<1	2.5	<1	<1	27	<1	8.4			<1	6.9
A-BSV-06	29-Nov-00	20	<100	2200	<100	<100	<100	6600	830	<100		<100	<100	<100	<100	7400	<100	600			<100	70
A-BSV-07	28-Nov-00	8	<10	25	<10	<10	<10	<10	<10	<1.0		<10	<10	<10	<10	13	<10	<10			<10	<10
A-BSV-07	28-Nov-00	20	<500	790	<500	<500	<500	8700	1300	<500		<500	<500	<500	<500	5400	<500	960			<500	<500
A-BSV-08	28-Nov-00	8	<10	140	<10	<10	<10	34	20	<10		<10	<10	<10	<10	25	<10	10			<10	42
A-BSV-08	28-Nov-00	20	<500	2900	<500	<500	<500	9200	2100	<500		<500	<500	<500	<500	3700	<500	590			<500	<500
A-BSV-09	28-Nov-00	8	<10	32	<10	<10	<10	13	<10	<10		<10	<10	<10	<10	31	<10	13			13	12
A-BSV-09	28-Nov-00	20	<500	18000	<500	<500	<500	5200	4800	<500		<500	<500	<500	<500	4600	<500	610			<500	<500

Note:
1. All values reported in units of ug/L.
2. Blank spaces = not analyzed
3. nd = non detect

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	Toluene	trans-1,2-Dichloroethene (trans-1,2-DCE)	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride (VC)	Xylenes (total)	xylenes(m,p)	xylenes(o)
A-SV-01	12-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-01	12-Jan-96	15	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-02	11-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-03	11-Jan-96	5	<1	<1	12	<1	15	<2	<1	<1
A-SV-04	11-Jan-96	5	11.1	3	1.7	<1	31.4	1.8	1.8	<1
A-SV-05	11-Jan-96	5	1.1	1.7	<1	<1	50.5	<2	<1	<1
A-SV-06	11-Jan-96	5	100.1	9.2	109.7	<1	325	13.9	12.8	1.1
A-SV-07	12-Jan-96	5	<1	<1	<1	<1	36	<2	<1	<1
A-SV-07	12-Jan-96	15	<1	<1	1.3	<1	6.2	<2	<1	<1
A-SV-08	11-Jan-96	5	<1	<1	<1	<1	23	<2	<1	<1
A-SV-09	11-Jan-96	5	34.2	12.2	29.2	<1	5.7	19.3	13.2	6.1
A-SV-09	12-Jan-96	15	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-10	12-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-10	12-Jan-96	15	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-11	11-Jan-96	5	105	<1	14	<1	<1	20	20	<1
A-SV-12	11-Jan-96	5	262	41	25	<1	<1	21	21	<1
A-SV-13	12-Jan-96	5	1.1	<1	1.2	<1	<1	<2	<1	<1
A-SV-13	12-Jan-96	15	1.9	<1	1.4	<1	<1	<2	<1	<1
A-SV-14	12-Jan-96	5	29.2	3.4	1.5	<1	<1	6.6	6.6	<1
A-SV-15	12-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-15	12-Jan-96	15	139.7	17.4	16.2	<1	<1	28.9	22.9	6
A-SV-16	12-Jan-96	5	1.2	<1	<1	<1	<1	<2	<1	<1
A-SV-17	11-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-18	11-Jan-96	5	<1	<1	<1	<1	<1	1.6	1.6	<1
A-SV-19	12-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-20	11-Jan-96	5	2.1	<1	33.4	<1	<1	<2	<1	<1
A-SV-21	11-Jan-96	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-22	12-Jan-96	5	<1	<1	2.2	<1	<1	<2	<1	<1
A-SV-23	11-Jan-96	5	7.6	<1	2.3	<1	<1	28.1	20.1	8
A-SV-23	12-Jan-96	15	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-24	20-Nov-97	5	4	<1	17	<1	<1	<2	<1	<1
A-SV-25	20-Nov-97	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-26	21-Nov-97	5	59	<1	<1	<1	<1	11	9.1	1.9
A-SV-26	21-Nov-97	15	589	<1	164	<1	3.2	135	114	21
A-SV-27	20-Nov-97	5	<1	<1	28	<1	<1	<2	<1	<1
A-SV-28	20-Nov-97	5	<1	<1	8.2	<1	<1	<2	<1	<1
A-SV-28	20-Nov-97	15	106	1.9	63	<1	3.2	38.6	30	8.6
A-SV-29	20-Nov-97	5	<1	<1	<1	<1	<1	<2	<1	<1
A-SV-30	20-Nov-97	5	25	<1	1.3	<1	<1	<2	<1	<1
A-SV-30	20-Nov-97	15	11	<1	<1	<1	<1	1	1	<1
A-SV-31	20-Nov-97	5	1.1	<1	1.4	<1	<1	27	14	13
A-SV-31	20-Nov-97	15	<1	<1	<1	<1	2.7	6.4	3.4	3
A-SV-32	21-Nov-97	5		<1						
A-SV-33	21-Nov-97	5	12	<1	6	<1	<1	21	10	11
A-SV-34	21-Nov-97	5	47	<1	30	<1	<1	23.1	21	2.1
A-SV-34	21-Nov-97	15	85	<1	30	<1	<1	23.1	20	3.1
A-SV-35	20-Nov-97	5	<1	<1	3.5	<1	<1	<2	<1	<1
A-BSV-01	27-Nov-00	10	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-01	27-Nov-00	20	<20	<20	32	<20	<20	<40	<20	<20
A-BSV-02	27-Nov-00	8	<1	1.4	<1	<1	<1	<2	<1	<1
A-BSV-02	27-Nov-00	20	<1	<1	1.1	<1	<1	2.2	2.2	<1
A-BSV-03	27-Nov-00	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-03	27-Nov-00	20	<20	<20	<20	<20	<20	<40	<20	<20
A-BSV-04	27-Nov-00	8	400	<1	1.8	<1	<1	2.1	2.1	<1
A-BSV-04	27-Nov-00	20	400	<10	15	<10	24	273	230	43
A-BSV-05	28-Nov-00	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-05	28-Nov-00	20	1000	<50	<50	<50	<50	380	310	70
A-BSV-06	28-Nov-00	8	32	<1	1.3	<1	<1	27.8	22	5.8
A-BSV-06	29-Nov-00	20	5300	<100	<100	<100	<100	1730	1400	330
A-BSV-07	28-Nov-00	8	27	<10	<10	<10	<10	24	24	<10
A-BSV-07	28-Nov-00	20	2600	<500	<500	<500	<500	2740	2200	540
A-BSV-08	28-Nov-00	8	240	<10	36	<10	<10	30	30	<10
A-BSV-08	28-Nov-00	20	12000	<500	<500	<500	<500	1400	1400	<500
A-BSV-09	28-Nov-00	8	120	<10	<10	<10	<10	60	45	15
A-BSV-09	28-Nov-00	20	2800	<500	<500	<500	<500	1700	1700	<500

Note:
1. All values reported in units of ug/L.
2. Blank spaces = not analyzed
3. nd = non detect

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (1,1,1-TCA)	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,1,2-Trichloroethane	1,1-Dichloroethane (1,1-DCA)	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Acetone	Benzene	Carbon Tetrachloride	Chloroethane	Chloroform	cis-1,2-Dichloroethene (cis-1,2-DCE)	Dichlorodifluoromethane (Freon 12)	Ethylbenzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone (MIBK)	Methylene Chloride	Tetrachloroethene (PCE)
A-BSV-10	28-Nov-00	8	<10	160	<10	<10	<10	16	19	<10		<10	<10	<10	<10	87	<10	<10			32	54
A-BSV-10	28-Nov-00	20	<500	12000	<500	<500	<500	1000	3900	<500		<500	<500	<500	<500	2200	<500	<500			<500	<500
A-BSV-11	28-Nov-00	8	<1	<1	<1	<1	<1	52	13	<1		<1	<1	<1	<1	70	<1	6.6			17	36
A-BSV-11	28-Nov-00	20	<100	6900	<100	<100	<100	520	3700	<100		<100	<100	<100	<100	3700	<100	<100			<100	<100
A-BSV-12	28-Nov-00	8	<1	6.6	<1	<1	<1	4.2	4.5	<1		<1	<1	<1	<1	20	<1	<1			26	1.3
A-BSV-12	28-Nov-00	20	<100	23000	<100	<100	<100	780	3800	<100		<100	3700	<100	<100	15000	<100	140			4700	1800
A-BSV-13	29-Nov-00	8	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	11	<10	<10			<10	<10
A-BSV-13	29-Nov-00	20	<500	6800	<500	<500	<500	<500	1600	<500		<500	<500	<500	<500	3600	<500	<500			<500	<500
A-BSV-14	29-Nov-00	8	<1	14	<1	<1	<1	2	3.2	<1		<1	<1	<1	<1	4.9	<1	3.8			<1	1.9
A-BSV-14	29-Nov-00	20	<500	28000	<500	<500	<500	790	4800	<500		<500	<500	<500	<500	3100	<500	900			<500	2000
A-BSV-15	29-Nov-00	8	<1	130	<1	<1	<1	9.9	27	<1		<1	<1	<1	<1	16	<1	8.1			2.8	8.1
A-BSV-15	29-Nov-00	20	<1000	39000	<1000	<1000	<1000	<1000	6000	<1000		<1000	<1000	<1000	<1000	<1000	<1000	<1000			<1000	<1000
A-BSV-16	29-Nov-00	8	<10	570	<10	<10	<10	<10	45	<10		<10	<10	<10	<10	<10	<10	41			<10	54
A-BSV-16	29-Nov-00	20	<1000	70000	<1000	<1000	<1000	<1000	7200	<1000		<1000	<1000	<1000	<1000	<1000	<1000	<1000			<1000	<1000
A-BSV-17	29-Nov-00	8	<20	3500	<20	<20	<20	66	150	<20		<20	<20	<20	<20	<20	<20	46			34	43
A-BSV-17	29-Nov-00	20	<2000	43000	<2000	<2000	<2000	<2000	4500	<2000		<2000	<2000	<2000	<2000	<2000	<2000	<2000			<2000	<2000
A-BSV-18	29-Nov-00	8	<100	720	<100	<100	<100	<100	<100	<100		<100	<100	<100	<100	<100	<100	<100			<100	<100
A-BSV-18	29-Nov-00	20	<200	5300	<200	<200	<200	520	1100	<200		<200	<200	<200	<200	1000	<200	330			<200	<200
A-BSV-19	29-Nov-00	8	<10	160	<10	<10	<10	<10	12	<10		<10	<10	<10	<10	17	<10	29			<10	13
A-BSV-19	29-Nov-00	20	<200	5600	<200	<200	<200	1500	1500	<200		<200	<200	<200	<200	3200	<200	390			<200	200
A-BSV-20	29-Nov-00	8	<10	76	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	22	<10	18			<10	13
A-BSV-20	29-Nov-00	20	<200	4900	<200	<200	<200	1100	1100	<200		<200	<200	<200	<200	4500	<200	1600			<200	3100
A-BSV-21	29-Nov-00	8	<10	27	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	12	<10	<10			<10	30
A-BSV-21	29-Nov-00	20	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000		<1000	<1000	<1000	<1000	4300	<1000	<1000			<1000	<1000
A-BSV-22	30-Nov-00	8	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	19	<10	<10			<10	13
A-BSV-22	30-Nov-00	20	<200	<200	<200	<200	<200	230	<200	<200		<200	<200	<200	<200	1400	<200	370			<200	<200
A-BSV-23	30-Nov-00	8	<10	48	<10	<10	<10	63	10	<10		<10	<10	<10	<10	210	<10	14			<10	<10
A-BSV-23	30-Nov-00	20	<200	360	<200	<200	<200	1800	240	<200		<200	<200	<200	<200	2100	<200	320			<200	<200
A-BSV-24	30-Nov-00	8	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	17	<10	<10			<10	<10
A-BSV-24	30-Nov-00	20	<200	280	<200	<200	<200	10000	2900	<200		<200	<200	<200	<200	4000	<200	1700			<200	<200
A-BSV-25	30-Nov-00	8	<10	<10	<10	<10	<10	11	25	<10		<10	<10	<10	<10	15	<10	18			<10	<10
A-BSV-25	30-Nov-00	20	<250	12000	<250	<250	<250	860	5000	<250		<250	<250	<250	<250	2700	<250	<250			<250	<250
A-BSV-26	30-Nov-00	8	<10	18	<10	<10	<10	<10	11	<10		<10	<10	<10	<10	11	<10	<10			<10	<10
A-BSV-26	30-Nov-00	20	<500	6700	<500	<500	<500	<500	4100	<500		<500	<500	<500	<500	2900	<500	<500			<500	<500
A-BSV-27	30-Nov-00	8	<1	11	<1	<1	<1	2.2	4.9	<1		<1	<1	<1	<1	10	<1	1.3			<1	1
A-BSV-27	30-Nov-00	20	<500	4200	<500	<500	<500	<500	2400	<500		<500	<500	<500	<500	3400	<500	<500			<500	<500
A-BSV-28	30-Nov-00	8	<1	19	<1	<1	<1	2.5	8.5	<1		<1	<1	<1	<1	24	<1	1.1			<1	1.7
A-BSV-28	30-Nov-00	20	<100	650	<100	<100	<100	5400	2200	<100		<100	<100	<100	<100	2000	<100	300			<100	<100
A-BSV-29	30-Nov-00	8	<1	5.3	<1	<1	<1	4.7	3.9	<1		<1	<1	<1	<1	8.4	<1	3.8			<1	<1
A-BSV-29	30-Nov-00	20	<100	<100	<100	150	<100	5800	1700	<100		<100	<100	<100	<100	2300	<100	630			<100	<100
A-BSV-30	01-Dec-00	8	<10	50	<10	<10	<10	110	17	<10		<10		16	<10	410	<10	76			<10	<10
A-BSV-30	01-Dec-00	20	<200	240	<200	<200	<200	1600	200	<200		<200	<200	<200	<200	830	<200	520			<200	<200
A-BSV-31	01-Dec-00	8	<20	120	<20	<20	<20	<20	<20	<20		<20		<20	<20	120	<20	<20			170	<20
A-BSV-31	01-Dec-00	20	<200	710	<200	<200	<200	<200	<200	<200		<200	<200	<200	<200	450	<200	<200			<200	<200
A-BSV-32	01-Dec-00	8	nd	6.2	nd	nd	nd	10	4.9	nd		nd		nd	nd	16	nd	8.8			1	2.2
A-BSV-32	01-Dec-00	20	<100	10000	<100	<100	<100	7700	3200	<100		300	<100	<100	<100	5400	<100	2100			3900	1600
A-BSV-33	01-Dec-00	8	nd	12	nd	nd	0.6	7.9	2.9	nd		nd		nd	nd	10	nd	13			1.5	9
A-BSV-33	01-Dec-00	20	<100	720	<100	110	<100	8100	1200	<100		<100	<100	<100	<100	5700	<100	580			<100	<100
A-BSV-34	01-Dec-00	8	<2	4.8	<2	<2	<2	20	<2	<2		<2		<2	<2	19	<2	4			<2	<2
A-BSV-34	01-Dec-00	20	<200	920	<200	<200	<200	4700	580	<200		<200	<200	<200	<200	5300	<200	410			<200	<200
A-BSV-35	01-Dec-00	8	nd	7	nd	nd	nd	26	2.9	nd		nd		nd	nd	46	nd	15			nd	1.7
A-BSV-35	01-Dec-00	20	<200	<200	<200	<200	<200	2900	380	<200		<200	<200	<200	<200	3300	<200	230			<200	<200
A-BSV-36	01-Dec-00	8	<10	22	<10	<10	72	27	<10	<10		<10		<10	<10	71	<10	18			13	<10
A-BSV-36	01-Dec-00	20	<500	90000	<500	<500	<500	2700	9400	<500		<500	<500	<500	<500	1900	<500	<500			<500	850
A-BSV-37	14-Jan-02	8	<1	<1	<1	<1	<1	<1	<1	<1		1.4	<1	<1	<1	<1	<1	3.3			<1	<1
A-BSV-37	14-Jan-02	20	<1	28	<1	3.1	<1	17	32	<1		<1	<1	<1	<1	5.9	<1	<1			<1	<1
A-BSV-38	14-Jan-02	8	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	1.4
A-BSV-38	14-Jan-02	21	<1	410	<1	17	<1	125	280	<1		<1	<1	<1	<1	75	<1	<1			<1	6.3
A-BSV-39	14-Jan-02	5	<1	14	<1	2.8	<1	5.3	18	<1		<1	<1	<1	<1	6.9	<1	<1			<1	1.2
A-BSV-39	14-Jan-02	10	<1	18	<1	2.3	<1	5.9	17	<1		<1	<1	<1	<1	6	<1	<1			<1	<1
A-BSV-39	14-Jan-02	20	<1	210	<1	34	<1	180	180	<1		3.7	<1	<1	<1	55	<1	5.5			<1	12
A-BSV-40	14-Jan-02	5	<1	58	<1	11	<1	51	61	<1		<1	<1	<1	<1	18	<1	<1			<1	3.6
A-BSV-40	14-Jan-02	10	<1	79	<1	16	<1	72	81	<1		<1	<1	<1	<1	24	<1	<1			<1	3.7
A-BSV-40	14-Jan-02	20	<100	140	<100	<100	<100	1400	480	<100		<100	<100	<100	<100	270	<100	<100			<100	<100

Note:
1. All values reported in units of ug/L.
2. Blank spaces = not analyzed
3. nd = non detect

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	Toluene	trans-1,2-Dichloroethene (trans-1,2-DCE)	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride (VC)	Xylenes (total)	xylenes(m,p)	xylenes(o)
A-BSV-10	28-Nov-00	8	30	<10	<10	<10	<10	11	11	<10
A-BSV-10	28-Nov-00	20	<500	<500	<500	<500	<500	<1000	<500	<500
A-BSV-11	28-Nov-00	8	46	<1	5.2	<1	1.6	24.9	20	4.9
A-BSV-11	28-Nov-00	20	150	<100	<100	<100	<100	170	170	<100
A-BSV-12	28-Nov-00	8	2.6	<1	4.4	<1	<1	1.8	1.8	<1.0
A-BSV-12	28-Nov-00	20	1800	<100	630	<100	<100	340	340	<100
A-BSV-13	29-Nov-00	8	11	<10	<10	<10	<10	12	12	<10
A-BSV-13	29-Nov-00	20	2500	<500	1300	<500	<500	1000	1000	<500
A-BSV-14	29-Nov-00	8	13	<1	7.2	<1	<1	13.7	11	2.7
A-BSV-14	29-Nov-00	20	5100	<500	2600	<500	<500	3490	2800	690
A-BSV-15	29-Nov-00	8	35	<1	32	<1	<1	31.6	26	5.6
A-BSV-15	29-Nov-00	20	1900	<1000	1200	<1000	<1000	1100	1100	<1000
A-BSV-16	29-Nov-00	8	75	<10	31	<10	<10	164	140	24
A-BSV-16	29-Nov-00	20	2600	<1000	2700	<1000	<1000	1900	1900	<1000
A-BSV-17	29-Nov-00	8	240	<20	79	<20	<20	191	150	41
A-BSV-17	29-Nov-00	20	2800	<2000	<2000	<2000	<2000	<4000	<2000	<2000
A-BSV-18	29-Nov-00	8	170	<100	<100	<100	<100	<200	<100	<100
A-BSV-18	29-Nov-00	20	4000	<200	240	<200	<200	1080	830	250
A-BSV-19	29-Nov-00	8	250	<10	<10	<10	<10	99	74	25
A-BSV-19	29-Nov-00	20	5800	<200	390	<200	<200	1340	1100	240
A-BSV-20	29-Nov-00	8	120	<10	13	<10	<10	68	54	14
A-BSV-20	29-Nov-00	20	6300	<200	2200	<200	<200	5800	4800	1000
A-BSV-21	29-Nov-00	8	200	<10	11	<10	<10	83	67	16
A-BSV-21	29-Nov-00	20	8800	<1000	<1000	<1000	<1000	2500	2500	<1000
A-BSV-22	30-Nov-00	8	75	<10	<10	<10	<10	33	33	<10
A-BSV-22	30-Nov-00	20	400	<200	<200	<200	<200	440	440	<200
A-BSV-23	30-Nov-00	8	38	<10	<10	<10	33	122	87	35
A-BSV-23	30-Nov-00	20	3500	<200	<200	<200	<200	1350	1100	250
A-BSV-24	30-Nov-00	8	24	<10	<10	<10	<10	12	12	<10
A-BSV-24	30-Nov-00	20	12000	<200	<200	<200	<200	5700	4500	1200
A-BSV-25	30-Nov-00	8	50	<10	<10	<10	<10	29	29	<10
A-BSV-25	30-Nov-00	20	<250	<250	<250	<250	<250	<500	<250	<250
A-BSV-26	30-Nov-00	8	20	<10	<10	<10	<10	12	12	<10
A-BSV-26	30-Nov-00	20	<500	<500	<500	<500	<500	<1000	<500	<500
A-BSV-27	30-Nov-00	8	8	<1	<1	<1	<1	5.3	4.1	1.2
A-BSV-27	30-Nov-00	20	<500	<500	<500	<500	<500	<1000	<500	<500
A-BSV-28	30-Nov-00	8	6.8	<1	<1	<1	<1	4.6	3.3	1.3
A-BSV-28	30-Nov-00	20	300	<100	<100	<100	<100	740	540	200
A-BSV-29	30-Nov-00	8	7.9	<1	<1	<1	<1	13.1	9.6	3.5
A-BSV-29	30-Nov-00	20	1500	<100	<100	<100	140	2100	1700	400
A-BSV-30	01-Dec-00	8	690	<10	<10	<10	730	308	250	58
A-BSV-30	01-Dec-00	20	2900	<200	<200	<200	<200		1600	390
A-BSV-31	01-Dec-00	8	260	<20	130	<20	<20		44	<20
A-BSV-31	01-Dec-00	20	950	<200	550	<200	<200		250	<200
A-BSV-32	01-Dec-00	8	45	nd	5.5	nd	nd	37.4	30	7.4
A-BSV-32	01-Dec-00	20	33000	<100	2000	<100	<100		7300	1900
A-BSV-33	01-Dec-00	8	73	nd	4.6	nd	nd	65	51	14
A-BSV-33	01-Dec-00	20	1600	<100	<100	<100	<100		920	350
A-BSV-34	01-Dec-00	8	13	<2	<2	<2	<2	7.2	3.4	3.8
A-BSV-34	01-Dec-00	20	2700	<200	<200	<200	<200		900	250
A-BSV-35	01-Dec-00	8	55	nd	1	nd	nd	49	37	12
A-BSV-35	01-Dec-00	20	280	<200	<200	<200	<200		480	<200
A-BSV-36	01-Dec-00	8	72	<10	<10	<10	<10	56	43	13
A-BSV-36	01-Dec-00	20	1300	<500	2700	<500	<500		<500	980
A-BSV-37	14-Jan-02	8	4.6	<1	<1	<1	<1	11.4	9.6	1.8
A-BSV-37	14-Jan-02	20	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-38	14-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-38	14-Jan-02	21	<1	<1	3.9	<1	2	<2	<1	<1
A-BSV-39	14-Jan-02	5	<1	<1	1.1	<1	<1	<2	<1	<1
A-BSV-39	14-Jan-02	10	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-39	14-Jan-02	20	37	<1	7.5	<1	6.7	21.3	17	4.3
A-BSV-40	14-Jan-02	5	<1	<1	2.4	<1	1.4	<2	<1	<1
A-BSV-40	14-Jan-02	10	<1	<1	2.6	<1	2.4	<2	<1	<1
A-BSV-40	14-Jan-02	20	<100	<100	<100	<100	250	<200	<100	<100

Note:
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3. nd = non detect

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (1,1,1-TCA)	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,1,2-Trichloroethane	1,1-Dichloroethane (1,1-DCA)	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Acetone	Benzene	Carbon Tetrachloride	Chloroethane	Chloroform	cis-1,2-Dichloroethene (cis-1,2-DCE)	Dichlorodifluoromethane (Freon 12)	Ethylbenzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone (MIBK)	Methylene Chloride	Tetrachloroethene (PCE)
A-BSV-41	14-Jan-02	5	<1	4.9	<1	5.8	<1	67	22	<1		<1	<1	3.6	<1	13	<1	<1			<1	<1
A-BSV-41	14-Jan-02	10	<1	3.1	<1	<1	<1	50	15	<1		<1	<1	<1	<1	16	<1	<1			<1	<1
A-BSV-41	14-Jan-02	20	<100	<100	<100	<100	<100	2500	710	<100		<100	<100	<100	<100	920	<100	<100			<100	<100
A-BSV-42	15-Jan-02	5	<1	19	<1	4.7	<1	22	5.7	<1		1.1	<1	<1	<1	6.7	<1	2.3			<1	25
A-BSV-42	15-Jan-02	10	<1	6.1	<1	1.5	<1	9.2	2	<1		<1	<1	<1	<1	2.9	<1	<1			<1	6.6
A-BSV-42	15-Jan-02	20	<10	100	<10	43	<10	2000	510	<10		<10	<10	19	<10	990	<10	130			<10	<10
A-BSV-43	15-Jan-02	5	<1	4.2	<1	<1	<1	12	1	<1		<1	<1	<1	<1	5.5	<1	<1			<1	<1
A-BSV-43	15-Jan-02	10	<1	6.8	<1	<1	<1	34	1.1	<1		<1	<1	<1	<1	30	<1	<1			<1	2.1
A-BSV-43	15-Jan-02	20	<10	280	<10	21	<10	1000	100	<10		<10	<10	<10	<10	1200	<10	90			<10	<10
A-BSV-44	17-Jan-02	5	<1	51	<1	<1	<1	17	16	<1		<1	<1	<1	<1	37	<1	<1			<1	3.7
A-BSV-44	17-Jan-02	10	<1	32	<1	<1	<1	6.4	13	<1		<1	<1	<1	<1	27	<1	<1			<1	<1
A-BSV-44	17-Jan-02	20	<1	3.2	<1	<1	<1	5.5	<1	<1		<1	<1	<1	<1	6.5	<1	<1			<1	<1
A-BSV-45	15-Jan-02	8	<1	2.6	<1	<1	<1	5.4	<1	<1		<1	<1	<1	<1	2.5	<1	<1			<1	<1
A-BSV-45	15-Jan-02	20	<1	2.8	<1	<1	<1	20	1.6	<1		<1	<1	<1	<1	22	<1	<1			<1	2.4
A-BSV-46	15-Jan-02	8	<1	<1	<1	<1	<1	3.3	<1	<1		<1	<1	<1	<1	2.3	<1	<1			<1	<1
A-BSV-46	15-Jan-02	20	<10	50	<10	<10	<10	590	72	<10		<10	<10	<10	<10	810	<10	95			<10	<10
A-BSV-47	15-Jan-02	8	<1	1.4	<1	<1	<1	6.5	<1	<1		<1	<1	<1	<1	4.5	<1	<1			<1	<1
A-BSV-47	15-Jan-02	20	<10	330	<10	16	<10	850	82	<10		<10	<10	<10	<10	1000	<10	110			<10	<10
A-BSV-48	15-Jan-02	8	<1	25	<1	<1	<1	63	4.3	<1		<1	<1	<1	<1	55	<1	11			<1	<1
A-BSV-48	15-Jan-02	20	<10	92	<10	18	<10	1300	240	<10		<10	<10	<10	<10	730	<10	92			<10	<10
A-BSV-49	15-Jan-02	8	<1	6.9	<1	<1	<1	48	5.7	<1		<1	<1	<1	<1	22	<1	3.1			<1	1.7
A-BSV-49	15-Jan-02	20	<10	67	<10	36	<10	1600	700	<10		<10	<10	21	<10	710	<10	170			<10	<10
A-BSV-50	15-Jan-02	8	<1	3.6	<1	1.8	<1	58	19	<1		<1	<1	<1	<1	19	<1	2.2			<1	<1
A-BSV-50	15-Jan-02	20	<1	140	<1	18	<1	150	130	<1		<1	<1	<1	<1	35	<1	<1			<1	1.5
A-BSV-51	16-Jan-02	8	<1	<1	<1	<1	<1	3.9	1.1	<1		<1	<1	<1	<1	1.1	<1	<1			<1	<1
A-BSV-51	16-Jan-02	20	<1	250	<1	11	<1	190	210	<1		<1	<1	<1	<1	66	<1	<1			<1	<1
A-BSV-52	16-Jan-02	8	<1	3.3	<1	<1	<1	6.6	2.8	<1		<1	<1	<1	<1	1.6	<1	<1			<1	<1
A-BSV-52	16-Jan-02	20	<10	2100	<10	18	<10	920	900	<10		<10	<10	<10	<10	790	<10	21			<10	<10
A-BSV-53	16-Jan-02	8	<1	5.3	<1	<1	<1	7.2	3.8	<1		<1	<1	<1	<1	5.9	<1	<1			<1	<1
A-BSV-53	16-Jan-02	20	<1	2.2	<1	<1	<1	3.7	6.9	<1		<1	<1	<1	<1	3.2	<1	<1			<1	<1
A-BSV-54	16-Jan-02	8	<1	1.6	<1	<1	<1	1.7	5.5	<1		<1	<1	<1	<1	2.9	<1	<1			<1	<1
A-BSV-54	16-Jan-02	20	<10	1400	<10	16	<10	330	800	<10		<10	<10	<10	<10	780	<10	<10			<10	<10
A-BSV-55	16-Jan-02	8	<1	57	<1	1.8	<1	4.9	48	<1		<1	<1	<1	<1	7.5	<1	<1			<1	1.8
A-BSV-55	16-Jan-02	20	<1	250	<1	6.3	<1	30	180	<1		<1	<1	<1	<1	54	<1	<1			<1	2.3
A-BSV-56	16-Jan-02	8	<1	96	<1	2.1	<1	9.3	71	<1		<1	<1	<1	<1	22	<1	<1			<1	2.4
A-BSV-56	16-Jan-02	20	<10	990	<10	18	<10	120	590	<10		<10	<10	<10	<10	330	<10	<10			<10	<10
A-BSV-57	16-Jan-02	8	<1	61	<1	1.3	<1	5.6	48	<1		<1	<1	<1	<1	23	<1	<1			<1	3.4
A-BSV-57	16-Jan-02	20	<10	800	<10	18	<10	79	500	<10		<10	<10	<10	<10	460	<10	<10			<10	<10
A-BSV-58	16-Jan-02	8	<1	13	<1	4.7	<1	1.3	6	<1		<1	<1	<1	<1	8	<1	<1			<1	<1
A-BSV-58	16-Jan-02	20	<10	370	<10	<10	<10	34	210	<10		<10	<10	<10	<10	220	<10	<10			<10	<10
A-BSV-59	17-Jan-02	8	<1	13	<1	<1	<1	9.8	1.7	<1		<1	<1	<1	<1	96	<1	<1			26	<1
A-BSV-59	17-Jan-02	20	<10	880	<10	<10	<10	58	67	<10		<10	<10	<10	<10	610	<10	10			34	<10
A-BSV-60	17-Jan-02	8	<1	250	<1	<1	<1	55	22	<1		<1	<1	<1	<1	120	<1	1.5			44	5.1
A-BSV-60	17-Jan-02	20	<10	890	<10	<10	<10	140	300	<10		<10	<10	<10	<10	800	<10	<10			<10	<10
A-BSV-61	13-Jun-02	12	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	7.1	<1	<1			<1	<1
A-BSV-61	13-Jun-02	20	<1	<1	<1	<1	<1	2.4	<1	<1		<1	<1	<1	1.5	26	<1	<1			<1	<1
A-BSV-62	13-Jun-02	10.5	<1	<1	<1	<1	<1	7.1	<1	<1		1.3	<1	<1	<1	<1	<1	<1			<1	<1
A-BSV-63	13-Jun-02	10.5	<1	<1	<1	<1	<1	1.8	<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1
A-BSV-64	13-Jun-02	12	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	7.3	<1	<1			<1	<1
A-BSV-64	13-Jun-02	20	<1	4300	<1	47	<1	280	1100	<1		2.7	<1	<1	<1	3200	<1	31			<1	59
A-BSV-65	13-Jun-02	12	<1	16	<1	<1	<1	<1	3.5	<1		<1	<1	<1	<1	8.1	<1	<1			<1	1
A-BSV-65	13-Jun-02	20	<1	1600	<1	<1	<1	160	670	<1		1.7	<1	<1	<1	880	<1	1.3			<1	58
A-BSV-66	13-Jun-02	7	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1
A-BSV-67	13-Jun-02	7	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1

Note:
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2. Blank spaces = not analyzed
3. nd = non detect

TABLE 2
HISTORICAL SOIL VAPOR ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

Location	Sample Date	Depth (feet bgs)	Toluene	trans-1,2-Dichloroethene (trans-1,2-DCE)	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride (VC)	Xylenes (total)	xylenes(m,p)	xylenes(o)
A-BSV-41	14-Jan-02	5	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-41	14-Jan-02	10	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-41	14-Jan-02	20	240	<100	<100	<100	<100	220	220	<100
A-BSV-42	15-Jan-02	5	3.4	<1	3.1	<1	<1	8.1	6.9	1.2
A-BSV-42	15-Jan-02	10	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-42	15-Jan-02	20	1000	<10	<10	<10	92	342	280	62
A-BSV-43	15-Jan-02	5	3.7	<1	<1	<1	<1	1.1	1.1	<1
A-BSV-43	15-Jan-02	10	1.5	<1	1	<1	<1	<2	<1	<1
A-BSV-43	15-Jan-02	20	940	<10	<10	<10	57	284	230	54
A-BSV-44	17-Jan-02	5	1	<1	2	<1	<1	<2	<1	<1
A-BSV-44	17-Jan-02	10	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-44	17-Jan-02	20	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-45	15-Jan-02	8	1.2	<1	<1	<1	<1	<2	<1	<1
A-BSV-45	15-Jan-02	20	<1	<1	6.3	<1	<1	<2	<1	<1
A-BSV-46	15-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-46	15-Jan-02	20	490	<10	<10	<10	200	344	290	54
A-BSV-47	15-Jan-02	8	1.4	<1	<1	<1	<1	<2	<1	<1
A-BSV-47	15-Jan-02	20	1100	<10	<10	<10	39	384	310	74
A-BSV-48	15-Jan-02	8	83	<1	<1	<1	1.7	38	30	8
A-BSV-48	15-Jan-02	20	760	<10	<10	<10	26	273	220	53
A-BSV-49	15-Jan-02	8	19	<1	<1	<1	<1	12.7	10	2.7
A-BSV-49	15-Jan-02	20	600	<10	<10	<10	41	452	360	92
A-BSV-50	15-Jan-02	8	12	<1	<1	<1	<1	8	6.4	1.6
A-BSV-50	15-Jan-02	20	1.6	<1	1.6	<1	6.3	<2	<1	<1
A-BSV-51	16-Jan-02	8	1.3	<1	<1	<1	<1	<2	<1	<1
A-BSV-51	16-Jan-02	20	<1	<1	<1	<1	6.8	<2	<1	<1
A-BSV-52	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-52	16-Jan-02	20	38	<10	<10	<10	28	51	37	14
A-BSV-53	16-Jan-02	8	<1	<1	<1	<1	1.9	<2	<1	<1
A-BSV-53	16-Jan-02	20	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-54	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-54	16-Jan-02	20	<10	<10	<10	<10	39	<20	<10	<10
A-BSV-55	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-55	16-Jan-02	20	<1	<1	1.6	<1	<1	<2	<1	<1
A-BSV-56	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-56	16-Jan-02	20	<10	<10	<10	<10	<10	<20	<10	<10
A-BSV-57	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-57	16-Jan-02	20	<10	<10	<10	<10	<10	<20	<10	<10
A-BSV-58	16-Jan-02	8	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-58	16-Jan-02	20	<10	<10	<10	<10	<10	<20	<10	<10
A-BSV-59	17-Jan-02	8	3.6	<1	1.6	<1	<1	<2	<1	<1
A-BSV-59	17-Jan-02	20	91	<10	<10	<10	<10	26	26	<10
A-BSV-60	17-Jan-02	8	15	<1	4	<1	<1	4.7	3.7	1
A-BSV-60	17-Jan-02	20	16	<10	<10	<10	16	<20	<10	<10
A-BSV-61	13-Jun-02	12	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-61	13-Jun-02	20	10	<1	<1	<1	<1	<2	<1	<1
A-BSV-62	13-Jun-02	10.5	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-63	13-Jun-02	10.5	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-64	13-Jun-02	12	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-64	13-Jun-02	20	110	3.8	170	<1	14	81	57	24
A-BSV-65	13-Jun-02	12	1.2	<1	1.2	<1	<1	<2	<1	<1
A-BSV-65	13-Jun-02	20	12	1.6	100	<1	4.8	34	20	14
A-BSV-66	13-Jun-02	7	<1	<1	<1	<1	<1	<2	<1	<1
A-BSV-67	13-Jun-02	7	<1	<1	<1	<1	<1	<2	<1	<1

Note:
1. All values reported in units of ug/L.
2. Blank spaces = not analyzed
3. nd = non detect

TABLE 3
PHYSICAL SOIL TESTING DATA
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

								Atterberg Tests			
Sample Number	Initial Moisture Content (%, Gravimetric)	Initial Moisture Content (%, Volumetric)	Dry Bulk Density (g/cm3)	Wet Bulk Density (g/cm3)	Calculated Porosity (%)	Saturated Hydraulic Conductivity	Fraction Organic Carbon (%)	Liquid Limit	Plastic Limit	Plasticity Index	Classi-fication
MW-12 (13.5-14.5)	16.3	28.5	1.74	2.03	37.1	1.5E-06	ND	27.4	23.2	4.2	ML
MW-12 (21-22)	2.6	4.3	1.66	1.70	37.6	1.4E-01	ND				
MW-12 (31-32)	3.5	4.8	1.35	1.40	49.3	5.3E-02	0.14				
MW-12 (46-47)	36.3	49.8	1.37	1.87	49.8	2.8E-06	0.13	32.4	26.7	5.7	ML
MW-15 (13.5-14.5)	14.4	24.6	1.71	1.96	38.2	3.8E-07	0.12	21.4	19.2	2.2	ML
MW-15 (23.5-24.5)	4.6	7.7	1.66	1.74	37.5	1.5E-02	0.14				
MW-15 (28.5-29.5)	26.4	40.9	1.55	1.96	44.2	6.0E-07	0.13				ML
MW-15 (38.5-39.5)	27.3	41.0	1.50	1.91	45.4	4.8E-06	0.12	35.9			ML
MW-16 (13.5-14.5)	14.6	25.0	1.71	1.96	37.8	4.1E-05	0.19	29.5	21.6	7.9	CL
MW-16 (23.5-24.5)	3.2	4.7	1.47	1.51	44.5	2.4E-02	0.12				ML
MW-16 (28.5-29.5)	20.8	31.1	1.49	1.81	45.4	1.4E-04	0.18	37.5	23.9	13.6	CL
MW-16 (38.5-39.5)	28.5	42.8	1.50	1.93	45.1	3.2E-05	0.14				ML

TABLE 4
HISTORICAL SOIL ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-A-1	12-Dec-98	15																										
A-A-2	12-Dec-98	15																										
A-B-1	12-Dec-98	15																										
A-B-2	12-Dec-98	15																										
A-BH-01	01-Jan-90	15		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-01	01-Jan-90	20		0.018	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-02	01-Jan-90	10		0.091	<0.005	<0.005	0.076	0.029			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-02	01-Jan-90	15		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-03	01-Jan-90	5		0.019	<0.005	<0.005	0.062	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-03	01-Jan-90	10		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-03	01-Jan-90	15		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-03	01-Jan-90	20		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-04	01-Jan-90	5		0.065	<0.01	<0.01	0.098	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-04	01-Jan-90	15		0.039	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-04	01-Jan-90	20		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-05	01-Jan-90	5		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-05	01-Jan-90	10		0.03	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-05	01-Jan-90	15		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-05	01-Jan-90	20		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	5		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	10		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	15		0.23	<0.005	<0.005	0.025	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	20		0.029	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	25		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	30		0.045	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	35		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	40		0.72	<0.005	<0.005	0.31	0.27			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	45		0.9	<0.005	<0.005	0.18	0.68			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-06	01-Jan-90	50		0.018	<0.005	<0.005	0.056	0.031			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-07	01-Jan-90	10		0.011	<0.005	<0.005	0.018	0.021			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-07	01-Jan-90	15		0.071	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-07	01-Jan-90	20		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-08	01-Jan-90	10		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-08	01-Jan-90	15		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-08	01-Jan-90	20		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-08	01-Jan-90	25		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01					<0.05		<0.03	
A-BH-09	01-Jan-90	5		0.056	<0.025	<0.025	0.03	<0.005			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-09	01-Jan-90	15		<0.005	<0.005	<0.005	0.024	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-09	01-Jan-90	25		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-10	01-Jan-90	10		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-10	01-Jan-90	20		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-11	01-Jan-90	25		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-11	01-Jan-90	30		1.2	<0.025	<0.025	<0.025	0.21			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-11	01-Jan-90	35		1	<0.025	<0.025	0.081	0.13			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-12	01-Jan-90	10		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-12	01-Jan-90	20		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-BH-13	01-Jan-90	15		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-13	01-Jan-90	30		0.21	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-13	01-Jan-90	40		0.28	<0.025	<0.025	<0.025	0.16			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-BH-14	01-Jan-90	5		<3.125	<3.125	<3.125	<3.125	<3.125			<3.125					<3.125	<3.125	<3.125		<3.125					<15.625		<9.375	
A-BH-14	01-Jan-90	10		<3.125	<3.125	<3.125	<3.125	<3.125			<3.125					<3.125	<3.125	<3.125		<3.125					<15.625		<9.375	
A-BH-14	01-Jan-90	15		2.3	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-14	01-Jan-90	20		28	<2.5	<2.5	<2.5	<2.5			<2.5					<2.5	<2.5	<2.5		<2.5					<12.5		<7.5	
A-BH-14	01-Jan-90	25		<2.5	<2.5	<2.5	<2.5	<2.5			<2.5					<2.5	<2.5	<2.5		<2.5					<12.5		<7.5	
A-BH-14	01-Jan-90	30		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-14	01-Jan-90	35		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-14	01-Jan-90	40		1.8	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-BH-15	05-Jan-94	1		20.9	<0.005	<0.005	0.462	0.269			<0.005					<0.005	<0.005	<0.005		<0.005		<0.005			<0.05		<0.03	
A-BH-15	05-Jan-94	5		0.109	<0.005	<0.005	0.074	0.01			<0.005					<0.005	<0.005	<0.005		<0.005		<0.005			<0.05		<0.03	
A-BH-15	05-Jan-94	10		0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005		<0.005			<0.05		<0.03	
A-BH-15	05-Jan-94	20		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005		<0.005			<0.05		<0.03	
A-BH-15(2000)	03-Feb-00	2	<1	1.8	<1	<1	4	1.6	<1	<1	<1	<1	150	<1	<1	<1	<1	<1	130	<1	<1	<1		<1				
A-BH-15(2000)	03-Feb-00	4	<1	2.7	<1	<1	1.4	<1	<1	<1	<1	<1	69	<1	<1	<1	<1	<1	51	<1	<1	<1		<1				
A-BH-15(2000)	03-Feb-00	6	<1	1.9	<1	<1	<1	<1	<1	<1	<1	<1	58	<1	<1	<1	<1	<1	44	<1	<1	<1		<1				
A-BH-15(2000)	03-Feb-00	10	<1	5.7	<1	<1	1.2	<1	<1	<1	<1	<1	85	<1	<1	<1	<1	<1	68	<1	<1	<1		<1			<20	
A-BH-15(2000)	03-Feb-00	15	<0.4	0.76	<0.4	<0.4	<0.4	0.81	<0.4	<0.4	<0.4	<0.4	0.73	<0.4	<0.4	<0.4	<0.4	<0.4	0.55	<0.4	<0.4	<0.4		<0.4				
A-BH-15(2000)	03-Feb-00	20	<1	18	<1	<1	5.4	<1	<1	<1	<1	<1	35	<1	<1	<1	<1	<1	30	<1	<1	<1		<1				

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-A-1	12-Dec-98	15		<0.005																			<0.015					
A-A-2	12-Dec-98	15		<0.005																			<0.015					
A-B-1	12-Dec-98	15		<0.005																			<0.015					
A-B-2	12-Dec-98	15		<0.005																			<0.015					
A-BH-01	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-01	01-Jan-90	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.2	0.18
A-BH-02	01-Jan-90	10	<0.025	0.021				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.087				<0.025	<0.015
A-BH-02	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	0.06
A-BH-03	01-Jan-90	5	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.062				<0.025	0.23
A-BH-03	01-Jan-90	10	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-03	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.11	0.37
A-BH-03	01-Jan-90	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-04	01-Jan-90	5	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-04	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-04	01-Jan-90	20	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	0.98
A-BH-05	01-Jan-90	5	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			0.042				1.8	2.1
A-BH-05	01-Jan-90	10	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.053				0.64	2.1
A-BH-05	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.6	1.3
A-BH-05	01-Jan-90	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.3	0.63
A-BH-06	01-Jan-90	5	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.071				0.11	0.12
A-BH-06	01-Jan-90	10	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.04	0.12
A-BH-06	01-Jan-90	15	<0.025	0.011				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.22				1.3	1.9
A-BH-06	01-Jan-90	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.013				0.24	0.6
A-BH-06	01-Jan-90	25	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.11	0.45
A-BH-06	01-Jan-90	30	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.26				1	2
A-BH-06	01-Jan-90	35	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.2	0.62
A-BH-06	01-Jan-90	40	<0.025	0.16				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.22				1.2	2.3
A-BH-06	01-Jan-90	45	<0.025	0.16				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			1.1				0.75	2.2
A-BH-06	01-Jan-90	50	<0.025	0.067				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.039				<0.025	1.2
A-BH-07	01-Jan-90	10	<0.025	0.12				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-07	01-Jan-90	15	<0.025	0.046				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-07	01-Jan-90	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-BH-08	01-Jan-90	10	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-08	01-Jan-90	15	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-08	01-Jan-90	20	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-08	01-Jan-90	25	<0.05	<0.01				<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01		<0.01			<0.01				<0.05	<0.03
A-BH-09	01-Jan-90	5	0.55	<0.005				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			0.037				0.12	0.45
A-BH-09	01-Jan-90	15	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.032				<0.025	<0.015
A-BH-09	01-Jan-90	25	0.38	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				0.39	0.17
A-BH-10	01-Jan-90	10	0.25	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				<0.125	<0.075
A-BH-10	01-Jan-90	20	0.6	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				<0.125	<0.075
A-BH-11	01-Jan-90	25	1.3	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				<0.125	<0.075
A-BH-11	01-Jan-90	30	<0.125	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			11				0.5	<0.075
A-BH-11	01-Jan-90	35	<0.125	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			1.4				<0.125	0.7
A-BH-12	01-Jan-90	10	27	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				<3.125	<1.875
A-BH-12	01-Jan-90	20	8.6	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	0.054
A-BH-13	01-Jan-90	15	6.9	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				<3.125	<1.875
A-BH-13	01-Jan-90	30	1.3	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				<0.125	<0.075
A-BH-13	01-Jan-90	40	11	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				0.53	0.15
A-BH-14	01-Jan-90	5	<15.625	<3.125				<3.125	<9.375	<3.125	<3.125	<3.125	<9.375	<3.125	<9.375		<3.125	<3.125		<3.125			45				<15.625	<9.375
A-BH-14	01-Jan-90	10	41	<3.125				<3.125	<9.375	<3.125	<3.125	<3.125	<9.375	<3.125	<9.375		<3.125	<3.125		<3.125			29				<15.625	<9.375
A-BH-14	01-Jan-90	15	<3.125	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			9.3				<3.125	<1.875
A-BH-14	01-Jan-90	20	50	<2.5				<2.5	<7.5	<2.5	<2.5	<2.5	<7.5	<2.5	<7.5		<2.5	<2.5		<2.5			44				<12.5	<7.5
A-BH-14	01-Jan-90	25	39	<2.5				<2.5	<7.5	<2.5	<2.5	<2.5	<7.5	<2.5	<7.5		<2.5	<2.5		<2.5			17				<12.5	<7.5
A-BH-14	01-Jan-90	30	31	<625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				10	9.3
A-BH-14	01-Jan-90	35	55	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				15	6.3
A-BH-14	01-Jan-90	40	<3.125	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			2.6				<3.125	<1.875
A-BH-15	05-Jan-94	1	4.48	0.008			<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.03	<0.005	<0.03		<0.005	<0.005	<0.005	<0.005			0.218		<0.005		0.193	0.198
A-BH-15	05-Jan-94	5	9.38	<0.005			<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.03	<0.005	<0.03		<0.005	<0.005	<0.005	<0.005			<0.005		<0.005		1.59	<0.03
A-BH-15	05-Jan-94	10	0.067	<0.005			<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.03	<0.005	<0.03		<0.005	<0.005	<0.005	<0.005			<0.005		<0.005		<0.05	<0.03
A-BH-15	05-Jan-94	20	0.261	<0.005			<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.03	<0.005	<0.03		<0.005	<0.005	<0.005	<0.005			<0.005		<0.005		<0.05	<0.03
A-BH-15(2000)	03-Feb-00	2	3000	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			100	<1		10	1500	<20
A-BH-15(2000)	03-Feb-00	4	2300	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			11	<1		<1	1500	5.3
A-BH-15(2000)	03-Feb-00	6	1500	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			3.2	<1		<1	850	2.9
A-BH-15(2000)	03-Feb-00	10	3000	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			4.7	<1		4.8	170	<20
A-BH-15(2000)	03-Feb-00	15	52	<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	<0.4			<0.4	<0.4		<0.4	26	1.4
A-BH-15(2000)	03-Feb-00	20	25	<1	<1	<1		<1	<1		3.1	<1		<1	<1	2	<1	<1	<1	<1			3.3	<1		2.2	16	2.2

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-A-1	12-Dec-98	15		<0.01										<0.005									<1
A-A-2	12-Dec-98	15		<0.01										<0.005									<1
A-B-1	12-Dec-98	15		<0.01										<0.005									<1
A-B-2	12-Dec-98	15		<0.01										<0.005									<1
A-BH-01	01-Jan-90	15	<0.025							<0.005			<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-01	01-Jan-90	20	<0.025							<0.005			0.016	0.021	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.012	<0.005	0.012
A-BH-02	01-Jan-90	10	<0.025							<0.005			0.21	0.25	<0.005	<0.005	0.04	<0.005	<0.015	<0.015	0.32	0.092	0.412
A-BH-02	01-Jan-90	15	<0.025							<0.005			<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-03	01-Jan-90	5	<0.025							<0.005			0.12	0.44	<0.005	<0.005	0.01	<0.005	<0.015	<0.015	0.33	0.12	0.45
A-BH-03	01-Jan-90	10	<0.05							<0.01			<0.01	0.16	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	0.07
A-BH-03	01-Jan-90	15	<0.025							<0.005			<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-03	01-Jan-90	20	<0.025							<0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-04	01-Jan-90	5	<0.05							<0.01			<0.01	0.15	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-04	01-Jan-90	15	<0.025							<0.005			<0.005	0.033	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-04	01-Jan-90	20	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-05	01-Jan-90	5	<0.05							<0.01			<0.01	0.16	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	0.12	0.055	0.175
A-BH-05	01-Jan-90	10	<0.025							<0.005			0.03	0.36	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.12	0.043	0.163
A-BH-05	01-Jan-90	15	<0.025							<0.005			<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.015	<0.005	0.015
A-BH-05	01-Jan-90	20	<0.025							<0.005			<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-06	01-Jan-90	5	<0.025							<0.005			0.035	0.7	<0.005	<0.005	0.016	<0.005	<0.015	<0.015	0.236	0.084	0.32
A-BH-06	01-Jan-90	10	<0.025							<0.005			<0.005	0.04	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.013	<0.005	0.013
A-BH-06	01-Jan-90	15	<0.025							<0.005			0.33	1.9	<0.005	<0.005	0.06	<0.005	<0.015	<0.015	2.1	0.2	2.3
A-BH-06	01-Jan-90	20	<0.025							<0.005			0.026	0.15	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.049	0.018	0.067
A-BH-06	01-Jan-90	25	<0.025							<0.005			<0.005	0.032	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.01	<0.005	0.01
A-BH-06	01-Jan-90	30	<0.025							<0.005			0.75	0.87	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	1.4	0.25	1.65
A-BH-06	01-Jan-90	35	<0.025							<0.005			<0.005	0.026	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.012	<0.005	0.012
A-BH-06	01-Jan-90	40	<0.025							<0.005			0.15	0.82	<0.005	<0.005	0.033	<0.005	<0.015	<0.015	0.35	0.18	0.53
A-BH-06	01-Jan-90	45	<0.025							<0.005			0.94	1.6	<0.005	<0.005	0.087	<0.005	<0.015	<0.015	1.7	0.87	2.57
A-BH-06	01-Jan-90	50	<0.025							<0.005			0.01	0.065	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.11	0.013	0.123
A-BH-07	01-Jan-90	10	<0.025							<0.005			0.02	0.02	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	0.013	0.013
A-BH-07	01-Jan-90	15	<0.025							<0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-07	01-Jan-90	20	<0.025							<0.005			<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-08	01-Jan-90	10	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-08	01-Jan-90	15	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-08	01-Jan-90	20	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-08	01-Jan-90	25	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.02
A-BH-09	01-Jan-90	5	0.46							<0.025			0.037	0.41	<0.025	<0.025	0.02	<0.025	<0.075	<0.075	0.18	0.07	0.25
A-BH-09	01-Jan-90	15	0.73							<0.005			<0.005	0.19	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	0.125	0.036	0.161
A-BH-09	01-Jan-90	25	<0.125							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	<0.025	<0.025	<0.025
A-BH-10	01-Jan-90	10	<0.125							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	<0.025	<0.025	<0.025
A-BH-10	01-Jan-90	20	<0.125							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	<0.025	<0.025	<0.025
A-BH-11	01-Jan-90	25	<0.125							<0.025			<0.025	0.059	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	0.05	<0.025	0.05
A-BH-11	01-Jan-90	30	<0.125							<0.025			<0.025	10	<0.025	<0.025	0.076	<0.025	<0.075	<0.075	16	8.3	24.3
A-BH-11	01-Jan-90	35	<0.125							<0.025			0.33	1.9	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	1.8	0.83	2.63
A-BH-12	01-Jan-90	10	<3.125							<0.625			<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	<0.625	<0.625	<0.625
A-BH-12	01-Jan-90	20	<0.025							<0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-BH-13	01-Jan-90	15	<3.125							<0.625			<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	<0.625	<0.625	<0.625
A-BH-13	01-Jan-90	30	<0.125							<0.025			0.09	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	<0.025	<0.025	<0.025
A-BH-13	01-Jan-90	40	0.3							<0.025			0.23	0.098	<0.025	<0.025	0.12	<0.025	<0.075	<0.075	0.06	<0.025	0.06
A-BH-14	01-Jan-90	5	<15.625							<3.125			<3.125	67	<3.125	<3.125	8.7	<3.125	<9.375	<9.375	180	53	233
A-BH-14	01-Jan-90	10	<15.625							<3.125			<3.125	98	<3.125	<3.125	8.4	<3.125	<9.375	<9.375	85	27	112
A-BH-14	01-Jan-90	15	<3.125							<0.625			8.9	27	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	21	7.3	28.3
A-BH-14	01-Jan-90	20	<12.5							<2.5			48	150	<2.5	<2.5	<2.5	<2.5	<7.5	<7.5	99	29	128
A-BH-14	01-Jan-90	25	<12.5							<2.5			19	37	<2.5	<2.5	<2.5	<2.5	<7.5	<7.5	40	12	52
A-BH-14	01-Jan-90	30	7.8							<0.625			<0.625	3.3	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	1.9	<0.625	1.9
A-BH-14	01-Jan-90	35	<3.125							<0.625			<0.625	1.6	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	<0.625	<0.625	<0.625
A-BH-14	01-Jan-90	40	<3.125							<0.625			1.4	2.4	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	5.8	2.5	8.3
A-BH-15	05-Jan-94	1	<0.05							<0.005			6.33	1.3	<0.005	<0.005	0.027	<0.005	<0.03	<0.03	14.2	29	43.2
A-BH-15	05-Jan-94	5	<0.05							<0.005			0.011	0.024	<0.005	<0.005	<0.005	<0.005	<0.03	<0.03	0.012	0.011	0.012
A-BH-15	05-Jan-94	10	<0.05							<0.005			<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.03	<0.03	<0.005	<0.005	<0.005
A-BH-15	05-Jan-94	20	<0.05							<0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.03	<0.005	<0.005	<0.005
A-BH-15(2000)	03-Feb-00	2	1.2	<1	6.1	<1	24	18	14	<1		<1	3.7	300	<1	<1	<1	<1		<1	280	130	410
A-BH-15(2000)	03-Feb-00	4	4.4	<1	4.1	<1	7.7	3.3	<1	<1		<1	3.4	48	<1	<1	<1	<1		<1	42	21	63
A-BH-15(2000)	03-Feb-00	6	2.7	<1	2.5	<1	6	2.5	<1	<1		<1	2.6	25	<1	<1	<1	<1		<1	12	7.4	19.4
A-BH-15(2000)	03-Feb-00	10	1.8	<1	2.6	<1	8.4	2.2	<1	<1		<1	5.5	46	<1	<1	<1	<1		<1	17	9.2	26.2
A-BH-15(2000)	03-Feb-00	15	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	0.62	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.8
A-BH-15(2000)	03-Feb-00	20	1.8	<1	2.8	<1	3.8	1.2	<1	<1		<1	2.3	39	<1	<1	2.5	<1		<1	12	5.6	17.6

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-BH-16	06-Jan-94	1		<0.05	<0.05	<0.05	<0.05	<0.05			<0.05					<0.05	<0.05	<0.05		<0.05		<0.05			<0.5		<0.3	
A-BH-16	06-Jan-94	5		0.055	<0.05	<0.05	<0.05	<0.05			<0.05					<0.05	<0.05	<0.05		<0.05		<0.05			<0.5		<0.3	
A-BH-16	06-Jan-94	10		0.006	<0.05	<0.05	<0.05	<0.05			<0.05					<0.05	<0.05	<0.05		<0.05		<0.05			<0.5		<0.3	
A-BH-16	06-Jan-94	20		<0.05	<0.05	<0.05	<0.05	<0.05			<0.05					<0.05	<0.05	<0.05		<0.05		<0.05			<0.5		<0.3	
A-BH-16(2000)	03-Feb-00	2	<1	1.2	<1	<1	<1	<1	<1	<1	<1	<1	64	<1	<1	<1	<1	<1	51	<1	<1	<1		<1				
A-BH-16(2000)	03-Feb-00	6	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	66	<1	<1	<1	<1	<1	53	<1	<1	<1		<1				
A-BH-16(2000)	03-Feb-00	10	<1	2.2	<1	<1	<1	<1	<1	<1	<1	<1	42	<1	<1	<1	<1	<1	33	<1	<1	<1		<1			<2	
A-BH-17	11-Jan-94	1		36.8	<0.25	<0.25	0.706	<0.25			<0.25					<0.25	<0.25	<0.25		<0.25		<0.25			<1.25		<0.75	
A-BH-17	11-Jan-94	5		19.4	<1	<1	<1	<1			<1					<1	<1	<1		<1		<1			<5		<3	
A-BH-17	11-Jan-94	10		0.055	<0.01	<0.01	0.011	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01		<0.01			<0.05		<0.03	
A-BH-17	11-Jan-94	20		<0.01	<0.01	<0.01	<0.01	<0.01			<0.01					<0.01	<0.01	<0.01		<0.01		<0.01			<0.05		<0.03	
A-BH-17(2000)	03-Feb-00	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	20	<1	<1	<1	<1	<1	18	<1	<1	<1		<1				
A-BH-17(2000)	03-Feb-00	6	<1	1.8	<1	<1	<1	<1	<1	<1	<1	<1	47	<1	<1	<1	<1	<1	37	<1	<1	<1		<1				
A-BH-17(2000)	03-Feb-00	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	<1	<1	<1	<1	1	<1	<1	<1		<1			<2	
A-BH-18	03-Feb-00	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.4	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1				
A-BH-18	03-Feb-00	6	<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	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4				
A-BH-18	03-Feb-00	10	<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	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4			<0.02	
A-BSB-01	05-Jun-02	5	<0.005	<0.005	<0.005	<0.005	0.0057	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	10	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	17.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	20	<0.005	0.115	<0.005	<0.005	0.112	0.0375	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	27.5	<0.005	0.55	<0.005	<0.005	0.305	0.222	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	28	<0.005	0.23	<0.005	<0.005	0.745	0.11	<0.005	<0.005	<0.005	<0.005	0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	35	<0.005	0.095	<0.005	<0.005	0.205	0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	40	<0.005	<0.005	<0.005	<0.005	0.196	0.132	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-01	05-Jun-02	45	<0.005	<0.005	<0.005	<0.005	0.148	0.08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	4	<0.005	0.011	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	9	<0.005	0.0056	<0.005	<0.005	0.0056	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	14	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	18	<0.005	0.055	<0.005	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-02	06-Jun-02	26.5	<0.005	0.0425	<0.005	<0.005	0.0185	0.0091	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-03	15-Aug-02	6.5	<0.005	<0.005	<0.005	<0.005	0.0086	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-03	15-Aug-02	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-03	15-Aug-02	18	<0.01	<0.01	<0.01	<0.01	0.325	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2	<0.01	<0.02	<0.01	<0.1	<0.01
A-BSB-03	15-Aug-02	19	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-03	15-Aug-02	27	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.975	<0.005	<0.005	<0.005	<0.005	<0.005	0.265	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-03	15-Aug-02	28	<0.25	<0.25	<0.25	3.98	<0.25	2	<0.25	<0.25	<0.25	<0.25	40.3	<0.25	<0.25	<0.25	<0.25	<0.25	10.4	<0.25	<0.25	<0.25	<25	<0.25	<0.25	<0.25	<12.5	<0.25
A-BSB-03	15-Aug-02	35	<0.01	<0.01	<0.01	<0.01	0.077	0.474	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2	<0.01	<0.02	<0.01	<0.1	<0.01
A-BSB-03	15-Aug-02	40	<0.025	<0.025	<0.025	<0.025	0.152	0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.5	<0.025	<0.05	<0.025	<0.25	<0.025
A-BSB-04	15-Aug-02	6.5	<0.005	<0.005	<0.005	<0.005	0.0368	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-04	15-Aug-02	12	<0.005	<0.005	<0.005	<0.005	0.207	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-04	15-Aug-02	17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.1	<0.05	<0.5	<0.05
A-BSB-04	15-Aug-02	25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.1	<0.05	<0.5	<0.05
A-BSB-04	15-Aug-02	26.5	<0.125	<0.125	<0.125	<0.125	0.85	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-04	15-Aug-02	34	<0.25	<0.25	<0.25	<0.25	2.21	0.875	<0.25	<0.25	<0.25	<0.25	1.95	<0.25	<0.25	<0.25	<0.25	<0.25	0.46	<0.25	<0.25	<0.25	<5	<0.25	<0.5	<0.25	<2.5	<0.25
A-BSB-04	15-Aug-02	40	<0.25	1.01	<0.25	<0.25	0.895	1.78	<0.25	<0.25	<0.25	<0.25	3.83	<0.25	<0.25	<0.25	<0.25	<0.25	0.965	<0.25	<0.25	<0.25	<5	<0.25	<0.5	<0.25	<2.5	<0.25
A-BSB-05	16-Aug-02	7	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-05	16-Aug-02	12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-05	16-Aug-02	20	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-05	16-Aug-02	23	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-05	16-Aug-02	28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-05	16-Aug-02	34	<0.125	<0.125	<0.125	<0.125	0.33	0.35	<0.125	<0.125	<0.125	<0.125	0.965	<0.125	<0.125	<0.125	<0.125	<0.125	0.165	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-05	16-Aug-02	37.5	<0.125	<0.125	<0.125	<0.125	0.35	0.31	<0.125	<0.125	<0.125	<0.125	0.85	<0.125	<0.125	<0.125	<0.125	<0.125	0.175	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-05	16-Aug-02	40	<0.125	<0.125	<0.125	<0.125	0.19	0.27	<0.125	<0.125	<0.125	<0.125	0.86	<0.125	<0.125	<0.125	<0.125	<0.125	0.195	<0.125	<0.125	<0.125	<2.5	<0.125	<0.25	<0.125	<1.25	<0.125
A-BSB-06	16-Aug-02	5	<2.5	36.8	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	474	<2.5	<2.5	<2.5	<2.5	<2.5	70.5	<2.5	<2.5	<2.5	<5	<2.5	<5	<2.5	<25	<2.5
A-BSB-06	16-Aug-02	9	<0.5	1.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	24.2	<0.5	<0.5	<5	<0.5	<0.5	2.88	<5	<0.5	<5	<10	<0.5	<1	<0.5	<5	<0.5
A-BSB-06	16-Aug-02	10	<2.5	1.46	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.5	<2.5	<2.5	<2.5	<5	<2.5	<5	<2.5	<25	<2.5
A-BSB-06	16-Aug-02	15	<1	80	<1	<1	1.46	1	<1	<1	<1	<1	80.7	<1	<1	<1	<1	<1	6.68	<1	<1	<1	<20	<1	<2	<1	<10	<1
A-BSB-06	16-Aug-02	19	<0.5	30.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	84	<0.5	<0.5	<0.5	<0.5	<0.5	10.3	<0.5	<0.5	<0.5	<10	<0.5	<1	<0.5	<5	<0.5
A-BSB-06	16-Aug-02	25	<1.25	2.54	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	21.7	<1.25	<1.25	<1.25	<1.25	<1.25	2.94	<1.25	<1.25	<1.25	<25	<1.25	<2.5	<1.25	<12.5	<1.25
A-BSB-06	16-Aug-02	30	<0.5	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	54.2	<0.5	<0.5	<0.5	<0.5	<0.5	7.34	<0.5	<0.5	<0.5	<10	<0.5	<1	<0.5	<5	<0.5
A-BSB-06	16-Aug-02	34	<1.25	26.3	<1.25	4.08	4.93	4.95	<1.25	<1.25	<1.25	<1.25	93	<1.25	<1.25	<1.25	<1.25	<1.25	13.3	<1.25	<1.25	<1.25	<25	<1.25	<2.5	<1.25	<12.5	<1.25
A-BSB-06	16-Aug-02	40	<0.5	<0.5	<0.5	<0.5	1.42	0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1	<0.5	<5	<0.5
A-BSB-07	19-Aug-02	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	0.195	<0.005	<0.005	<0.5	<0.005	<0.005	0.06	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	7.5	<0.005	<0.005	<0.005	<0.005	0.188	<0.005	<0.005	<0.005	<0.005	<0.5	0.155	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	15	<0.005	61.6	<0.005	139	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	224	<0.005	<0.005	<0.5	<0.005	<0.005	59	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-BH-16	06-Jan-94	1	10.1	<0.05			<0.05	<0.05	<0.3	<0.05	<0.05	<0.05	<0.3	<0.05	<0.3		<0.05	<0.05	<0.05	<0.05			<0.05		<0.05		23.4	<0.3
A-BH-16	06-Jan-94	5	2.18	<0.05			<0.05	<0.05	<0.3	<0.05	<0.05	<0.05	<0.3	<0.05	<0.3		<0.05	<0.05	<0.05	<0.05			<0.05		<0.05		52	<0.3
A-BH-16	06-Jan-94	10	<0.5	<0.05			<0.05	<0.05	<0.3	<0.05	<0.05	<0.05	<0.3	<0.05	<0.3		<0.05	<0.05	<0.05	<0.05			<0.05		<0.05		11.6	<0.3
A-BH-16	06-Jan-94	20	<0.5	<0.05			<0.05	<0.05	<0.3	<0.05	<0.05	<0.05	<0.3	<0.05	<0.3		<0.05	<0.05	<0.05	<0.05			0.082		<0.05		<0.5	<0.3
A-BH-16(2000)	03-Feb-00	2	450	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			32	<1		3.8	220	5
A-BH-16(2000)	03-Feb-00	6	490	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			4.6	<1		4.4	290	3.5
A-BH-16(2000)	03-Feb-00	10	450	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1		2.5	74	5
A-BH-17	11-Jan-94	1	39.7	<0.25			<0.25	<0.25	<0.75	<0.25	<0.25	<0.25	<0.75	<0.25	<0.75		<0.25	<0.25	<0.25	<0.25			1.56		<0.25		12.2	2.05
A-BH-17	11-Jan-94	5	25.2	<1			<1	<1	<3	<1	<1	<1	<3	<1	<3		<1	<1	<1	<1			6.33		<1		35.2	11.6
A-BH-17	11-Jan-94	10	15.4	<0.01			<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01	<0.01	<0.01			<0.01		<0.01		60.3	3.02
A-BH-17	11-Jan-94	20	1.05	<0.01			<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.03	<0.01	<0.03		<0.01	<0.01	<0.01	<0.01			<0.01		<0.01		2.4	0.399
A-BH-17(2000)	03-Feb-00	2	96	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1		<1	49	5.3
A-BH-17(2000)	03-Feb-00	6	150	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			2.3	<1		3	64	<2
A-BH-17(2000)	03-Feb-00	10	96	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1		<1	55	5.3
A-BH-18	03-Feb-00	2	0.15	<1	<1	<1		<1	<1		<1	<1		<1	<1	<1	<1	<1	<1	<1			<1	<1		<1	0.054	<0.02
A-BH-18	03-Feb-00	6	4.4	<0.4	<0.4	<0.4		<0.4	<0.4		<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4			<0.4	<0.4		<0.4	1.8	<0.8
A-BH-18	03-Feb-00	10	0.15	<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	<0.4			<0.4	<0.4		<0.4	<0.8	<0.02
A-BSB-01	05-Jun-02	5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0195	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	10	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.05	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	17.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	20	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.178	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	27.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.365	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	28	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.58	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	35	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.308	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	40	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.27	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-01	05-Jun-02	45	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.125	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	4	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	9	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	14	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	18	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	21	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-02	06-Jun-02	26.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.022	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-03	15-Aug-02	6.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-03	15-Aug-02	11.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-03	15-Aug-02	18	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.01	<0.02	<0.01	<0.02	0.195	<0.01	<0.01	<0.01	<0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1
A-BSB-03	15-Aug-02	19	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-03	15-Aug-02	27	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.18	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-03	15-Aug-02	28	<12.5	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<12.5	<0.25	<0.25	<2.5	<0.25	<2.5	<0.25	<0.25	<0.25	<0.25	<2.5	<0.25	<0.25	18.4	<0.005	<0.25	1.85	<12.5	<12.5
A-BSB-03	15-Aug-02	35	<0.1	0.0102	<0.01	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.01	<0.02	<0.01	<0.02	0.474	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.1	<0.1
A-BSB-03	15-Aug-02	40	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.05	<0.25	<0.025	<0.025	<0.05	<0.025	<0.05	0.66	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.25	<0.25
A-BSB-04	15-Aug-02	6.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.049	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-04	15-Aug-02	12	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.34	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-04	15-Aug-02	17	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.5	<0.05	<0.05	<0.1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.5
A-BSB-04	15-Aug-02	25	3.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.5	<0.05	<0.05	<0.1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.5
A-BSB-04	15-Aug-02	26.5	3.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	1.07	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	0.055	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-04	15-Aug-02	34	2.38	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<2.5	<0.25	<0.25	<0.5	<0.25	<0.5	10.2	<0.25	<0.25	<0.25	<0.5	<0.25	<0.25	1.12	<0.25	<0.25	<0.25	<2.5	<2.5
A-BSB-04	15-Aug-02	40	<2.5	0.23	<0.25	<0.25	<0.25	<0.25	<0.5	<2.5	<0.25	<0.25	<0.5	<0.25	<0.5	0.76	<0.25	<0.25	<0.25	<0.5	<0.25	<0.25	1.25	<0.25	<0.25	<0.25	<2.5	<2.5
A-BSB-05	16-Aug-02	7	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-05	16-Aug-02	12	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-05	16-Aug-02	20	6.3	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	0.565	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-05	16-Aug-02	23	7.7	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	0.405	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-05	16-Aug-02	28	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-05	16-Aug-02	34	<1.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	2	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-05	16-Aug-02	37.5	1.37	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	1.75	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-05	16-Aug-02	40	1.83	0.08	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25	1.19	<0.125	<0.125	<0.125	<0.25	<0.125	<0.125	0.195	<0.125	<0.125	<0.125	<1.25	<1.25
A-BSB-06	16-Aug-02	5	36.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5	<25	<2.5	<2.5	<5	<2.5	<5	8.35	<2.5	<2.5	<2.5	<5	<2.5	<2.5	4.55	<2.5	<2.5	1.65	<25	<25
A-BSB-06	16-Aug-02	9	16.6	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<5	<0.5	<0.5	<1	<0.5	<1	1.15	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<5	<5
A-BSB-06	16-Aug-02	10	173	<2.5	<2.5	<2.5	<2.5	<2.5	<5	<25	<2.5	<2.5	<5	<2.5	<5	1.69	<2.5	<2.5	<2.5	<5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25
A-BSB-06	16-Aug-02	15	19.3	<1	<1	<1	<1	<1	<2	<10	<1	<1	<2	<1	<2	2.04	<1	<1	<1	<2	<1	<1	1.82	<1	<1	<1	<10	<10
A-BSB-06	16-Aug-02	19	7.87	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<5	<0.5	<0.5	<1	<0.5	<1	9.85	<0.5	<0.5	<0.5	<1	<0.5	<0.5	2.8	<0.5	<0.5	0.608	<5	<5
A-BSB-06	16-Aug-02	25	14.4	<1.25	<1.25	<1.25	<1.25	<1.25	<2.5	<12.5	<1.25	<1.25	<2.5	<1.25	<2.5	1.79	<1.25	<1.25	<1.25	<2.5	<1.25	<1.25	1.48	<1.25	<1.25	<1.25	<12.5	<12.5
A-BSB-06	16-Aug-02	30	10.9	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<5	<0.5	<0.5	<1	<0.5	<1	5.71	<0.5	<0.5	<0.5	<1	<0.5	<0.5	3.65	<0.5	<0.5	0.588	<5	<5
A-BSB-06	16-Aug-02	34	31.3	<1.25	<1.25	<1.25	<1.25	<1.25	<2.5	<12.5	<1.25	<1.25	<2.5	<1.25	<2.5	9.15	<1.25	<1.25	<1.25	<2.5	<1.25	<1.25	14.4	<1.25	<1.25	1.1	<12.5	<12.5
A-BSB-06	16-Aug-02	40	39.4	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<5	<0.5	<0.5	<1	<0.5	<1	4.12	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
A-BSB-07	19-Aug-02	2.5	1.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	4.89	<0.05
A-BSB-07	19-Aug-02	7.5	1.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.795	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	5.75	<0.05
A-BSB-07	19-Aug-02	15	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	5.8	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	143	<0.5	<0.005	13.8	<0.05	<0.05

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-BH-16	06-Jan-94	1	<0.5							<0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.3	<0.3	<0.05	<0.05	<0.005
A-BH-16	06-Jan-94	5	<0.5							<0.05			<0.05	<0.05	<0.05	<0.05	0.061	<0.05	<0.3	<0.3	<0.05	<0.05	<0.005
A-BH-16	06-Jan-94	10	<0.5							<0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.3	<0.3	<0.05	<0.05	<0.005
A-BH-16	06-Jan-94	20	<0.5							<0.05			0.471	0.125	<0.05	<0.05	<0.05	<0.05	<0.3	<0.3	0.318	0.104	0.422
A-BH-16(2000)	03-Feb-00	2	1.5	<1	2.9	<1	9.4	7	<1	<1		<1	2.1	64	<1	<1	<1	<1		<1	120	46	166
A-BH-16(2000)	03-Feb-00	6	2.5	<1	2.8	<1	7.2	2	<1	<1		<1	3.8	25	<1	<1	<1	<1		<1	18	11	29
A-BH-16(2000)	03-Feb-00	10	1.8	<1	1.7	<1	4.3	<1	<1	<1		<1	3.5	15	<1	<1	<1	<1		<1	3.7	2.9	6.6
A-BH-17	11-Jan-94	1	<1.25							<0.25			41.8	11.2	<0.25	<0.25	9.28	<0.25	<0.75	<0.75	6.46	4.02	10.48
A-BH-17	11-Jan-94	5	<5							<1			58.2	48.3	<1	<1	5.63	<1	<3	<3	22.9	4.87	27.77
A-BH-17	11-Jan-94	10	<0.05							<0.01			0.012	0.179	<0.01	<0.01	0.021	<0.01	<0.03	<0.03	0.024	<0.01	0.024
A-BH-17	11-Jan-94	20	<0.05							<0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01	<0.01
A-BH-17(2000)	03-Feb-00	2	<1	<1	1.4	<1	1.9	<1	<1	<1		<1	<1	9.2	<1	<1	<1	<1		<1	3.9	2.9	6.8
A-BH-17(2000)	03-Feb-00	6	1.1	<1	3	<1	4.9	<1	<1	<1		<1	5.4	22	<1	<1	<1	<1		<1	9.8	5.3	15.1
A-BH-17(2000)	03-Feb-00	10	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	1.4	<1	<1	<1	<1		<1	<1	<1	<2
A-BH-18	03-Feb-00	2	<1	<1	2.4	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<2
A-BH-18	03-Feb-00	6	<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	<0.4	<0.4		<0.4	<0.4	<0.4	<0.8
A-BH-18	03-Feb-00	10	<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	<0.4	<0.4		<0.4	<0.4	<0.4	<0.8
A-BSB-01	05-Jun-02	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	17.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	27.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	28	<0.005	<0.005	0.085	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.13
A-BSB-01	05-Jun-02	35	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-01	05-Jun-02	45	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	14	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0068	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	18	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-02	06-Jun-02	26.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-03	15-Aug-02	6.5	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-03	15-Aug-02	11.5	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-03	15-Aug-02	18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.1	<0.02			<0.01
A-BSB-03	15-Aug-02	19	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-03	15-Aug-02	27	<0.005	<0.005	<0.005	<0.005	0.46	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.085	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.545
A-BSB-03	15-Aug-02	28	1.28	<0.25	2.35	2.38	3.65	<0.25	<0.25	<0.25	<7.5	<0.25	<0.25	12.1	<0.25	<0.25	<0.25	<2.5	<12.5	<2.5			81
A-BSB-03	15-Aug-02	35	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.06	<0.01	0.294	0.0032	<0.01	<0.01	0.45	<0.02	<0.1	<0.02			<0.01
A-BSB-03	15-Aug-02	40	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.15	<0.025	0.255	<0.025	<0.025	<0.025	0.255	<0.05	<0.25	0.09			<0.025
A-BSB-04	15-Aug-02	6.5	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0094	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-04	15-Aug-02	12	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-04	15-Aug-02	17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.3	<0.05	<0.05	0.195	<0.05	<0.05	<0.05	<0.1	<0.5	<0.1			0.12
A-BSB-04	15-Aug-02	25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.3	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.1	<0.5	<0.1			<0.05
A-BSB-04	15-Aug-02	26.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	0.54	<0.125	<0.125	<0.125	<0.25	<1.25	<0.25			<0.21
A-BSB-04	15-Aug-02	34	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.5	<0.25	<0.25	0.6	<0.25	<0.25	<0.25	<0.5	<2.5	<0.5			4.88
A-BSB-04	15-Aug-02	40	<0.25	<0.25	0.375	0.26	2.27	<0.25	<0.25	<0.25	<1.5	<0.25	0.53	4.55	<0.25	<0.25	1.35	<0.5	<2.5	<0.5			4.72
A-BSB-05	16-Aug-02	7	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-05	16-Aug-02	12	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-05	16-Aug-02	20	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	<0.125	<0.125	<0.125	0.153	<0.25	<1.25	<0.25			0.15
A-BSB-05	16-Aug-02	23	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.25			<0.125
A-BSB-05	16-Aug-02	28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-05	16-Aug-02	34	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.25			<0.125
A-BSB-05	16-Aug-02	37.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.25	<1.25	<0.25			<0.125
A-BSB-05	16-Aug-02	40	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.75	<0.125	<0.125	0.225	<0.125	<0.125	<0.125	<0.25	<1.25	<0.25			0.5
A-BSB-06	16-Aug-02	5	6	<2.5	217	7.2	9.55	7.1	4.75	<2.5	<15	<2.5	827	6	<2.5	<2.5	100	<5	<25	<5			27.8
A-BSB-06	16-Aug-02	9	2.88	<0.5	9.25	4.91	3.92	<0.5	<0.5	<0.5	<3	<0.5	24	0.487	<0.5	<0.5	7.15	<1	<5	<1			0.82
A-BSB-06	16-Aug-02	10	7.96	<2.5	3.07	0.89	<2.5	<2.5	<2.5	<2.5	<15	<2.5	14	0.225	<2.5	<2.5	4.67	<5	<25	<5			0.36
A-BSB-06	16-Aug-02	15	3.8	<1	40	9.84	4.86	<1	<1	<1	<6	<1	462	8.2	<1	<1	5.64	<2	<10	<2			7.78
A-BSB-06	16-Aug-02	19	1.34	<0.5	40	17.6	1.68	<0.5	<0.5	<0.5	<3	<0.5	302	14	<0.5	<0.5	15	<1	<5	<1			12.2
A-BSB-06	16-Aug-02	25	<1.25	<1.25	10.2	4.41	0.38	<1.25	<1.25	<1.25	<7.5	<1.25	16.1	3.21	<1.25	<1.25	0.69	<2.5	<12.5	<2.5			5.6
A-BSB-06	16-Aug-02	30	<0.5	<0.5	27.6	12.6	1.54	<0.5	0.707	<0.5	<3	<0.5	1.15	9.54	<0.5	<0.5	<0.5	<1	<5	<1			14.4
A-BSB-06	16-Aug-02	34	5.8	<1.25	34	93	2.43	1.48	<1.25	<1.25	<7.5	<1.25	20.9	56.5	<1.25	<1.25	105	<2.5	<12.5	<2.5			55.8
A-BSB-06	16-Aug-02	40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5	<0.5	1.76	<0.5	<0.5	<0.5	<1	<5	<1			0.44
A-BSB-07	19-Aug-02	2.5	<0.005	<0.005	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.06	0.06	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.28
A-BSB-07	19-Aug-02	7.5	<0.005	<0.005	0.107	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.1
A-BSB-07	19-Aug-02	15	<0.005	<0.005	18	9	34.4	<0.005	<0.005	<0.005	<0.03	<0.005	210	574	<0.005	<0.005	13.2	<0.01	<0.05	<0.01			872

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-BSB-07	19-Aug-02	17	<0.005	<0.005	<0.005	<0.005	0.44	<0.005	<0.005	<0.005	<0.005	<0.005	10.6	<0.005	<0.005	<0.005	<0.005	<0.005	2.56	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	22.5	<0.005	<0.005	<0.005	3.36	0.44	<0.005	<0.005	<0.005	<0.005	<0.005	22.4	<0.005	<0.005	<0.005	<0.005	<0.005	5.8	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	27.5	<0.005	<0.005	<0.005	2.25	0.355	<0.005	<0.005	<0.005	<0.005	<0.005	12.2	<0.005	<0.005	<0.005	<0.005	<0.005	3.15	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	30	<0.005	16.8	<0.005	18.4	2.14	0.848	<0.005	<0.005	<0.005	<0.005	40.2	<0.005	<0.005	<0.005	<0.005	<0.005	11.5	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	33	<0.005	78	<0.005	88.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	252	<0.005	<0.005	<0.005	<0.005	<0.005	78	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	40	<0.005	0.775	<0.005	<0.005	0.985	0.375	<0.005	<0.005	<0.005	<0.005	0.485	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-07	19-Aug-02	41.5	<0.005	<0.005	<0.005	<0.005	0.167	0.018	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	5	<0.005	<0.005	<0.005	<0.005	0.29	<0.005	<0.005	<0.005	<0.005	<0.5	0.615	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	13	<0.005	<0.005	<0.005	<0.005	0.25	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	18	<0.005	<0.005	<0.005	1.45	0.4	<0.005	<0.005	<0.005	<0.005	<0.005	6.88	<0.005	<0.005	<0.005	<0.005	<0.005	1.75	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	27.5	<0.005	<0.005	<0.005	1.81	0.286	<0.005	<0.005	<0.005	<0.005	<0.005	8.84	<0.005	<0.005	<0.005	<0.005	<0.005	2.29	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	31	<0.005	<0.005	<0.005	<0.005	5.4	<0.005	<0.005	<0.005	<0.005	<0.005	18.6	<0.005	<0.005	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	35	<0.005	<0.005	<0.005	0.76	0.335	0.285	<0.005	<0.005	<0.005	<0.005	3.08	<0.005	<0.005	<0.005	<0.005	<0.005	0.87	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	40	<0.005	<0.005	<0.005	<0.005	1.02	0.437	<0.005	<0.005	<0.005	<0.005	0.838	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-08	19-Aug-02	45	<0.005	<0.005	<0.005	<0.005	1.58	0.355	<0.005	<0.005	<0.005	<0.005	1.85	<0.005	<0.005	<0.005	<0.005	<0.005	0.548	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	5	<0.005	36.5	<0.005	2.25	0.9	<0.005	<0.005	<0.005	<0.005	<0.5	51.5	<0.005	<0.005	<0.5	<0.005	<0.005	3.35	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	8	<0.005	176	<0.005	4	2.2	<0.005	<0.005	<0.005	<0.005	<0.5	76.4	<0.005	<0.005	<0.5	<0.005	<0.005	10.9	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	15	<0.005	19.8	<0.005	<0.005	1.13	<0.005	<0.005	<0.005	<0.005	<0.5	9.37	<0.005	<0.005	<0.5	<0.005	<0.005	1.6	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	17	<0.005	2.38	<0.005	0.57	0.17	<0.005	<0.005	<0.005	<0.005	<0.005	1.99	<0.005	<0.005	<0.005	<0.005	<0.005	0.353	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	22.5	<0.005	0.595	<0.005	<0.005	0.057	0.085	<0.005	<0.005	<0.005	<0.005	0.77	<0.005	<0.005	<0.005	<0.005	<0.005	0.145	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	24	<0.005	0.783	<0.005	<0.005	<0.005	0.277	<0.005	<0.005	<0.005	<0.005	2.47	<0.005	<0.005	<0.005	<0.005	<0.005	0.536	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	27.5	<0.005	306	<0.005	36.6	<0.005	3.78	<0.005	<0.005	<0.005	<0.005	113	<0.005	<0.005	<0.005	<0.005	<0.005	2.7	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	32.5	<0.005	37.6	<0.005	3.45	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	8.89	<0.005	<0.005	<0.005	<0.005	<0.005	2.11	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	35	<0.005	0.23	<0.005	<0.005	0.05	0.26	<0.005	<0.005	<0.005	<0.005	0.365	<0.005	<0.005	<0.005	<0.005	<0.005	0.08	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-09	20-Aug-02	40	<0.005	0.06	<0.005	<0.005	<0.005	0.25	<0.005	<0.005	<0.005	<0.005	0.175	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	2	<0.005	0.0271	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	7.5	<0.005	0.51	<0.005	<0.005	0.125	<0.005	<0.005	<0.005	<0.005	<0.5	1.23	<0.005	<0.005	<0.5	<0.005	<0.005	0.125	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	12.5	<0.005	0.132	<0.005	<0.005	0.026	0.0115	<0.005	<0.005	<0.005	<0.5	0.0408	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	16	<0.005	0.342	<0.005	<0.005	0.165	<0.005	<0.005	0.19	<0.005	<0.005	0.308	<0.005	<0.005	<0.005	<0.005	<0.005	0.0975	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	22.5	<0.005	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	27.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	30	<0.005	<0.005	<0.005	<0.005	0.232	0.525	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	35	<0.005	<0.005	<0.005	<0.005	0.045	0.0525	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-10	20-Aug-02	40	<0.005	<0.005	<0.005	<0.005	0.027	0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	0.846	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	0.529	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	29.5	<0.005	<0.005	<0.005	<0.005	11.3	0.406	<0.005	<0.005	<0.005	<0.005	0.235	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	34.5	<0.005	<0.005	<0.005	<0.005	2.97	0.745	<0.005	<0.005	<0.005	<0.005	4.56	0.194	<0.005	<0.005	<0.005	<0.005	1.37	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	1.23	0.926	<0.005	<0.005	<0.005	<0.005	0.527	<0.005	<0.005	<0.005	<0.005	<0.005	0.138	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	1.75	<0.005
A-BSB-11	11-Nov-02	42	<0.005	2.85	<0.005	<0.005	0.78	1.58	<0.005	<0.005	<0.005	<0.005	21	<0.005	<0.005	<0.005	<0.005	<0.005	6.89	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-11	11-Nov-02	44	<0.005	0.988	<0.005	<0.005	<0.005	0.989	<0.005	<0.005	<0.005	<0.005	0.636	<0.005	<0.005	<0.005	<0.005	<0.005	0.461	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	9	<0.005	0.259	<0.005	<0.005	0.676	0.16	<0.005	<0.005	<0.005	<0.005	0.281	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	10	<0.005	0.292	<0.005	<0.005	0.75	0.173	<0.005	<0.005	<0.005	<0.005	0.228	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	14.5	<0.005	207	<0.005	<0.005	7.66	8.04	<0.005	<0.005	<0.005	<0.005	156	<0.005	<0.005	<0.005	<0.005	<0.005	28.4	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	19.5	<0.005	0.458	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	7.05	<0.005	<0.005	<0.005	<0.005	<0.005	1.02	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	24.5	<0.005	8.69	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	65.2	<0.005	<0.005	<0.005	<0.005	<0.005	9.46	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	28.5	<0.005	1.15	<0.005	<0.005	0.671	0.242	<0.005	<0.005	<0.005	<0.005	0.403	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	34.5	<0.005	1.57	<0.005	<0.005	2.5	2.2	<0.005	<0.005	<0.005	<0.005	17.7	<0.005	<0.005	<0.005	<0.005	<0.005	2.37	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	3.28	3.46	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-12	11-Nov-02	44.5	<0.005	<0.005	<0.005	<0.005	0.586	0.957	<0.005	<0.005	<0.005	<0.005	0.0142	<0.005	<0.005	<0.005	<0.005	<0.005	0.0082	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	4.5	<0.005	1.6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	21.2	<0.005	<0.005	<0.005	<0.005	<0.005	7.45	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	9.5	<0.005	0.244	<0.005	<0.005	0.285	<0.005	<0.005	<0.005	<0.005	<0.005	0.259	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	27.3	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	14.5	<0.005	0.247	<0.005	<0.005	0.689	<0.005	<0.005	<0.005	<0.005	<0.005	0.205	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	4.64	<0.005	2.86	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	19.5	<0.005	0.213	<0.005	<0.005	0.929	<0.005	<0.005	<0.005	<0.005	<0.005	0.125	<0.005	<0.005	<0.005	<0.005	<0.005	0.0261	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	25	<0.005	<0.005	<0.005	<0.005	0.34	<0.005	<0.005	<0.005	<0.005	<0.005	2.72	<0.005	<0.005	<0.005	<0.005	<0.005	0.693	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	27	<0.005	<0.005	<0.005	<0.005	2.21	<0.005	<0.005	<0.005	<0.005	<0.005	17	<0.005	<0.005	<0.005	<0.005	<0.005	5.03	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	29.5	<0.005	<0.005	<0.005	<0.005	1.12	0.37	<0.005	<0.005	<0.005	<0.005	32.1	<0.005	<0.005	<0.005	<0.005	<0.005	8.77	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	30	<0.005	<0.005	<0.005	<0.005	1.1	0.46	<0.005	<0.005	<0.005	<0.005	25.5	<0.005	<0.005	<0.005	<0.005	<0.005	7.26	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	32	<0.005	<0.005	<0.005	<0.005	1.18	0.396	<0.005	<0.005	<0.005	<0.005	10.6	<0.005	<0.005	<0.005	<0.005	<0.005	2.92	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	34.5	<0.005	<0.005	<0.005	<0.005	1.7	0.947	<0.005	<0.005	<0.005	<0.005	18.7	<0.005	<0.005	<0.005	<0.005	<0.005	6.07	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-13	12-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	2.34	0.38	<0.005	<0.005	<0.005	<0.005	4.32	<0.005	<0.005	<0.005	<0.005	<0.005	1.31	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	9.5	<0.005	0.798	<0.005	<0.005	0.461	0.297	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	14.5	<0.005	2.85	<0.005	<0.005	1.13	1.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	19.5	<0.005	0.506	<0.005	<0.005	0.065	0.095	<0.005	<0.005	<0.005	<0.005	0.068	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-BSB-07	19-Aug-02	17	2.97	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.06	<0.005	<0.005	<0.005	5.32	<0.05
A-BSB-07	19-Aug-02	22.5	3.64	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.88	<0.005	<0.005	0.76	6.1	<0.05
A-BSB-07	19-Aug-02	27.5	1.21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.05	<0.005	<0.005	<0.005	4.72	<0.05
A-BSB-07	19-Aug-02	30	34.3	0.22	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	12.3	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	18.3	<0.005	<0.005	2.2	17.1	3.78
A-BSB-07	19-Aug-02	33	72.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	34.5	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	60.5	<0.005	<0.005	13.5	<0.05	<0.05
A-BSB-07	19-Aug-02	40	1.95	0.075	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.27	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.59	<0.005	<0.005	<0.005	7.85	<0.05
A-BSB-07	19-Aug-02	41.5	0.842	0.0119	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0721	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.442	0.203
A-BSB-08	19-Aug-02	5	32.7	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.65	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.235	<0.5	<0.005	<0.005	25.7	1.77
A-BSB-08	19-Aug-02	10	76	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.42	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.08	<0.5	<0.005	<0.005	50	1.59
A-BSB-08	19-Aug-02	13	81	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.665	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.14	<0.5	<0.005	<0.005	43.5	2.13
A-BSB-08	19-Aug-02	18	11.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.25	<0.005	<0.005	<0.005	12.5	<0.05
A-BSB-08	19-Aug-02	27.5	5.17	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.68	<0.005	<0.005	2.6	7.1	<0.05
A-BSB-08	19-Aug-02	31	27.6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	4.1	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	8.6	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-08	19-Aug-02	35	19.5	0.085	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.82	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.02	<0.005	<0.005	0.15	13.1	<0.05
A-BSB-08	19-Aug-02	40	12.3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.97	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.367	<0.005	<0.005	<0.005	13.9	<0.05
A-BSB-08	19-Aug-02	45	8.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.52	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.472	<0.005	<0.005	<0.005	14.7	1.8
A-BSB-09	20-Aug-02	5	5.85	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	6.55	<0.5	<0.005	<0.005	12	<0.05
A-BSB-09	20-Aug-02	8	60	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	14.3	<0.5	<0.005	<0.005	30	<0.05
A-BSB-09	20-Aug-02	15	24.3	1.57	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.258	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.44	<0.5	<0.005	<0.005	10.4	<0.05
A-BSB-09	20-Aug-02	17	9.9	0.285	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0625	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.323	<0.005	<0.005	<0.005	9.85	<0.05
A-BSB-09	20-Aug-02	22.5	5.45	0.13	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.057	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.15	<0.005	<0.005	<0.005	9.5	<0.05
A-BSB-09	20-Aug-02	24	4.65	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.05	<0.005	<0.005	<0.005	11.2	<0.05
A-BSB-09	20-Aug-02	27.5	23.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.6	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	40.8	<0.005	<0.005	4.4	<0.05	<0.05
A-BSB-09	20-Aug-02	32.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.25	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-09	20-Aug-02	35	1.91	0.11	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.125	<0.005	<0.005	<0.005	4.67	<0.05
A-BSB-09	20-Aug-02	40	1.85	0.065	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.165	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.082	<0.005	<0.005	<0.005	3.95	<0.05
A-BSB-10	20-Aug-02	2	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-10	20-Aug-02	7.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.575	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-10	20-Aug-02	12.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.135	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-BSB-10	20-Aug-02	16	2.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.49	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	7.73	<0.05
A-BSB-10	20-Aug-02	22.5	0.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.024	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.125	<0.05
A-BSB-10	20-Aug-02	27.5	3.69	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.235	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	7.35	<0.05
A-BSB-10	20-Aug-02	30	2.63	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.218	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0425	<0.005	<0.005	<0.005	8.53	<0.05
A-BSB-10	20-Aug-02	35	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.016	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-10	20-Aug-02	40	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0135	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-11	11-Nov-02	9.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-11	11-Nov-02	14.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-11	11-Nov-02	19.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.365	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-11	11-Nov-02	24.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.194	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-11	11-Nov-02	29.5	1.84	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	5.48	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.409	<0.005	<0.005	<0.005	6.39	<0.05
A-BSB-11	11-Nov-02	34.5	2.1	0.065	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	5.6	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.903	<0.005	<0.005	0.218	<0.05	<0.05
A-BSB-11	11-Nov-02	39.5	39.7	0.0775	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	6.71	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.267	<0.005	<0.005	<0.005	23.4	<0.05
A-BSB-11	11-Nov-02	42	<0.05	0.226	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.64	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	4.11	<0.005	<0.005	1.18	<0.05	<0.05
A-BSB-11	11-Nov-02	44	2.44	0.129	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.425	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.255	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-12	11-Nov-02	9	9.6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.77	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0635	<0.005	<0.005	<0.005	13	0.525
A-BSB-12	11-Nov-02	10	13.6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	4.47	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0515	<0.005	<0.005	<0.005	15.4	0.468
A-BSB-12	11-Nov-02	14.5	46.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	18.3	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	28.2	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-12	11-Nov-02	19.5	4.23	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.366	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.485	<0.005	<0.005	<0.005	1.75	<0.05
A-BSB-12	11-Nov-02	24.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	4.36	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	4.7	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-12	11-Nov-02	28.5	4.79	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	7.94	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.17	<0.005	<0.005	<0.005	2.77	<0.05
A-BSB-12	11-Nov-02	34.5	17.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.66	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	2.35	<0.005	<0.005	<0.005	8.63	1.74
A-BSB-12	11-Nov-02	39.5	43	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	52.5	<0.05
A-BSB-12	11-Nov-02	44.5	0.048	0.0139	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.083	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-13	12-Nov-02	4.5	44.7	0.31	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.11	<0.005	<0.005	0.816	<0.05	<0.05
A-BSB-13	12-Nov-02	9.5	32.5	0.056	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	0.168	<0.005	<0.01	0.758	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.055	<0.005	<0.005	<0.005	9.43	0.66
A-BSB-13	12-Nov-02	14.5	39	0.105	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0963	<0.01	<0.005	<0.01	2.52	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	14.7	0.685
A-BSB-13	12-Nov-02	19.5	12.3	0.0296	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.07	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0981	<0.005	<0.005	0.0058	6.14	1.26
A-BSB-13	12-Nov-02	25	9.04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.294	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.83	<0.005	<0.005	<0.005	5.46	1.27
A-BSB-13	12-Nov-02	27	69.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	5.7	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	12.3	<0.005	<0.005	0.978	12.5	8.18
A-BSB-13	12-Nov-02	29.5	29.1	0.197	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.532	<0.01	<0.005	<0.01	10.9	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	19.4	<0.005	<0.005	2.11	13	11.8
A-BSB-13	12-Nov-02	30	31.5	0.199	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.456	<0.01	<0.005	<0.01	11.7	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	18.5	<0.005	<0.005	1.63	15.4	11.9
A-BSB-13	12-Nov-02	32	5.82	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	7.09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.08	<0.005	<0.005	0.671	6.5	1.38
A-BSB-13	12-Nov-02	34.5	3.57	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.55	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	2.12	<0.005	<0.005	1.3	5.25	3.65
A-BSB-13	12-Nov-02	39.5	2.46	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.11	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.18	<0.005	<0.005	0.253	3.96	<0.05
A-BSB-14	12-Nov-02	9.5	1.43	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.094	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.85	<0.05
A-BSB-14	12-Nov-02	14.5	1.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.264	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2.63	<0.05
A-BSB-14	12-Nov-02	19.5	1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.11	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0042	<0.005	<0.005	<0.005	2.54	<0.05

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-BSB-07	19-Aug-02	17	<0.005	<0.005	1.32	0.7	0.846	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.24	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			7.6
A-BSB-07	19-Aug-02	22.5	<0.005	<0.005	1.9	1.12	2.24	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	7.1	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			26.8
A-BSB-07	19-Aug-02	27.5	<0.005	<0.005	0.795	0.535	1.34	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	5.3	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			18.8
A-BSB-07	19-Aug-02	30	<0.005	<0.005	2.44	1.76	5.84	<0.005	<0.005	<0.005	<0.03	<0.005	12	102	<0.005	<0.005	1.4	<0.01	<0.05	<0.01			106
A-BSB-07	19-Aug-02	33	<0.005	<0.005	13	12.5	41	<0.005	<0.005	<0.005	<0.03	<0.005	13.5	441	<0.005	<0.005	41.5	<0.01	<0.05	<0.01			308
A-BSB-07	19-Aug-02	40	<0.005	<0.005	<0.005	<0.005	0.125	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	8.6	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.77
A-BSB-07	19-Aug-02	41.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.111	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.055
A-BSB-08	19-Aug-02	5	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.95	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.23
A-BSB-08	19-Aug-02	10	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.41	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.425
A-BSB-08	19-Aug-02	13	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.74	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.755
A-BSB-08	19-Aug-02	18	<0.005	<0.005	0.925	<0.005	0.575	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.3	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			6.55
A-BSB-08	19-Aug-02	27.5	<0.005	<0.005	1.09	0.649	0.786	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.4	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			7.9
A-BSB-08	19-Aug-02	31	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	34.6	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			32
A-BSB-08	19-Aug-02	35	<0.005	<0.005	0.24	0.14	0.357	<0.005	<0.005	<0.005	<0.03	<0.005	0.36	0.25	<0.005	<0.005	0.18	<0.01	<0.05	<0.01			3.57
A-BSB-08	19-Aug-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.71	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.14
A-BSB-08	19-Aug-02	45	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.19	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.11
A-BSB-09	20-Aug-02	5	<0.005	<0.005	25.2	8.7	3.35	<0.005	<0.005	<0.005	<0.03	<0.005	13.7	6.6	<0.005	<0.005	4.4	<0.01	<0.05	<0.01			40.2
A-BSB-09	20-Aug-02	8	<0.005	<0.005	31.5	13.8	3.9	<0.005	<0.005	<0.005	<0.03	<0.005	26	12.9	<0.005	<0.005	4.36	<0.01	<0.05	<0.01			81.3
A-BSB-09	20-Aug-02	15	<0.005	<0.005	4.76	1.55	0.652	<0.005	<0.005	<0.005	<0.03	<0.005	2.44	2.36	<0.005	<0.005	0.845	<0.01	<0.05	<0.01			7.88
A-BSB-09	20-Aug-02	17	<0.005	<0.005	0.99	0.34	0.15	<0.005	<0.005	<0.005	<0.03	<0.005	0.427	0.572	<0.005	<0.005	0.177	<0.01	<0.05	<0.01			1.7
A-BSB-09	20-Aug-02	22.5	<0.005	<0.005	0.425	0.125	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.145	0.315	<0.005	<0.005	0.08	<0.01	<0.05	<0.01			0.925
A-BSB-09	20-Aug-02	24	<0.005	<0.005	0.459	0.25	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.28	<0.005	<0.005	0.358	<0.01	<0.05	<0.01			7.17
A-BSB-09	20-Aug-02	27.5	<0.005	<0.005	14.8	9.4	4.4	<0.005	<0.005	<0.005	<0.03	<0.005	9.2	93.4	<0.005	<0.005	64	<0.01	<0.05	<0.01			205
A-BSB-09	20-Aug-02	32.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	7.7	<0.005	<0.005	5.55	<0.01	<0.05	<0.01			15.4
A-BSB-09	20-Aug-02	35	<0.005	<0.005	0.16	0.05	0.06	<0.005	<0.005	<0.005	<0.03	<0.005	0.09	0.23	<0.005	<0.005	0.095	<0.01	<0.05	<0.01			0.42
A-BSB-09	20-Aug-02	40	<0.005	<0.005	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.25	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.255
A-BSB-10	20-Aug-02	2	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.658	<0.005	<0.005	<0.005	0.0634	<0.01	<0.05	<0.01			<0.005
A-BSB-10	20-Aug-02	7.5	<0.005	<0.005	0.605	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	1.1	0.06	<0.005	<0.005	1.02	<0.01	<0.05	<0.01			<0.005
A-BSB-10	20-Aug-02	12.5	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.025	<0.005	<0.005	<0.005	0.0693	<0.01	<0.05	<0.01			<0.005
A-BSB-10	20-Aug-02	16	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.155	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.142
A-BSB-10	20-Aug-02	22.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0075	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.005
A-BSB-10	20-Aug-02	27.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-10	20-Aug-02	30	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0975
A-BSB-10	20-Aug-02	35	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-10	20-Aug-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-11	11-Nov-02	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-11	11-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-11	11-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-11	11-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.357	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.136
A-BSB-11	11-Nov-02	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.244	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.8
A-BSB-11	11-Nov-02	34.5	<0.005	<0.005	0.212	<0.005	0.405	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	5.41	<0.005	<0.005	<0.005	<0.01	0.143	<0.01			4.41
A-BSB-11	11-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.263	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.616
A-BSB-11	11-Nov-02	42	<0.005	<0.005	0.432	0.91	3.01	<0.005	<0.005	<0.005	<0.03	<0.005	1.95	1.69	<0.005	<0.005	1.48	<0.01	0.966	<0.01			12.7
A-BSB-11	11-Nov-02	44	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.18	1.54	<0.005	<0.005	0.065	<0.01	<0.05	<0.01			0.649
A-BSB-12	11-Nov-02	9	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.494	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.271
A-BSB-12	11-Nov-02	10	3.72	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.391	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.19
A-BSB-12	11-Nov-02	14.5	107	<0.005	18.9	14.6	49.7	<0.005	<0.005	<0.005	<0.03	<0.005	355	126	<0.005	<0.005	20.7	<0.01	<0.05	<0.01			129
A-BSB-12	11-Nov-02	19.5	<0.005	<0.005	1.25	0.899	1.86	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.46	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.4
A-BSB-12	11-Nov-02	24.5	<0.005	<0.005	13.1	4.57	13.7	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	10.2	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			21.3
A-BSB-12	11-Nov-02	28.5	0.289	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.14	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.476
A-BSB-12	11-Nov-02	34.5	11.5	<0.005	2.59	1.88	3.83	<0.005	<0.005	<0.005	<0.03	<0.005	13	9.32	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			9.24
A-BSB-12	11-Nov-02	39.5	23.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	3.2	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-12	11-Nov-02	44.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.285	0.0029	<0.005	<0.005	0.017	<0.01	<0.05	<0.01			0.0035
A-BSB-13	12-Nov-02	4.5	<0.005	<0.005	1.14	0.94	3.06	<0.005	<0.005	<0.005	<0.03	<0.005	3.94	15	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			6.51
A-BSB-13	12-Nov-02	9.5	0.557	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.117	1.17	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.258
A-BSB-13	12-Nov-02	14.5	0.775	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.48	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.307
A-BSB-13	12-Nov-02	19.5	<0.005	<0.005	0.0221	<0.005	0.062	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.12	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.443
A-BSB-13	12-Nov-02	25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.09	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			3.7
A-BSB-13	12-Nov-02	27	<0.005	<0.005	<0.005	1.17	11.1	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	64.8	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			48.8
A-BSB-13	12-Nov-02	29.5	<0.005	<0.005	1.88	2.34	3.78	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	111	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			90.6
A-BSB-13	12-Nov-02	30	<0.005	<0.005	1.6	1.74	2.86	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	98.6	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			74.3
A-BSB-13	12-Nov-02	32	<0.005	<0.005	0.307	8.01	1.2	0.255	<0.005	<0.005	<0.03	<0.005	<0.005	12.9	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			7.73
A-BSB-13	12-Nov-02	34.5	<0.005	<0.005	0.273	1.47	2.48	0.251	0.26	<0.005	<0.03	<0.005	<0.005	0.256	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			3.06
A-BSB-13	12-Nov-02	39.5	<0.005	<0.005	<0.005	0.319	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	3.48	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.28
A-BSB-14	12-Nov-02	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.13	<0.005	<0.005	<0.005	0.115	<0.01	<0.05	<0.01			<0.005
A-BSB-14	12-Nov-02	14.5	0.425	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.27	<0.005	<0.005	<0.005	0.255	<0.01	<0.05	<0.01			0.185
A-BSB-14	12-Nov-02	19.5	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.005	0.0142	<0.005	<0.005	0.0127	<0.01	<0.05	<0.01			0.065

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-BSB-14	12-Nov-02	27	<0.005	0.4	<0.005	<0.005	0.0916	0.225	<0.005	<0.005	<0.005	<0.005	0.039	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	28.5	<0.005	0.577	<0.005	<0.005	0.035	0.213	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	29	<0.005	0.304	<0.005	<0.005	0.0267	0.251	<0.005	<0.005	<0.005	<0.005	0.0272	<0.005	<0.005	<0.005	<0.005	<0.005	0.0075	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	33	<0.005	0.628	<0.005	<0.005	0.109	0.635	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	0.634	1.4	<0.005	<0.005	<0.005	<0.005	0.332	<0.005	<0.005	<0.005	<0.005	<0.005	0.272	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-14	12-Nov-02	42	<0.005	0.0192	<0.005	<0.005	0.108	0.327	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0964	<0.005	<0.005	<0.005	<0.005	<0.005	0.0242	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.24	<0.005	<0.005	<0.005	<0.005	<0.005	0.0614	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	0.007
A-BSB-16	13-Nov-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.285	<0.005	<0.005	<0.005	<0.005	<0.005	0.0733	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	0.00942
A-BSB-16	13-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00742	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0122	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	21.1	<0.005	<0.005	<0.005	<0.005	<0.005	6.2	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	29.5	<0.005	4.95	<0.005	<0.005	<0.005	1.04	<0.005	<0.005	<0.005	<0.005	14.4	<0.005	<0.005	<0.005	<0.005	<0.005	3.97	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	34.5	<0.005	0.0183	<0.005	<0.005	0.164	0.341	<0.005	<0.005	<0.005	<0.005	0.0673	<0.005	<0.005	<0.005	<0.005	<0.005	0.0127	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	39.5	<0.005	0.0106	<0.005	<0.005	0.101	0.179	<0.005	<0.005	<0.005	<0.005	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	44.5	<0.005	<0.005	<0.005	<0.005	0.202	0.238	<0.005	<0.005	<0.005	<0.005	0.0138	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-16	13-Nov-02	49.5	<0.005	<0.005	<0.005	<0.005	0.254	0.18	<0.005	<0.005	<0.005	<0.005	0.208	<0.005	<0.005	<0.005	<0.005	<0.005	0.0452	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	631	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	199	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.48	<0.005	<0.005	14	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	14	<0.005	11.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	207	<0.005	<0.005	30	<0.005	<0.005	60.7	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	15	<0.005	12.8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	234	<0.005	<0.005	34.4	<0.005	<0.005	71	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	20	<0.005	28.5	<0.005	<0.005	27.7	<0.005	<0.005	<0.005	<0.005	<0.005	161	<0.005	<0.005	<0.005	<0.005	<0.005	39.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	22.5	<0.005	3.25	<0.005	<0.005	3.79	<0.005	<0.005	<0.005	<0.005	<0.005	47.2	<0.005	<0.005	<0.005	<0.005	<0.005	12.6	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	25	<0.005	<0.005	<0.005	<0.005	4.9	<0.005	<0.005	<0.005	<0.005	<0.005	70	<0.005	<0.005	<0.005	<0.005	<0.005	17	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	27.5	<0.005	36.4	<0.005	<0.005	16.2	2.27	<0.005	<0.005	<0.005	<0.005	54.1	<0.005	<0.005	<0.005	<0.005	<0.005	14.3	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	30	<0.005	14.9	<0.005	<0.005	6.69	1.14	<0.005	<0.005	<0.005	<0.005	30.6	<0.005	<0.005	<0.005	<0.005	<0.005	7.82	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	35	<0.005	<0.005	<0.005	<0.005	2.11	<0.005	<0.005	<0.005	<0.005	<0.005	10.1	<0.005	<0.005	<0.005	<0.005	<0.005	3.11	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	40	<0.005	<0.005	<0.005	<0.005	0.916	0.63	<0.005	<0.005	<0.005	<0.005	0.404	<0.005	<0.005	<0.005	<0.005	<0.005	0.221	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-17	14-Nov-02	45	<0.005	<0.005	<0.005	<0.005	0.336	0.282	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-BSB-18	17-Jun-03	29	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<2.5	<2.5		<2.5	<2.5		<12.5	
A-BSB-18	17-Jun-03	35	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125		<0.125	<0.125		<0.625	
A-BSB-18	17-Jun-03	39.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125		<0.625	
A-BSB-18	17-Jun-03	45	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25		<1.25	
A-E-11	18-Mar-03	1.5	<0.005	<0.005	<0.005	<0.005	0.0083	<0.005	<0.005	<0.005	<0.005	<0.005	0.088	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	5	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	10	<0.005	0.009	<0.005	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	0.0065	<0.005	<0.005	<0.005	1.7	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	15	<0.005	<0.005	<0.005	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	5.03	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	19.5	<0.005	<0.005	<0.005	<0.005	0.0064	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.41	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	25	<0.005	<0.005	<0.005	<0.005	0.33	<0.005	<0.005	<0.005	<0.005	<0.005	1.35	<0.005	<0.005	<0.005	<0.005	<0.005	0.32	<0.005	<0.005	<0.005	3.19	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	30	<0.005	<0.005	<0.005	<0.005	0.674	0.374	<0.005	<0.005	<0.005	<0.005	7	<0.005	<0.005	<0.005	<0.005	<0.005	1.8	<0.005	<0.005	<0.005	3.31	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	35	<0.005	<0.005	<0.005	<0.005	0.182	0.163	<0.005	<0.005	<0.005	<0.005	0.471	<0.005	<0.005	<0.005	<0.005	<0.005	0.108	<0.005	<0.005	<0.005	2.34	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-11	18-Mar-03	40	<0.005	<0.005	<0.005	<0.005	0.26	0.13	<0.005	<0.005	<0.005	<0.005	0.125	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	1.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.176	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	58.5	<0.005	<0.005	<0.005	<0.005	<0.005	18	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	16	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55.4	<0.005	<0.005	<0.005	<0.005	<0.005	15.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.352	<0.005	<0.005	<0.005	<0.005	<0.005	0.84	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	5.7	<0.005	<0.005	<0.005	<0.005	<0.005	1.35	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-E-12	18-Mar-03	25.5	<0.005	<0.005	<0.005	<0.005	0.162	<0.005	<0.005	<0.005	<0.005	<0.005	0.355	<0.005	<0.005	<0.005	<0.005	<0.005	0.072	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.025	<0.005
A-G-01	19-Jul-01	15	<2.5		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<2.5		<2.5	<2.5		<2.5	<2.5	<2.5		<2.5	<2.5		<25	
A-G-02	19-Jul-01	15	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.025	
A-G-03	19-Jul-01	15	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25	<0.25		<0.25	<0.25		<2.5	
A-G-04	19-Jul-01	15	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625		<0.625	<0.625	<0.625	<0.625	<0.625		<0.625	<0.625	<0.625		<0.625	<0.625		<6.25	
A-G-05	19-Jul-01	15	<3.125		<3.125	<3.125	<3.125	<3.125	<3.125	<3.125	<3.125	<3.125		<3.125	<3.125	<3.125	<3.125	<3.125		<3.125	<3.125	<3.125		<3.125	<3.125		<31.25	
A-G-06	19-Jul-01	15	<5		<5	<5		<5	<5	<5	<5	<5		<5	<5	<5	<5	<5		<5	<5	<5		<5	<5		<25	
A-G-07	19-Jul-01	15	<6.25		<6.25	<6.25	<6.25	<6.25	<6.25	<6.25	<6.25	<6.25		<6.25	<6.25	<6.25	<6.25	<6.25		<6.25	<6.25	<6.25		<6.25	<6.25		<62.5	
A-G-08	19-Jul-01	15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		<0.025	<0.025		<0.25	
A-G-09	19-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-G-10	19-Jul-01	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5		<5	
A-G-11	19-Jul-01	15	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625		<0.0625	
A-G-12	19-Jul-01	15	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25		<1.25	<1.25	<1.25		<1.25	<1.25		<12.5	
A-G-13	19-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-MW-01	01-Jan-90	10		<0.005	<0.005	<0.005	<0.005	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-MW-01	01-Jan-90	15		0.15	<0.005	<0.005	0.021	0.092			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-MW-01	01-Jan-90	20		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-BSB-14	12-Nov-02	27	0.222	0.00865	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0049	<0.01	<0.005	<0.01	0.335	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0237	<0.005	<0.005	<0.005	0.059	0.034
A-BSB-14	12-Nov-02	28.5	1.23	0.025	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.04	<0.005	<0.005	<0.005	1.8	<0.05
A-BSB-14	12-Nov-02	29	0.418	0.0137	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0274	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0158	<0.005	<0.005	<0.005	0.299	0.0847
A-BSB-14	12-Nov-02	33	0.054	0.0154	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.142	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.065	<0.005	<0.005	<0.005	0.037	<0.05
A-BSB-14	12-Nov-02	39.5	0.966	0.203	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.108	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.305	<0.005	<0.005	<0.005	2.8	<0.05
A-BSB-14	12-Nov-02	42	0.083	0.0032	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0193	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0102	<0.005	<0.005	<0.005	0.046	<0.05
A-BSB-16	13-Nov-02	4.5	7.3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0094	<0.005	<0.005	<0.005	7.66	0.276
A-BSB-16	13-Nov-02	9	39.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0072	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0931	<0.005	<0.005	0.0046	8.64	3.31
A-BSB-16	13-Nov-02	10	46	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0084	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.112	<0.005	<0.005	0.0058	8.64	3.77
A-BSB-16	13-Nov-02	14.5	4.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2.97	0.449
A-BSB-16	13-Nov-02	19.5	0.201	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0076	<0.005	<0.005	<0.005	<0.05	0.0732
A-BSB-16	13-Nov-02	22	0.138	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0075	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0112	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-16	13-Nov-02	24.5	5.98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.33	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	46.9	<0.005	<0.005	1.1	<0.05	<0.05
A-BSB-16	13-Nov-02	29.5	5.22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.83	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	23.5	<0.005	<0.005	0.703	2.5	3.96
A-BSB-16	13-Nov-02	34.5	0.0266	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.181	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.061	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-16	13-Nov-02	39.5	<0.05	0.0148	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.378	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.05	<0.05
A-BSB-16	13-Nov-02	44.5	<0.05	0.019	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.00841	<0.01	<0.005	<0.01	0.658	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.004	<0.005	<0.005	0.0061	<0.05	<0.05
A-BSB-16	13-Nov-02	49.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0184	<0.01	<0.005	<0.01	0.698	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.0113	<0.05	<0.05
A-BSB-17	14-Nov-02	0	49.3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	42.7	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	193	<0.005	<0.005	29.8	<0.05	<0.05
A-BSB-17	14-Nov-02	10	16.3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.664	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	9.5	<0.005	<0.005	2.52	<0.05	<0.05
A-BSB-17	14-Nov-02	14	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	23.6	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	55	<0.005	<0.005	12.5	<0.05	<0.05
A-BSB-17	14-Nov-02	15	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	19.4	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	73.6	<0.005	<0.005	14.7	<0.05	<0.05
A-BSB-17	14-Nov-02	20	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	19.8	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	94.5	<0.005	<0.005	7.2	<0.05	<0.05
A-BSB-17	14-Nov-02	22.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.73	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	27.6	<0.005	<0.005	2.11	<0.05	<0.05
A-BSB-17	14-Nov-02	25	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.69	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	45.1	<0.005	<0.005	3.34	<0.05	<0.05
A-BSB-17	14-Nov-02	27.5	20.8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	20.4	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	41.9	<0.005	<0.005	2.48	7.65	14
A-BSB-17	14-Nov-02	30	24.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	14.4	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	17.7	<0.005	<0.005	1.43	9	7.22
A-BSB-17	14-Nov-02	35	28.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	8.46	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	7.06	<0.005	<0.005	<0.005	10	<0.05
A-BSB-17	14-Nov-02	40	58	0.179	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	6.82	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.364	<0.005	<0.005	<0.005	18.5	7
A-BSB-17	14-Nov-02	45	18.8	0.101	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.86	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.11	<0.005	<0.005	<0.005	7.5	2.45
A-BSB-18	17-Jun-03	29	<12.5	<2.5	<2.5	<2.5		<2.5	<2.5	<12.5	<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<2.5				<2.5		<2.5		<2.5		<12.5
A-BSB-18	17-Jun-03	35	<0.625	<0.125	<0.125	<0.125		<0.125	<0.125	<0.625	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125				<0.125		<0.125		<0.125		<0.625
A-BSB-18	17-Jun-03	39.5	<0.625	<0.125	<0.125	<0.125		<0.125	<0.125	<0.625	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125				<0.125		<0.125		<0.125		<0.625
A-BSB-18	17-Jun-03	45	<1.25	<0.25	<0.25	<0.25		<0.25	<0.25	<1.25	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25				<0.25		<0.25		<0.25		<1.25
A-E-11	18-Mar-03	1.5	3.88	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.0171	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.007	<0.005	<0.005	<0.005	0.095	<0.025
A-E-11	18-Mar-03	5	2.12	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.061	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.001	<0.005	<0.005	<0.005	0.17	<0.025
A-E-11	18-Mar-03	10	2.67	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.327	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.0194	<0.005	<0.005	<0.005	0.351	0.266
A-E-11	18-Mar-03	15	4.15	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.246	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.027	<0.005	<0.005	<0.005	0.778	<0.025
A-E-11	18-Mar-03	19.5	2.26	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.005	<0.005	<0.005	<0.005	0.451	<0.025
A-E-11	18-Mar-03	25	16.7	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	3.56	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	1.17	<0.005	<0.005	<0.005	10.9	<0.025
A-E-11	18-Mar-03	30	47.1	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	0.109	<0.005	<0.005	<0.005	8.56	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	5.94	<0.005	<0.005	0.4	27.5	<0.025
A-E-11	18-Mar-03	35	0.551	0.0138	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	0.0098	<0.005	<0.005	<0.005	1.79	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.286	<0.005	<0.005	0.0234	0.526	<0.025
A-E-11	18-Mar-03	40	0.11	0.0214	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	0.01	<0.005	<0.005	<0.005	0.787	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	0.168	<0.005	<0.005	0.0054	<0.025	<0.025
A-E-12	18-Mar-03	1.5	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.001	<0.005	<0.005	<0.005	<0.025	<0.025
A-E-12	18-Mar-03	5	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.001	<0.005	<0.005	<0.005	<0.025	<0.025
A-E-12	18-Mar-03	10	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.001	<0.005	<0.005	<0.005	<0.025	<0.025
A-E-12	18-Mar-03	15	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.85	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	24.5	<0.005	<0.005	2.7	<0.025	<0.025
A-E-12	18-Mar-03	16	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.7	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	23	<0.005	<0.005	2.44	<0.025	<0.025
A-E-12	18-Mar-03	20	1.42	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.069	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	1.44	<0.005	<0.005	0.106	6.36	<0.025
A-E-12	18-Mar-03	25	<0.025	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	1.46	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	7.575	<0.005	<0.005	0.257	<0.025	<0.025
A-E-12	18-Mar-03	25.5	0.985	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	2.9	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	1.67	<0.005	<0.005	<0.005	4.75	<0.025
A-G-01	19-Jul-01	15	<25	<1	<2.5	<2.5		<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<2.5						<2.5				<25
A-G-02	19-Jul-01	15		<0.002	<0.005	<0.005		<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005					<0.002	<0.005		<0.005		<0.025
A-G-03	19-Jul-01	15	<2.5	<0.1	<0.25	<0.25		<0.25	<0.25	<2.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25						<0.25				<2.5
A-G-04	19-Jul-01	15		<0.25	<0.625	<0.625		<0.625	<0.625	<6.25	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625						<0.625				<6.25
A-G-05	19-Jul-01	15	<31.25	<1.25	<3.125	<3.125		<3.125	<3.125	<31.25	<3.125	<3.125	<3.125	<3.125	<3.125	<3.125	<3.125	<3.125						<3.125				<31.25
A-G-06	19-Jul-01	15		<2	<5	<5		<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5						<5				<50
A-G-07	19-Jul-01	15	<62.5	<2.5	<6.25	<6.25		<6.25	<6.25	<62.5	<6.25	<6.25	<6.25	<6.25	<6.25	<6.25	<6.25	<6.25						<6.25				<62.5
A-G-08	19-Jul-01	15		<0.01	<0.025	<0.025		<0.025	<0.025	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.01	<0.025		<0.025		<0.25
A-G-09	19-Jul-01	15	<0.025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	<0.0025		<0.0025		<0.025
A-G-10	19-Jul-01	15	<5	<0.5	<0.5	<0.5		<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5						<0.5		<0.5		<5
A-G-11	19-Jul-01	15		<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	<0.0625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625					<0.0025	<0.00625		<0.00625		<0.0625
A-G-12	19-Jul-01	15	<12.5	<0.5	<1.25	<1.25		<1.25	<1.25	<12.5	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25					<0.5	<1.25		<1.25		<12.5
A-G-13	19-Jul-01	15		<0.001	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.001	<0.0025		<0.0025		<0.025
A-MW-01	01-Jan-90	10	21	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-MW-01	01-Jan-90	15	7.9	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-MW-01	01-Jan-90	20	8.4	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				<3.125	<1.875

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-BSB-14	12-Nov-02	27	<0.005	<0.005	<0.005	<0.005	0.0235	<0.005	<0.005	<0.005	<0.03	0.006	0.0156	0.0817	<0.005	<0.005	0.0893	<0.01	<0.05	<0.01			0.119
A-BSB-14	12-Nov-02	28.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.045	0.234	<0.005	<0.005	0.04	<0.01	<0.05	<0.01			0.125
A-BSB-14	12-Nov-02	29	<0.005	<0.005	<0.005	<0.005	0.0198	<0.005	<0.005	<0.005	<0.03	<0.005	0.0329	0.196	<0.005	<0.005	0.0158	<0.01	<0.05	<0.01			0.0845
A-BSB-14	12-Nov-02	33	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0297	0.0071	<0.005	<0.005	0.01	<0.01	<0.05	<0.01			0.115
A-BSB-14	12-Nov-02	39.5	<0.005	<0.005	0.107	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.943	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.435
A-BSB-14	12-Nov-02	42	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0162	0.002	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-BSB-16	13-Nov-02	4.5	<0.005	<0.005	<0.005	<0.005	0.0387	<0.005	<0.005	0.0063	<0.03	0.0145	<0.005	0.0062	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0379
A-BSB-16	13-Nov-02	9	<0.005	<0.005	<0.005	<0.005	0.0142	<0.005	<0.005	0.033	<0.03	<0.005	<0.005	0.0814	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.222
A-BSB-16	13-Nov-02	10	<0.005	<0.005	<0.005	<0.005	0.0166	<0.005	<0.005	0.04	<0.03	<0.005	<0.005	0.0921	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.251
A-BSB-16	13-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.002	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.004
A-BSB-16	13-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.00591	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0153
A-BSB-16	13-Nov-02	22	<0.005	<0.005	0.0089	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0083	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0302
A-BSB-16	13-Nov-02	24.5	<0.005	<0.005	<0.005	1.4	2.09	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	54.7	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			101
A-BSB-16	13-Nov-02	29.5	0.892	<0.005	<0.005	0.965	1.48	<0.005	<0.005	<0.005	<0.03	<0.005	14.3	46.7	<0.005	<0.005	9.56	<0.01	<0.05	<0.01			45.3
A-BSB-16	13-Nov-02	34.5	0.0227	<0.005	0.0088	<0.005	0.0171	<0.005	<0.005	<0.005	<0.03	<0.005	0.137	0.525	<0.005	<0.005	0.345	<0.01	<0.05	<0.01			0.268
A-BSB-16	13-Nov-02	39.5	0.0081	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.013	0.0534	<0.005	<0.005	0.0647	<0.01	<0.05	<0.01			0.0246
A-BSB-16	13-Nov-02	44.5	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0143	0.0125	0.00537	<0.005	0.35	<0.01	<0.05	<0.01			0.01
A-BSB-16	13-Nov-02	49.5	<0.005	<0.005	0.0272	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0671	0.00489	<0.005	<0.005	0.536	<0.01	<0.05	<0.01			0.113
A-BSB-17	14-Nov-02	0	<0.005	<0.005	<0.005	43.2	73.7	23.5	21	<0.005	<0.03	<0.005	760	943	<0.005	<0.005	31.7	<0.01	<0.05	<0.01			1,450
A-BSB-17	14-Nov-02	10	<0.005	<0.005	2.62	0.96	4.73	<0.005	<0.005	<0.005	<0.03	<0.005	2.92	67	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			64.1
A-BSB-17	14-Nov-02	14	<0.005	<0.005	<0.005	<0.005	151	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	450	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			343
A-BSB-17	14-Nov-02	15	<0.005	<0.005	<0.005	<0.005	150	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	320	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			388
A-BSB-17	14-Nov-02	20	<0.005	<0.005	15.4	<0.005	13.4	<0.005	<0.005	<0.005	<0.03	<0.005	21.1	546	<0.005	<0.005	20.7	<0.01	<0.05	<0.01			451
A-BSB-17	14-Nov-02	22.5	<0.005	<0.005	3.55	2.79	4.15	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	120	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			118
A-BSB-17	14-Nov-02	25	<0.005	<0.005	2.91	4.45	6.01	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	131	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			195
A-BSB-17	14-Nov-02	27.5	<0.005	<0.005	2.77	2.97	4.32	<0.005	<0.005	<0.005	<0.03	<0.005	90.9	195	<0.005	<0.005	10.3	<0.01	<0.05	<0.01			172
A-BSB-17	14-Nov-02	30	2.06	<0.005	1.17	1.75	2.34	<0.005	<0.005	<0.005	<0.03	<0.005	54.4	112	<0.005	<0.005	5.13	<0.01	<0.05	<0.01			37.4
A-BSB-17	14-Nov-02	35	<0.005	<0.005	<0.005	<0.005	6.52	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	37.3	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			30
A-BSB-17	14-Nov-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	8.72	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.43
A-BSB-17	14-Nov-02	45	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	1.45	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.55
A-BSB-18	17-Jun-03	29	<5	<2.5	<2.5	<2.5		<2.5	<2.5	<2.5	<10	<2.5	<2.5		<2.5	<2.5	<2.5	<2.5	<12.5	<2.5			
A-BSB-18	17-Jun-03	35	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.625	<0.125			
A-BSB-18	17-Jun-03	39.5	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.625	<0.125			
A-BSB-18	17-Jun-03	45	<0.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.25	<0.25			
A-E-11	18-Mar-03	1.5	<0.005	<0.002	0.012	0.0053	0.029	<0.005	<0.005	<0.005	<0.01	<0.005	0.014	0.0125	<0.005	<0.005	0.025	<0.005	<0.025	<0.002			0.075
A-E-11	18-Mar-03	5	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.013	<0.005	<0.005	0.029	<0.005	<0.025	<0.002			0.022
A-E-11	18-Mar-03	10	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.0021	<0.005	<0.005	0.0181	<0.005	<0.025	<0.002			0.085
A-E-11	18-Mar-03	15	<0.005	<0.002	0.01	<0.005	0.016	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.02	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			0.116
A-E-11	18-Mar-03	19.5	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.016	<0.005	<0.005	0.0029	<0.005	<0.025	<0.002			0.019
A-E-11	18-Mar-03	25	<0.005	<0.002	0.29	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	6.94	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			4.65
A-E-11	18-Mar-03	30	<0.005	<0.002	1.01	0.421	0.69	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	3.31	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			25.2
A-E-11	18-Mar-03	35	<0.005	<0.002	0.089	0.0194	0.0383	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.191	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			0.888
A-E-11	18-Mar-03	40	<0.005	<0.002	0.066	<0.005	0.011	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.0977	<0.005	<0.005	<0.002	<0.005	<0.025	0.11			0.188
A-E-12	18-Mar-03	1.5	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	0.0307	<0.001	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			<0.001
A-E-12	18-Mar-03	5	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	0.112	<0.001	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			<0.001
A-E-12	18-Mar-03	10	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	<0.001	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			<0.001
A-E-12	18-Mar-03	15	<0.005	<0.002	3.89	5.32	6.07	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	16.8	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			61.9
A-E-12	18-Mar-03	16	<0.005	<0.002	5.5	3.86	5.73	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	11.6	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			51.2
A-E-12	18-Mar-03	20	<0.005	<0.002	0.516	0.24	0.261	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	0.62	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			3.84
A-E-12	18-Mar-03	25	<0.005	<0.002	0.762	0.29	0.525	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	6.1	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			13.3
A-E-12	18-Mar-03	25.5	<0.005	<0.002	0.079	0.033	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.002	5.07	<0.005	<0.005	<0.002	<0.005	<0.025	<0.002			2.13
A-G-01	19-Jul-01	15	<5	<2.5					<2.5	<2.5		<2.5	<2.5		<2.5	<2.5		<2.5	<25	<2.5			
A-G-02	19-Jul-01	15	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.002	<0.002	<0.004
A-G-03	19-Jul-01	15	<0.5	<0.25					<0.25	<0.25		<0.25			<0.25	<0.25		<0.25	<2.5	<0.25			
A-G-04	19-Jul-01	15	<1.25	<0.625				<0.625	<0.625	<0.625		<0.625			<0.625	<0.625	<0.625	<0.625	<6.25	<0.625			
A-G-05	19-Jul-01	15	<6.25	<3.125				<3.125	<3.125	<3.125		<3.125			<3.125	<3.125		<3.125	<31.25	<3.125			
A-G-06	19-Jul-01	15	<10	<5					<5	<5		<5			<5	<5	<5	<5	<25	<5			
A-G-07	19-Jul-01	15	<12.5	<6.25		<6.25		<6.25	<6.25	<6.25		<6.25			<6.25	<6.25	<6.25	<6.25	<62.5	<6.25			
A-G-08	19-Jul-01	15	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		<0.025	<0.025		<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.01	<0.01	<0.02
A-G-09	19-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.001	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.001	<0.001	<0.002
A-G-10	19-Jul-01	15	<1	<0.5	<0.5			<0.5	<0.5	<0.5		<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<5	<0.5			
A-G-11	19-Jul-01	15	<0.0125	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625		<0.00625	<0.00625	<0.00625	<0.00625	<0.0625	<0.00625			
A-G-12	19-Jul-01	15	<2.5	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25		<1.25	<1.25	<0.5	<1.25	<1.25	<1.25	<1.25	<12.5	<1.25	<0.5	<0.5	<1
A-G-13	19-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.001	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.001	<0.001	<0.002
A-MW-01	01-Jan-90	10	<0.025							<0.005			<0.005	0.014	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-MW-01	01-Jan-90	15	<0.025							<0.005			0.049	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<0.005
A-MW-01	01-Jan-90	20	<3.125							<0.625			<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	<0.625	<0.625	<0.625

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-MW-01	01-Jan-90	25		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-MW-01	01-Jan-90	30		3.5	<0.025	<0.025	0.24	<0.025			<0.025					<0.025	<0.025	<0.025		<0.025					<0.125		<0.075	
A-MW-01	01-Jan-90	35		<0.005	<0.005	<0.005	0.039	<0.005			<0.005					<0.005	<0.005	<0.005		<0.005					<0.025		<0.015	
A-MW-01	01-Jan-90	40		<0.625	<0.625	<0.625	<0.625	<0.625			<0.625					<0.625	<0.625	<0.625		<0.625					<3.125		<1.875	
A-MW-02	07-Jan-94	5		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-02	07-Jan-94	10		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-02	07-Jan-94	20		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-02	07-Jan-94	30		0.069	<0.0025	<0.0025	0.01	0.037			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-02	07-Jan-94	40		0.088	<0.0025	<0.0025	0.03	0.102			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-03	07-Jan-94	5		0.018	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-03	07-Jan-94	10		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-03	07-Jan-94	20		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-03	07-Jan-94	30		0.088	<0.0025	<0.0025	<0.0025	0.332			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-03	07-Jan-94	40		<0.0025	<0.0025	<0.0025	0.023	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-04	05-Jan-94	5		<0.025	<0.025	<0.025	<0.025	<0.025			<0.025						<0.025	<0.025							<0.25		<0.15	
A-MW-04	05-Jan-94	10		0.071	<0.025	<0.025	<0.025	<0.025			<0.025						<0.025	<0.025							<0.25		<0.15	
A-MW-04	05-Jan-94	20		54.7	<0.5	<0.5	<0.5	<0.5			<0.5						<0.5	<0.5							<5		<3	
A-MW-05	05-Jan-94	2		0.005	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-05	05-Jan-94	5		<0.0025	<0.0025	<0.0025	0.031	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-05	05-Jan-94	10		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-05	05-Jan-94	20		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-06	11-Jan-94	5		0.412	<0.005	<0.005	0.301	0.02			<0.005						0.01	<0.005							<0.025		<0.015	
A-MW-06	11-Jan-94	10		0.312	<0.005	<0.005	0.078	<0.005			<0.005						0.018	<0.005							<0.025		<0.015	
A-MW-06	11-Jan-94	20		2.97	<0.005	<0.005	<0.005	0.027			<0.005						<0.005	<0.005							<0.025		<0.015	
A-MW-07	06-Jan-94	5		<0.0025	<0.0025	<0.0025	0.012	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-07	06-Jan-94	10		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-07	06-Jan-94	20		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-07	06-Jan-94	30		<0.0025	<0.0025	<0.0025	0.028	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-07	06-Jan-94	40		<0.0025	<0.0025	<0.0025	0.027	<0.0025			<0.0025						<0.0025	<0.0025							<0.025		<0.015	
A-MW-08	06-Jun-02	3.5	<0.005	0.0425	<0.005	<0.005	0.0275	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	10	<0.005	0.0525	<0.005	<0.005	0.04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	15	<0.005	0.045	<0.005	<0.005	0.0475	0.0056	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	19	<0.005	0.247	<0.005	<0.005	0.175	0.0067	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	24	<0.005	0.835	<0.005	<0.005	0.455	0.195	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	29	<0.005	9.55	<0.005	<0.005	0.991	<0.005	<0.005	<0.005	<0.005	<0.005	15.5	<0.005	<0.005	<0.005	<0.005	<0.005	4.42	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	30	<0.005	36.4	<0.005	<0.005	7.35	<0.005	<0.005	<0.005	<0.005	<0.005	80.5	<0.005	<0.005	<0.005	4.95	<0.005	19.8	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	32.5	<0.005	42.8	<0.005	<0.005	29.8	1.85	<0.005	<0.005	<0.005	<0.005	161	<0.005	<0.005	<0.005	<0.005	<0.005	47.5	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	35	<0.005	10.2	<0.005	<0.005	3.68	<0.005	<0.005	<0.005	<0.005	<0.005	17.3	<0.005	<0.005	<0.005	<0.005	<0.005	4.58	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	40	<0.005	10.6	<0.005	<0.005	2.09	0.09	<0.005	<0.005	<0.005	<0.005	18.4	<0.005	<0.005	<0.005	<0.005	<0.005	4.63	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-08	06-Jun-02	42.5	<0.005	0.055	<0.005	<0.005	0.145	0.035	<0.005	<0.005	<0.005	<0.005	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	0.095	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	3	<0.005	0.0133	<0.005	<0.005	0.005	0.0051	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.5	<0.005	<0.5		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	15	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	25	<0.005	0.0076	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	29	<0.005	0.035	<0.005	<0.005	0.095	0.033	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	35	<0.005	<0.005	<0.005	<0.005	0.088	0.085	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	40	<0.005	<0.005	<0.005	<0.005	0.026	0.027	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	45	<0.005	<0.005	<0.005	<0.005	0.0057	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-09	07-Jun-02	50	<0.005	<0.005	<0.005	<0.005	<0.005	0.0218	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	18.5	<0.005	1.15	<0.005	<0.005	2.04	0.0928	<0.005	<0.005	<0.005	<0.005	0.0638	<0.005	<0.005	<0.005	<0.005	<0.005	0.0116	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	24.5	<0.005	0.336	<0.005	<0.005	0.394	0.0415	<0.005	<0.005	<0.005	<0.005	0.0355	<0.005	<0.005	<0.005	<0.005	<0.005	0.00728	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	27	<0.005	5.45	<0.005	<0.005	4.31	0.52	<0.005	<0.005	<0.005	<0.005	7.83	<0.005	<0.005	<0.005	<0.005	<0.005	1.91	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	32	<0.005	198	<0.005	<0.005	20.2	4.23	<0.005	<0.005	<0.005	<0.005	393	<0.005	<0.005	<0.005	<0.005	<0.005	115	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	35	<0.005	1.02	<0.005	<0.005	17.8	2.56	<0.005	<0.005	<0.005	<0.005	106	<0.005	<0.005	<0.005	<0.005	<0.005	35.9	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	37	<0.005	<0.005	<0.005	<0.005	8.75	<0.005	<0.005	<0.005	<0.005	<0.005	51.6	<0.005	<0.005	<0.005	<0.005	<0.005	18.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-10	13-Nov-02	40	<0.005	<0.005	<0.005	<0.005	1.74	<0.005	<0.005	<0.005	<0.005	<0.005	0.304	<0.005	<0.005	<0.005	<0.005	<0.005	0.105	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	5	<0.005	0.0068	<0.005	<0.005	0.0096	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	10	<0.005	<0.005	<0.005	<0.005	0.0068	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	0.0071	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0254	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	27	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	32	<0.005	<0.005	<0.005	<0.005	0.0102	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	32.5	<0.005	<0.005	<0.005	<0.005	0.0112	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-MW-01	01-Jan-90	25	0.43	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			<0.025				<0.125	<0.075
A-MW-01	01-Jan-90	30	15	<0.025				<0.025	<0.075	<0.025	<0.025	<0.025	<0.075	<0.025	<0.075		<0.025	<0.025		<0.025			2.2				<0.125	<0.075
A-MW-01	01-Jan-90	35	0.085	0.016				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				<0.025	<0.015
A-MW-01	01-Jan-90	40	15	<0.625				<0.625	<1.875	<0.625	<0.625	<0.625	<1.875	<0.625	<1.875		<0.625	<0.625		<0.625			<0.625				<3.125	<1.875
A-MW-02	07-Jan-94	5	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-02	07-Jan-94	10	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-02	07-Jan-94	20	0.097	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-02	07-Jan-94	30	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-02	07-Jan-94	40	1.102	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			0.113				0.72	0.352
A-MW-03	07-Jan-94	5	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-03	07-Jan-94	10	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-03	07-Jan-94	20	0.261	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-03	07-Jan-94	30	15.1	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			0.109				3	1.34
A-MW-03	07-Jan-94	40	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-04	05-Jan-94	5	1.64	<0.025				<0.025	<0.15	<0.025	<0.025	<0.025	<0.15	<0.025	<0.15		<0.025	<0.025		<0.025			<0.025				1.99	0.594
A-MW-04	05-Jan-94	10	2.13	<0.025				<0.025	<0.15	<0.025	<0.025	<0.025	<0.15	<0.025	<0.15		<0.025	<0.025		<0.025			<0.025				4.26	<0.15
A-MW-04	05-Jan-94	20	<5	<0.5				<0.5	<3	<0.5	<0.5	<0.5	<3	<0.5	<3		<0.5	<0.5		<0.5			16.6				<5	12
A-MW-05	05-Jan-94	2	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-05	05-Jan-94	5	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-05	05-Jan-94	10	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-05	05-Jan-94	20	0.974	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				0.529	<0.015
A-MW-06	11-Jan-94	5	5.18	0.017				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			0.032				3.11	0.9
A-MW-06	11-Jan-94	10	2.03	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			<0.005				0.804	1.23
A-MW-06	11-Jan-94	20	<0.025	<0.005				<0.005	<0.015	<0.005	<0.005	<0.005	<0.015	<0.005	<0.015		<0.005	<0.005		<0.005			3.22				<0.025	2.44
A-MW-07	06-Jan-94	5	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-07	06-Jan-94	10	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-07	06-Jan-94	20	0.117	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				0.147	<0.015
A-MW-07	06-Jan-94	30	6.05	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				29.7	0.069
A-MW-07	06-Jan-94	40	<0.025	<0.0025				<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.015		<0.0025	<0.0025		<0.0025			<0.0025				<0.025	<0.015
A-MW-08	06-Jun-02	3.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.008	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-08	06-Jun-02	10	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.02	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-08	06-Jun-02	15	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.025	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-08	06-Jun-02	19	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.115	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-08	06-Jun-02	24	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.265	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-08	06-Jun-02	29	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.748	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	2.26	<0.005	<0.005	0.438	<0.05	<0.05
A-MW-08	06-Jun-02	30	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.6	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	14.1	<0.005	<0.005	2.75	<0.05	<0.05
A-MW-08	06-Jun-02	32.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	12.3	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	27.9	<0.005	<0.005	5.29	<0.05	<0.05
A-MW-08	06-Jun-02	35	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.9	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.34	<0.005	<0.005	0.52	<0.05	<0.05
A-MW-08	06-Jun-02	40	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.36	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	3.51	<0.005	<0.005	0.566	<0.05	<0.05
A-MW-08	06-Jun-02	42.5	<0.05	0.0625	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.212	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	3	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0176	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	10	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	15	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0225	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	20	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0072	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	25	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.06	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	29	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.4	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	35	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.068	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	40	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.019	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	45	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-09	07-Jun-02	50	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-10	13-Nov-02	18.5	12.4	0.0078	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.55	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0352	<0.005	<0.005	<0.005	4.55	0.135
A-MW-10	13-Nov-02	24.5	3.28	0.00249	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.281	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0215	<0.005	<0.005	<0.005	<0.05	0.0388
A-MW-10	13-Nov-02	27	6.52	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	3.02	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	2.18	<0.005	<0.005	<0.005	4.01	<0.05
A-MW-10	13-Nov-02	32	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	16.5	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	93.1	<0.005	<0.005	15.2	<0.05	<0.05
A-MW-10	13-Nov-02	35	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	12.9	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	20.5	<0.005	<0.005	5.22	<0.05	<0.05
A-MW-10	13-Nov-02	37	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.26	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	9.01	<0.005	<0.005	3.06	<0.05	<0.05
A-MW-10	13-Nov-02	40	50.5	0.0545	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.393	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.321	<0.005	<0.005	<0.005	22	6.16
A-MW-12	15-Nov-02	5	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0134	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	10	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.007	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	14.5	0.0263	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0066	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	19.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	22	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0054	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	24.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	27	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	29.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	32	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	32.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-MW-01	01-Jan-90	25	<0.125							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	<0.075	<0.025	<0.025	<0.025
A-MW-01	01-Jan-90	30	10							<0.025			6.3	0.33	<0.025	<0.025	0.27	<0.025	<0.075	<0.075	5.4	2.3	7.7
A-MW-01	01-Jan-90	35	6.8							<0.005			<0.005	<0.005	<0.005	<0.005	0.18	<0.005	<0.015	<0.015	2.4	<0.005	2.4
A-MW-01	01-Jan-90	40	<3.125							<0.625			<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<1.875	<1.875	1.8	<0.625	1.8
A-MW-02	07-Jan-94	5	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-02	07-Jan-94	10	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-02	07-Jan-94	20	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-02	07-Jan-94	30	<0.025							<0.0025			0.033	0.015	<0.0025	<0.0025	0.024	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-02	07-Jan-94	40	<0.025							<0.0025			0.194	0.168	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	0.387	0.107	0.494
A-MW-03	07-Jan-94	5	<0.025							<0.0025			0.013	<0.0025	<0.0025	<0.0025	0.018	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.0025
A-MW-03	07-Jan-94	10	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-03	07-Jan-94	20	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<2.5	<0.0025	<0.005
A-MW-03	07-Jan-94	30	<0.025							<0.0025			0.452	0.48	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	0.366	0.104	0.47
A-MW-03	07-Jan-94	40	<0.025							<0.0025			0.069	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-04	05-Jan-94	5	<0.25							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.15	<0.15	<0.025	<0.025	<0.05
A-MW-04	05-Jan-94	10	<0.25							<0.025			<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.15	<0.15	<0.025	<0.025	<0.05
A-MW-04	05-Jan-94	20	<5							<0.5			98.9	48.7	<0.5	<0.5	16.5	<0.5	<3	<3	49	12	61
A-MW-05	05-Jan-94	2	<0.025							<0.0025			0.021	0.008	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	0.013	<0.0025	0.013
A-MW-05	05-Jan-94	5	<0.025							<0.0025			0.019	0.006	<0.0025	<0.0025	0.007	<0.0025	<0.015	<0.015	0.016	<0.0025	0.016
A-MW-05	05-Jan-94	10	<0.025							<0.0025			<0.0025	0.009	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-05	05-Jan-94	20	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-06	11-Jan-94	5	<0.025							<0.005			0.024	0.424	<0.005	<0.005	0.011	<0.005	<0.015	<0.015	0.188	0.089	0.277
A-MW-06	11-Jan-94	10	<0.025							<0.005			<0.005	0.036	<0.005	<0.005	<0.005	<0.005	<0.015	<0.015	<0.005	<0.005	<10
A-MW-06	11-Jan-94	20	<0.025							<0.005			3.51	4.3	<0.005	<0.005	0.154	<0.005	<0.015	<0.015	6.24	4	10.24
A-MW-07	06-Jan-94	5	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.0025
A-MW-07	06-Jan-94	10	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.0025
A-MW-07	06-Jan-94	20	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-07	06-Jan-94	30	<0.025							<0.0025			<0.0025	0.034	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	0.007	<0.0025	0.007
A-MW-07	06-Jan-94	40	<0.025							<0.0025			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.015	<0.0025	<0.0025	<0.005
A-MW-08	06-Jun-02	3.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-08	06-Jun-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-08	06-Jun-02	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-08	06-Jun-02	19	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-08	06-Jun-02	24	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-08	06-Jun-02	29	<0.005	<0.005	1.04	0.968	1.3	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	2.31	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			9.58
A-MW-08	06-Jun-02	30	<0.005	<0.005	6.1	4.35	8.7	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	34.1	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			52
A-MW-08	06-Jun-02	32.5	<0.005	<0.005	11	7.95	18.1	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	65.5	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			92.6
A-MW-08	06-Jun-02	35	<0.005	<0.005	0.98	0.8	1.82	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	6.92	<0.005	<0.005	0.46	<0.01	<0.05	<0.01			10.9
A-MW-08	06-Jun-02	40	<0.005	<0.005	1.29	0.851	1.87	<0.005	<0.005	<0.005	<0.03	<0.005	0.16	7.25	<0.005	<0.005	0.26	<0.01	<0.05	<0.01			11.6
A-MW-08	06-Jun-02	42.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.452	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.113
A-MW-09	07-Jun-02	3	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0248	<0.005	<0.005	<0.005	0.0067	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	29	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	35	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0056	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	45	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-09	07-Jun-02	50	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-10	13-Nov-02	18.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.285	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.22
A-MW-10	13-Nov-02	24.5	<0.005	<0.005	0.0079	<0.005	0.0166	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0986	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.101
A-MW-10	13-Nov-02	27	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	4.24	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			10
A-MW-10	13-Nov-02	32	<0.005	<0.005	33.8	25	38.5	<0.005	<0.005	<0.005	<0.03	<0.005	2.59	179	<0.005	<0.005	3.56	<0.01	<0.05	<0.01			315
A-MW-10	13-Nov-02	35	<0.005	<0.005	4.23	4.45	14.9	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	69	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			63.7
A-MW-10	13-Nov-02	37	<0.005	<0.005	2.5	2.59	8.19	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	54.8	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			31
A-MW-10	13-Nov-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	4.77	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.29
A-MW-12	15-Nov-02	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0203	<0.005	<0.005	<0.005	0.0058	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.002	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	24.5	<0.005	0.0056	<0.005	<0.005	0.0168	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0262
A-MW-12	15-Nov-02	27	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0029	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.0027
A-MW-12	15-Nov-02	32	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	32.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-MW-12	15-Nov-02	34.5	<0.005	<0.005	<0.005	<0.005	0.217	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0102	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	0.453	<0.005	<0.005	<0.005	<0.005	<0.005	17.7	<0.005	<0.005	<0.005	<0.005	<0.005	8.75	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	44.5	<0.005	<0.005	<0.005	<0.005	0.422	<0.005	<0.005	<0.005	<0.005	<0.005	4.05	<0.005	<0.005	<0.005	<0.005	<0.005	1.87	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-12	15-Nov-02	47	<0.005	<0.005	<0.005	<0.005	0.0601	0.2	<0.005	<0.005	<0.005	<0.005	0.0212	<0.005	<0.005	<0.005	<0.005	<0.005	0.0088	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-14	03-Dec-02	4.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	0.356	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<0.125	<0.25		<0.625	
A-MW-14	03-Dec-02	9.5	<0.0625	<0.0625	<0.0625	<0.0625	0.388	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.23	<0.0625	<0.0625	<0.0625	10.4	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.625	<0.0625	<0.125		<0.3125	
A-MW-14	03-Dec-02	14.5	<0.0625	0.495	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.197	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.625	<0.0625	<0.125		<0.3125	
A-MW-14	03-Dec-02	15	<0.0625	0.45	<0.0625	<0.0625	0.426	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.187	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.625	<0.0625	<0.125		<0.3125	
A-MW-14	03-Dec-02	19.5	<0.0625	0.739	<0.0625	<0.0625	0.445	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	8.81	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	2.36	<0.0625	<0.0625	<0.0625	<0.625	<0.0625	<0.125		<0.3125	
A-MW-14	03-Dec-02	24.5	<0.0625	0.286	<0.0625	<0.0625	0.406	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	25	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	7.44	<0.0625	<0.0625	<0.0625	<0.625	<0.0625	<0.125		<0.3125	
A-MW-14	03-Dec-02	29.5	<1.25	150	<1.25	<1.25	13.6	5.53	<1.25	<1.25	<1.25	<1.25	172	<1.25	<1.25	<1.25	<1.25	<1.25	51	<1.25	<1.25	<1.25	<12.5	<1.25	<2.5		<6.25	
A-MW-14	03-Dec-02	30	<1.25	120	<1.25	<1.25	11.6	5.18	<1.25	<1.25	<1.25	<1.25	135	<1.25	<1.25	<1.25	<1.25	<1.25	41	<1.25	<1.25	<1.25	<12.5	<1.25	<2.5		<6.25	
A-MW-14	03-Dec-02	34.5	<0.25	93.3	<0.25	<0.25	2.21	2.8	<0.25	<0.25	<0.25	<0.25	87.6	<0.25	<0.25	<0.25	<0.25	<0.25	26.3	<0.25	<0.25	<0.25	<2.5	<0.25	<0.5		<1.25	
A-MW-14	03-Dec-02	39.5	<0.125	<0.125	<0.125	<0.125	3.27	0.298	<0.125	<0.125	<0.125	<0.125	1.45	<0.125	<0.125	<0.125	<0.125	<0.125	0.434	<0.125	<0.125	<0.125	<1.25	<0.125	<0.25		<0.625	
A-MW-14	03-Dec-02	40	<0.125	<0.125	<0.125	<0.125	3.6	0.358	<0.125	<0.125	<0.125	<0.125	0.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<1.25	<0.125	<0.25		<0.625	
A-MW-14	03-Dec-02	42	<0.25	<0.25	<0.25	<0.25	0.842	0.51	<0.25	<0.25	<0.25	<0.25	7.42	<0.25	<0.25	<0.25	<0.25	<0.25	2.11	<0.25	<0.25	<0.25	<2.5	<0.25	<0.5		<1.25	
A-MW-14	03-Dec-02	65		<0.0025			<0.0025	<0.0025		<0.0025		<0.0025	<0.0025	<0.0025		<0.0025			<0.0025				<0.05		<0.005		<0.025	
A-MW-15	19-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	25	<0.005	<0.005	<0.005	<0.005	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	0.0088	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	30	<0.005	<0.005	<0.005	<0.005	0.142	0.0061	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	35	<0.005	<0.005	<0.005	<0.005	0.258	0.0327	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	45	<0.005	<0.005	<0.005	<0.005	0.31	0.384	<0.005	<0.005	<0.005	<0.005	0.0163	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	50	<0.005	<0.005	<0.005	<0.005	0.205	1.25	<0.005	<0.005	<0.005	<0.005	0.0343	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.283	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-15	19-Nov-02	55	<0.005	<0.005	<0.005	<0.005	0.27	0.113	<0.005	<0.005	<0.005	<0.005	0.0546	<0.005	<0.005	<0.005	<0.005	<0.005	0.0084	<0.005	<0.005	<0.005	0.627	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-16	19-Nov-02	10	<0.005	0.0087	<0.005	<0.005	0.0279	0.0124	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.189	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-16	19-Nov-02	25	<0.005	0.092	<0.005	<0.005	0.036	0.0293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-16	19-Nov-02	27.5	<0.005	0.0207	<0.005	<0.005	0.203	0.0735	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-16	19-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	0.625	0.38	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.48	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-16	19-Nov-02	40	<0.005	<0.005	<0.005	<0.005	0.669	0.494	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	4.34	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	9.5	<0.005	0.0163	<0.005	<0.005	0.0738	0.0376	<0.005	<0.005	<0.005	<0.005	0.0058	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	24.5	<0.005	0.0246	<0.005	<0.005	0.0396	0.01	<0.005	<0.005	<0.005	<0.005	0.0066	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	26.8	<0.005	0.84	<0.005	<0.005	1.01	0.185	<0.005	<0.005	<0.005	<0.005	0.0897	<0.005	<0.005	<0.005	<0.005	<0.005	0.0129	<0.005	<0.005	<0.005	0.252	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	29.5	<0.005	0.0161	<0.005	<0.005	0.251	0.0101	<0.005	<0.005	<0.005	<0.005	0.0449	<0.005	<0.005	<0.005	<0.005	<0.005	0.0099	<0.005	<0.005	<0.005	0.84	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	30	<0.005	0.0073	<0.005	<0.005	0.0959	0.0035	<0.005	<0.005	<0.005	<0.005	0.0123	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	1.02	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	34.5	<0.005	0.0114	<0.005	<0.005	0.221	0.0124	<0.005	<0.005	<0.005	<0.005	0.9	<0.005	<0.005	<0.005	<0.005	<0.005	0.0691	<0.005	<0.005	<0.005	13.8	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	0.138	0.161	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.71	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-17	20-Nov-02	40	<0.005	<0.005	<0.005	<0.005	0.127	0.15	<0.005	<0.005	<0.005	<0.005	0.0195	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.56	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	4.5	<0.005	45.7	<0.005	<0.005	1.66	1	<0.005	<0.005	<0.005	<0.005	57.3	<0.005	<0.005	<0.005	<0.005	<0.005	9.07	<0.005	<0.005	<0.005	42	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	5	<0.005	38.6	<0.005	<0.005	1.7	1	<0.005	<0.005	<0.005	<0.005	50.5	<0.005	<0.005	<0.005	<0.005	<0.005	8.13	<0.005	<0.005	<0.005	36	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	14.5	<0.005	4,150	<0.005	<0.005	17.1	55.2	<0.005	<0.005	<0.005	<0.005	391	<0.005	<0.005	<0.005	<0.005	<0.005	123	<0.005	<0.005	<0.005	13	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	19.5	<0.005	209	<0.005	<0.005	<0.005	3.5	<0.005	<0.005	<0.005	<0.005	102	<0.005	<0.005	<0.005	<0.005	<0.005	28.3	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	24.5	<0.005	2.05	<0.005	<0.005	0.058	<0.005	<0.005	<0.005	<0.005	<0.005	11.3	<0.005	<0.005	<0.005	<0.005	<0.005	3.38	<0.005	<0.005	<0.005	2.7	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	28	<0.005	846	<0.005	<0.005	<0.005	48.8	<0.005	<0.005	<0.005	<0.005	316	<0.005	<0.005	<0.005	<0.005	<0.005	72.6	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	29.5	<0.005	748	<0.005	<0.005	<0.005	47.6	<0.005	<0.005	<0.005	<0.005	296	<0.005	<0.005	<0.005	<0.005	<0.005	65	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	34	<0.005	0.57	<0.005	<0.005	0.685	2	<0.005	<0.005	<0.005	<0.005	6.35	<0.005	<0.005	<0.005	<0.005	<0.005	1.35	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	38	<0.005	0.35	<0.005	<0.005	0.994	2.06	<0.005	<0.005	<0.005	<0.005	1.45	<0.005	<0.005	<0.005	<0.005	<0.005	0.28	<0.005	<0.005	<0.005	1.6	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	39	<0.005	0.3	<0.005	<0.005	1.06	2.31	<0.005	<0.005	<0.005	<0.005	4.17	<0.005	<0.005	<0.005	<0.005	<0.005	0.933	<0.005	<0.005	<0.005	1.83	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	44	<0.005	<0.005	<0.005	<0.005	0.156	0.206	<0.005	<0.005	<0.005	<0.005	0.231	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	49.5	<0.005	<0.005	<0.005	<0.005	0.161	0.237	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-19	21-Nov-02	54.5	<0.005	<0.005	<0.005	<0.005	0.05	0.258	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-MW-22	19-Jun-01	30	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.0125	
A-MW-22	19-Jun-01	42.5	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.0125	
A-MW-26	20-Jun-03	5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.005		<0.025	
A-MW-26	20-Jun-03	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.005		<0.025	
A-MW-26	20-Jun-03	25	<0.125		<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	<0.125		<0.125	<0.25		<1.25	
A-MW-26	20-Jun-03	35	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625		<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625		<0.0625	<0.125		<0.625	
A-MW-26	20-Jun-03	39	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-MW-26	20-Jun-03	40	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025		<0.0025	<0.005		<0.025	
A-RR-01	01-Oct-92	0		<0.05	<0.05	<0.05	<0.05	<0.05			<0.05					<0.05	<0.05	<0.05		<0.05					<0.25		<0.15	
A-RR-02	01-Oct-92	1.5		17	<1	<1	<1	<1			<1					<1	<1	<1		<1					<5		<3	
A-RR-03	01-Oct-92	0		19000	<1	<1	<1	8.3			<1					<1	3.9	<1		<1					<5		<3	
A-RR-04	01-Oct-92	1.5		<0.4	<0.4	<0.4	<0.4	<0.4			<0.4					<0.4	<0.4	<0.4		<0.4					<2		<1.2	
A-RR-05	01-Oct-92	0		16	<1	<1	<1	<1			<1					<1	<1	<1		<1					<5		<3	
A-RR-06	01-Oct-92	1.5		160	<1	<1	<1	<1			<1					<1	<1	<1		<1					<5		<3	
A-RR-07	01-Oct-92	0		73	<1	<1	<1	<1			<1					<1	<1	<1		<1					<5		<3	
A-S-01	01-Apr-90	0		6.4			ND	ND																				
A-S-02	01-Apr-90	0		ND			ND	ND																				

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-MW-12	15-Nov-02	34.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0085	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-12	15-Nov-02	39.5	0.964	0.145	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.116	<0.01	<0.005	<0.01	0.0675	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.238	<0.005	<0.005	<0.005	1.56	0.68
A-MW-12	15-Nov-02	44.5	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2.43	<0.05
A-MW-12	15-Nov-02	47	0.0429	0.0523	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.092	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-14	03-Dec-02	4.5	4.5	<0.05	<0.125	<0.125		<0.125	<0.125	<0.625	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	0.1	<0.125		<0.125	4.36	<0.625
A-MW-14	03-Dec-02	9.5	27.2	<0.025	<0.0625	<0.0625		<0.0625	<0.0625	<0.3125	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.553	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.142	<0.0625		<0.0625	10.4	2.11
A-MW-14	03-Dec-02	14.5	32.8	<0.025	<0.0625	<0.0625		<0.0625	<0.0625	<0.3125	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.589	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.192	<0.0625		<0.0625	14	2.6
A-MW-14	03-Dec-02	15	41.3	<0.025	<0.0625	<0.0625		<0.0625	<0.0625	<0.3125	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.586	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.173	<0.0625		<0.0625	16	3.24
A-MW-14	03-Dec-02	19.5	27.6	<0.025	<0.0625	<0.0625		<0.0625	<0.0625	<0.3125	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.55	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	3.53	<0.0625		0.45	6.83	3.27
A-MW-14	03-Dec-02	24.5	12.3	<0.025	<0.0625	<0.0625		<0.0625	<0.0625	<0.3125	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	0.487	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	8.89	<0.0625		1.25	6.77	2.17
A-MW-14	03-Dec-02	29.5	60.3	<0.5	<1.25	<1.25		<1.25	<1.25	<6.25	<1.25	<1.25	<1.25	<1.25	<1.25	12.3	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	110	<1.25		12	14.9	26.6
A-MW-14	03-Dec-02	30	68.4	<0.5	<1.25	<1.25		<1.25	<1.25	<6.25	<1.25	<1.25	<1.25	<1.25	<1.25	9.67	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	91.6	<1.25		9.65	14.5	26.1
A-MW-14	03-Dec-02	34.5	46.3	<0.1	<0.25	<0.25		<0.25	<0.25	<1.25	<0.25	<0.25	<0.25	<0.25	<0.25	11.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	59.4	<0.25		6.06	13	15.4
A-MW-14	03-Dec-02	39.5	6.73	<0.05	<0.125	<0.125		<0.125	<0.125	<0.625	<0.125	<0.125	<0.125	<0.125	<0.125	6.95	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	1	<0.125		<0.125	<0.625	<0.625
A-MW-14	03-Dec-02	40	6.68	<0.05	<0.125	<0.125		<0.125	<0.125	<0.625	<0.125	<0.125	<0.125	<0.125	<0.125	7.91	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	0.525	<0.125		<0.125	<0.625	<0.625
A-MW-14	03-Dec-02	42	38.3	<0.1	<0.25	<0.25		<0.25	<0.25	<1.25	<0.25	<0.25	<0.25	<0.25	<0.25	2.33	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	4.01	<0.25		0.53	<1.25	2.09
A-MW-14	03-Dec-02	65	<0.025	<0.0025								<0.0025	<0.005			<0.0025					<0.0025		<0.0025			<0.0025	<0.025	<0.025
A-MW-15	19-Nov-02	24.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0179	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0022	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	25	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0178	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0032	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	30	<0.05	0.002	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.005	<0.01	<0.005	<0.01	0.665	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	35	<0.05	0.0056	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.005	<0.01	<0.005	<0.01	1.05	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	45	<0.05	0.0073	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	0.0063	<0.005	<0.01	1.91	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.023	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	50	<0.05	0.0071	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0106	<0.01	<0.005	<0.01	1.25	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-15	19-Nov-02	55	<0.05	0.0085	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	0.0059	0.017	<0.005	<0.01	1.88	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0065	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-16	19-Nov-02	10	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.175	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-16	19-Nov-02	25	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.233	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-16	19-Nov-02	27.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.84	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-16	19-Nov-02	39.5	<0.05	0.0096	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.172	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-16	19-Nov-02	40	<0.05	0.0115	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.194	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	9.5	<0.05	0.056	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.455	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	24.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.111	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	26.8	<0.05	0.0042	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.68	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	29.5	<0.05	0.0065	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.054	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0213	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	30	0.0424	0.0024	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0235	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.0052	<0.005	<0.005	0.76	<0.05	<0.05
A-MW-17	20-Nov-02	34.5	<0.05	0.0109	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0082	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.105	<0.005	<0.005	0.0095	<0.05	<0.05
A-MW-17	20-Nov-02	39.5	<0.05	0.0032	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0496	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-17	20-Nov-02	40	<0.05	0.0034	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	0.0497	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	4.5	38.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	5.05	<0.005	<0.005	<0.005	10.5	<0.05
A-MW-19	21-Nov-02	5	26.4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	4.55	<0.005	<0.005	<0.005	10.8	<0.05
A-MW-19	21-Nov-02	14.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	101	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	19.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	17.1	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	24.5	2.7	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.05	<0.005	<0.005	0.262	5.33	<0.05
A-MW-19	21-Nov-02	28	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	58	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	29.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	54	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	34	15.2	0.125	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	2.22	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.14	<0.005	<0.005	0.11	7.51	<0.05
A-MW-19	21-Nov-02	38	17	0.202	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.81	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.575	<0.005	<0.005	<0.005	7.83	<0.05
A-MW-19	21-Nov-02	39	17.6	0.25	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	1.74	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	1.05	<0.005	<0.005	<0.005	8.49	<0.05
A-MW-19	21-Nov-02	44	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	0.137	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	49.5	1.02	0.0328	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-19	21-Nov-02	54.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-MW-22	19-Jun-01	30	<0.0125	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0125	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025				<0.0025	<0.001	<0.0025		<0.0025		<0.0125
A-MW-22	19-Jun-01	42.5	<0.0125	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0125	<0.0025	<0.0025		<0.0025	<0.0025		<0.0025	<0.0025				<0.0025	<0.001	<0.0025		<0.0025		<0.0125
A-MW-26	20-Jun-03	5	<0.025	<0.0025	<0.0025	<0.0025		<0.0025	<0.005	<0.025	<0.0025	<0.0025	<0.005	<0.0025	<0.005		<0.0025	<0.0025				<0.0025	<0.0025	<0.0025		<0.0025		<0.025
A-MW-26	20-Jun-03	15	<0.025	<0.0025	<0.0025	<0.0025		<0.0025	<0.005	<0.025	<0.0025	<0.0025	<0.005	<0.0025	<0.005	<0.0025	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025		<0.0025		<0.025
A-MW-26	20-Jun-03	25	<1.25	<0.125	<0.125	<0.125		<0.125	<0.25	<1.25	<0.125	<0.125	<0.25	<0.125	<0.25		<0.125	<0.125				<0.125		<0.125				<1.25
A-MW-26	20-Jun-03	35			<0.0625	<0.0625		<0.0625	<0.125	<0.625	<0.0625	<0.0625	<0.125	<0.0625	<0.125		<0.0625	<0.0625				<0.0625		<0.0625		<0.0625		
A-MW-26	20-Jun-03	39	<0.025		<0.0025	<0.0025		<0.0025	<0.005	<0.025	<0.0025	<0.0025	<0.005	<0.0025	<0.005		<0.0025	<0.0025				<0.0025		<0.0025		<0.0025		<0.025
A-MW-26	20-Jun-03	40	<0.025		<0.0025	<0.0025		<0.0025	<0.005	<0.025	<0.0025	<0.0025	<0.005	<0.0025	<0.005		<0.0025	<0.0025				<0.0025		<0.0025		<0.0025		<0.025
A-RR-01	01-Oct-92	0	2.8	<0.05				<0.05	<0.15	<0.05	<0.05	<0.05	<0.15	<0.05	<0.15		<0.05	<0.05		<0.05			<0.05				<0.25	<0.15
A-RR-02	01-Oct-92	1.5	<5	<1				<1	<3	<1	<1	<1	<3	<1	<3		<1	<1		<1			16				<5	<3
A-RR-03	01-Oct-92	0	<5	<1				<1	<3	<1	<1	<1	<3	<1	<3		<1	<1		<1			<1				<5	<3
A-RR-04	01-Oct-92	1.5	<2	<0.4				<0.4	<1.2	<0.4	<0.4	<0.4	<1.2	<0.4	<1.2		<0.4	<0.4		<0.4			1.1				15	<1.2
A-RR-05	01-Oct-92	0	<5	<1				<1	<3	<1	<1	<1	<3	<1	<3		<1	<1		<1			<1				<5	<3
A-RR-06	01-Oct-92	1.5	3100	<1				<1	<3	<1	<1	<1	<3	<1	<3		<1	<1		<1			5.2				38	7.2
A-RR-07	01-Oct-92	0	<5	<1				<1	<3	<1	<1	<1	<3	<1	<3		<1	<1		<1			3.6				<5	<3
A-S-01	01-Apr-90	0	ND	ND																			210				ND	ND
A-S-02	01-Apr-90	0	ND	ND																			94				ND	ND

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-MW-12	15-Nov-02	34.5	<0.005	<0.005	0.0076	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	0.146			0.01
A-MW-12	15-Nov-02	39.5	<0.005	<0.005	0.202	1.35	3.91	0.287	0.351	<0.005	<0.03	<0.005	<0.005	0.097	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.135
A-MW-12	15-Nov-02	44.5	<0.005	<0.005	<0.005	<0.005	0.747	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-12	15-Nov-02	47	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0118	<0.005	<0.005	<0.005	0.0789	<0.01	<0.05	<0.01			<0.005
A-MW-14	03-Dec-02	4.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.5	<0.125	<0.125	0.45	<0.125	<0.125	<0.125	<0.125	<0.625	<0.125			0.8
A-MW-14	03-Dec-02	9.5	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.25	<0.0625	<0.0625	2.52	<0.0625	<0.0625	<0.0625	<0.0625	<0.3125	<0.0625			0.927
A-MW-14	03-Dec-02	14.5	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	1.32	<0.0625	<0.0625	7.94	<0.0625	<0.0625	0.219	<0.0625	<0.3125	<0.0625			1.23
A-MW-14	03-Dec-02	15	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.25	<0.0625	<0.0625	7.23	<0.0625	<0.0625	0.18	<0.0625	<0.3125	<0.0625			1.2
A-MW-14	03-Dec-02	19.5	<0.0625	<0.0625	0.489	0.35	1.08	<0.0625	<0.0625	<0.0625	<0.25	<0.0625	1.74	20	<0.0625	<0.0625	<0.0625	<0.0625	<0.3125	<0.0625			22.8
A-MW-14	03-Dec-02	24.5	<0.0625	<0.0625	1.78	1.11	3	<0.0625	<0.0625	<0.0625	<0.25	<0.0625	1.29	31.3	<0.0625	<0.0625	0.229	<0.0625	<0.3125	<0.0625			53
A-MW-14	03-Dec-02	29.5	<1.25	<1.25	11.1	6.53	25.8	<1.25	<1.25	<1.25	<5	<1.25	131	758	<1.25	<1.25	5.77	<1.25	<6.25	<1.25			641
A-MW-14	03-Dec-02	30	<1.25	<1.25	9.05	5.78	20.3	<1.25	<1.25	<1.25	<5	<1.25	111	654	<1.25	<1.25	4.65	<1.25	<6.25	<1.25			551
A-MW-14	03-Dec-02	34.5	17.5	<0.25	5.4	3.3	12.6	<0.25	<0.25	<0.25	<1	<0.25	52.3	384	<0.25	<0.25	6.02	<0.25	<1.25	<0.25			316
A-MW-14	03-Dec-02	39.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.5	<0.125	<0.125	10.8	<0.125	<0.125	<0.125	<0.125	<0.625	<0.125			5.62
A-MW-14	03-Dec-02	40	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.5	<0.125	<0.125	8.6	<0.125	<0.125	<0.125	<0.125	<0.625	<0.125			2.6
A-MW-14	03-Dec-02	42	<0.25	<0.25	0.64	<0.25	1.12	<0.25	<0.25	<0.25	<1	<0.25	<0.25	20.4	<0.25	<0.25	<0.25	<0.25	<1.25	<0.25			23.1
A-MW-14	03-Dec-02	65	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025		<0.0025		<0.025	<0.005			<0.0025
A-MW-15	19-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	0.0084			0.0048
A-MW-15	19-Nov-02	25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	0.0078			0.0053
A-MW-15	19-Nov-02	30	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	0.0296			<0.005
A-MW-15	19-Nov-02	35	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0117	0.0025	<0.005	<0.005	0.0193	<0.01	<0.05	0.0174			<0.005
A-MW-15	19-Nov-02	45	<0.005	<0.005	0.0066	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.165	<0.005	<0.005	<0.005	0.25	<0.01	<0.05	<0.01			0.0026
A-MW-15	19-Nov-02	50	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0121	0.0024	<0.005	<0.005	0.0236	<0.01	<0.05	<0.01			0.003
A-MW-15	19-Nov-02	55	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	0.0099			0.005
A-MW-16	19-Nov-02	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0086	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-16	19-Nov-02	25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-16	19-Nov-02	27.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0044	<0.005	<0.005	<0.005	<0.01	<0.05	0.276			0.01
A-MW-16	19-Nov-02	39.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.053	<0.005	<0.005	<0.005	0.0422	<0.01	<0.05	0.0819			<0.005
A-MW-16	19-Nov-02	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0648	<0.005	<0.005	<0.005	0.0496	<0.01	<0.05	0.105			<0.005
A-MW-17	20-Nov-02	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.005	0.271	<0.005	<0.005	0.005	<0.01	<0.05	0.0098			<0.005
A-MW-17	20-Nov-02	24.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-17	20-Nov-02	26.8	<0.005	<0.005	0.0132	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.014	0.0098	<0.005	<0.005	<0.005	<0.01	<0.05	0.069			0.0606
A-MW-17	20-Nov-02	29.5	<0.005	<0.005	0.0092	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0434	<0.005	<0.005	<0.005	<0.01	<0.05	0.0792			0.0272
A-MW-17	20-Nov-02	30	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.0125	<0.005	<0.005	<0.005	<0.01	<0.05	0.018			0.0083
A-MW-17	20-Nov-02	34.5	<0.005	<0.005	0.0994	0.0258	0.0155	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.56	<0.005	<0.005	<0.005	<0.01	<0.05	0.0139			0.545
A-MW-17	20-Nov-02	39.5	<0.005	<0.005	0.0054	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0224	<0.005	<0.005	<0.005	0.0068	<0.01	<0.05	0.0088			<0.005
A-MW-17	20-Nov-02	40	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	0.0212	<0.005	<0.005	<0.005	0.0071	<0.01	<0.05	0.0095			<0.005
A-MW-19	21-Nov-02	4.5	<0.005	<0.005	21.5	9.65	2.14	<0.005	<0.005	<0.005	<0.03	<0.005	9.31	12.2	<0.005	<0.005	2.35	<0.01	<0.05	<0.01			38.3
A-MW-19	21-Nov-02	5	<0.005	<0.005	17.8	8.38	2.01	<0.005	<0.005	<0.005	<0.03	<0.005	7.74	9.95	<0.005	<0.005	2.18	<0.01	<0.05	<0.01			33.6
A-MW-19	21-Nov-02	14.5	15.4	<0.005	17	16.5	40.1	<0.005	<0.005	<0.005	<0.03	<0.005	210	239	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			323
A-MW-19	21-Nov-02	19.5	<0.005	<0.005	4.8	4.1	8.9	<0.005	<0.005	<0.005	<0.03	<0.005	28.2	28.5	<0.005	<0.005	6.1	<0.01	<0.05	<0.01			41.1
A-MW-19	21-Nov-02	24.5	<0.005	<0.005	1.15	0.85	0.722	<0.005	<0.005	<0.005	<0.03	<0.005	0.482	2.6	<0.005	<0.005	0.425	<0.01	<0.05	<0.01			3.36
A-MW-19	21-Nov-02	28	<0.005	<0.005	28	19.6	19.6	<0.005	<0.005	<0.005	<0.03	<0.005	98.4	122	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			149
A-MW-19	21-Nov-02	29.5	<0.005	<0.005	20	18.4	18.4	<0.005	<0.005	<0.005	<0.03	<0.005	85.8	122	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			128
A-MW-19	21-Nov-02	34	<0.005	<0.005	0.483	0.292	0.305	<0.005	<0.005	<0.005	<0.03	<0.005	0.053	3.62	<0.005	<0.005	0.05	<0.01	<0.05	<0.01			2.45
A-MW-19	21-Nov-02	38	<0.005	<0.005	0.213	0.065	0.0875	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	3.68	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			1.27
A-MW-19	21-Nov-02	39	<0.005	<0.005	0.431	0.231	0.256	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	5.31	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			2.33
A-MW-19	21-Nov-02	44	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	0.67	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			0.251
A-MW-19	21-Nov-02	49.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-19	21-Nov-02	54.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-MW-22	19-Jun-01	30	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.01	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0125				
A-MW-22	19-Jun-01	42.5	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.01	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0125				<0.001
A-MW-26	20-Jun-03	5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.005	<0.025	<0.005			<0.0025
A-MW-26	20-Jun-03	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.015	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.005	<0.025	<0.005			<0.0025
A-MW-26	20-Jun-03	25	<0.125	<0.125					<0.125	<0.125	<0.75	<0.125			<0.125	<0.125		<0.25	<1.25	<0.25			
A-MW-26	20-Jun-03	35		<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.375	<0.0625			<0.0625	<0.0625		<0.125	<0.625	<0.125			
A-MW-26	20-Jun-03	39		<0.0025		<0.0025		<0.0025	<0.0025	<0.0025	<0.015	<0.0025				<0.0025		<0.005	<0.025	<0.005			
A-MW-26	20-Jun-03	40		<0.0025		<0.0025		<0.0025	<0.0025	<0.0025	<0.015	<0.0025				<0.0025		<0.005	<0.025	<0.005			
A-RR-01	01-Oct-92	0	<0.25							<0.05			0.17	0.25	<0.05	<0.05	<0.05	<0.05	<0.15	<0.05	0.16	0.51	0.67
A-RR-02	01-Oct-92	1.5	<5							<1			32	210	<1	<1	2.2	<1	<3	<3	61	54	115
A-RR-03	01-Oct-92	0	<5							<1			7.6	9.3	<1	<1	4.2	<1	<3	<3	3.4	<1	3.4
A-RR-04	01-Oct-92	1.5	<2							<0.4			4.1	0.84	<0.4	<0.4	<0.4	<0.4	<1.2	<1.2	6.8	2.3	9.1
A-RR-05	01-Oct-92	0	<5							<1			2300	17	<1	<1	<1	<1	<3	<3	3.7	2.7	6.4
A-RR-06	01-Oct-92	1.5	<5							<1			1200	14	<1	<1	<1	<1	<3	<3	21	7.5	28.5
A-RR-07	01-Oct-92	0	<5							<1			37	4.3	<1	<1	<1	<1	<3	<3	16	13	29
A-S-01	01-Apr-90	0	ND										32	220			9.9						540
A-S-02	01-Apr-90	0	ND										33	120			5.1						264

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	1,1,1,2-TETRACHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1-DICHLOROPROPENE	1,2,3-TRICHLOROBENZENE	1,2,3-TRICHLOROPROPANE	1,2,4-TRICHLOROBENZENE	1,2,4-TRIMETHYLBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3,5-TRIMETHYLBENZENE	1,3-DICHLOROBENZENE	1,3-DICHLOROPROPANE	1,4-DICHLOROBENZENE	1,4-DIOXANE	2,2-DICHLOROPROPANE	2-CHLOROETHYL VINYL ETHER	2-CHLOROTOLUENE	2-HEXANONE	4-CHLOROTOLUENE
A-SP-01	18-Jul-01	15																										
A-SP-02	18-Jul-01	15																										
A-SS-01	25-Sep-02	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-SS-02	25-Sep-02	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.01	<0.005	<0.05	<0.005
A-T-01	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	<0.005	<0.01	<0.005	0.089	<0.01	<0.005	<0.005	<0.005	<0.005	0.044	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-01	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	0.0078	<0.005	<0.005	<0.005	<0.01	<0.005	0.0072	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-02	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	0.023	<0.005	<0.005	<0.005	<0.01	<0.005	0.018	<0.01	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-02	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	0.0059	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-03	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.01	<0.005	0.0074	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-03	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-04	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	0.0097	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-T-04	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005		<0.005
A-TK-01A	03-Jun-99	15	<0.005	0.021	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.01	<0.005	0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-01B	03-Jun-99	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-02A	03-Jun-99	15	<0.05	0.94	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	2.72	<0.1	<0.05	<0.05	<0.05	<0.05	1.38	<0.05	<0.05	<0.05		<0.05			<0.5	
A-TK-02B	03-Jun-99	15	<0.05	1.43	<0.05	<0.05	0.061	<0.05	<0.05	<0.05	<0.1	<0.05	59.9	<0.1	<0.05	<0.05	<0.05	<0.05	23.2	<0.05	<0.05	<0.05		<0.05			<0.5	
A-TK-03A	03-Jun-99	15	<0.025	18	<0.025	<0.025	0.742	0.182	<0.025	<0.025	<0.05	<0.025	219	<0.05	<0.025	<0.025	<0.025	<0.025	56.5	<0.025	<0.025	<0.025		<0.025			<0.25	
A-TK-03B	03-Jun-99	15	<0.005	0.108	<0.005	<0.005	0.056	<0.005	<0.005	<0.005	<0.01	<0.005	20	<0.01	<0.005	<0.005	<0.005	<0.005	6.95	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-04A	03-Jun-99	15	<0.05	4.92	<0.05	<0.05	0.485	0.136	<0.05	<0.05	<0.1	<0.05	152	<0.1	<0.05	<0.05	<0.05	<0.05	35	<0.05	<0.05	<0.05		<0.05			<0.5	
A-TK-04B	03-Jun-99	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	0.034	<0.01	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-17A	18-Jul-01	19.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125		<1.25	
A-TK-17B	18-Jul-01	19.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	4.08	<0.125	<0.125	<0.125	<0.125	<0.125	2.28	<0.125	<0.125	<0.125		<0.125	<0.125		<1.25	
A-TK-17C	18-Jul-01	19.5	<0.00625	0.016	<0.00625	<0.00625	0.055	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	0.156	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	0.044	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625		<0.0625	
A-TK-18B	03-Jun-99	15	<0.025	0.052	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.05	<0.025	7.53	<0.05	<0.025	<0.025	<0.025	<0.025	2.49	<0.025	<0.025	<0.025		<0.025			<0.25	
A-TK-19A	03-Jun-99	15	<0.005	1.33	<0.005	<0.005	0.24	<0.005	<0.005	<0.005	<0.01	<0.005	31	<0.01	<0.005	<0.005	<0.005	<0.005	8.36	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-20B	18-Jul-01	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-21A	03-Jun-99	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-22A	03-Jun-99	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-22B	03-Jun-99	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05			<0.5	
A-TK-23A	03-Jun-99	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005			<0.05	
A-TK-23B	03-Jun-99	15	<0.025	13.5	<0.025	<0.025	0.219	<0.025	<0.025	<0.025	<0.05	<0.025	39.4	<0.05	<0.025	0.179	<0.025	<0.025	13.3	<0.025	<0.025	<0.025		<0.025			<0.25	
A-TK-24A	18-Jul-01	19.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.269	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.145	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-TK-24B	18-Jul-01	19.5	<1.25	6.91	<1.25	<1.25	3.31	<1.25	<1.25	<1.25	<1.25	<1.25	63.9	<1.25	<1.25	<1.25	<1.25	<1.25	21.9	<1.25	<1.25	<1.25		<1.25	<1.25		<12.5	
A-TK-24C	18-Jul-01	19.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	152	<2.5	<2.5	<2.5	<2.5	<2.5	43.6	<2.5	<2.5	<2.5		<2.5	<2.5		<25	
A-TK-25A	18-Jul-01	19.5	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.348	<0.025	<0.025	<0.025	<0.025	<0.025	0.232	<0.025	<0.025	<0.025		<0.025	<0.025		<0.25	
A-TK-25B	18-Jul-01	19.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	9.05	<0.25	<0.25	<0.25	<0.25	<0.25	2.96	<0.25	<0.25	<0.25		<0.25	<0.25		<2.5	
A-TK-25C	18-Jul-01	19.5	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125		<1.25	
A-TK-29A	18-Jul-01	19.5	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625		<0.0625	
A-TK-30A	18-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-TK-30B	18-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-TK-31A	18-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	
A-TK-31B	18-Jul-01	15	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.007	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.025	

* SP series of soil samples taken from stockpiled dirt during tank removal operations.

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	ACETONE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	DIPE	ETBE	ETHYLBENZENE	HEXACHLOROBUTADIENE	IODOMETHANE	ISOPROPYLBENZENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
A-SP-01	18-Jul-01	15																										
A-SP-02	18-Jul-01	15																										
A-SS-01	25-Sep-02	0	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-SS-02	25-Sep-02	0	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	<0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05
A-T-01	04-Apr-99	5		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.386		<0.005	<0.005	<0.005			0.01	<0.005		<0.005		
A-T-01	04-Apr-99	10		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.098		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-02	04-Apr-99	5		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.329		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-02	04-Apr-99	10		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.101		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-03	04-Apr-99	5		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.182		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-03	04-Apr-99	10		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.016		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-04	04-Apr-99	5		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.119		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-T-04	04-Apr-99	10		<0.005	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.01		<0.005	<0.005	<0.005			<0.005	<0.005		<0.005		
A-TK-01A	03-Jun-99	15	6.14	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.011		<0.005		<0.005			<0.005	<0.005		<0.005	0.579	0.061
A-TK-01B	03-Jun-99	15	0.097	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			<0.005	<0.005		<0.005	<0.05	<0.05
A-TK-02A	03-Jun-99	15	7.64	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.061		<0.05		<0.05			1.51	<0.05		0.201	0.73	<0.5
A-TK-02B	03-Jun-99	15	4.72	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.429		<0.05		<0.05			7.84	<0.05		2.05	<0.5	<0.5
A-TK-03A	03-Jun-99	15	13.4	<0.025	<0.025	<0.025		<0.025	<0.025		<0.025	<0.025	<0.025	<0.025	<0.025	1.44		<0.025		<0.025			93.6	<0.025		9.49	1.76	<0.25
A-TK-03B	03-Jun-99	15	0.168	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.06		<0.005		<0.005			29.7	<0.005		4.23	<0.05	<0.05
A-TK-04A	03-Jun-99	15	23.5	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	1.41		<0.05		<0.05			51.5	<0.05		6.86	2.3	<0.5
A-TK-04B	03-Jun-99	15	0.494	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			0.055	<0.005		<0.005	<0.05	<0.05
A-TK-17A	18-Jul-01	19.5	76.6	<0.05	<0.125	<0.125		<0.125	<0.125	<1.25	<0.125	<0.125	<0.125	<0.125	<0.125	0.325	<0.125	<0.125	<0.125	<0.125			<0.05	<0.125		<0.125	24.3	8.05
A-TK-17B	18-Jul-01	19.5	4.13	<0.05	<0.125	<0.125		<0.125	<0.125	<1.25	<0.125	<0.125	<0.125	<0.125	<0.125	0.3	<0.125	<0.125	<0.125	<0.125			1.4	<0.125		<0.125	1.5	<1.25
A-TK-17C	18-Jul-01	19.5	0.031	<0.0025	<0.00625	<0.00625		<0.00625	<0.00625	<0.0625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	0.251	<0.00625	<0.00625	<0.00625	<0.00625			0.022	<0.00625		<0.00625	<0.0625	<0.0625
A-TK-18B	03-Jun-99	15	50.3	<0.025	<0.025	<0.025		<0.025	<0.025		<0.025	0.066	<0.025	<0.025	<0.025	<0.025		<0.025		<0.025			0.823	<0.025		<0.025	29.7	1.13
A-TK-19A	03-Jun-99	15	1.18	0.017	<0.005	<0.005		<0.005	<0.005		<0.005	0.113	<0.005	<0.005	<0.005	0.527		<0.005		<0.005			3.68	<0.005		<0.005	1.18	16.4
A-TK-20B	18-Jul-01	15	1.61	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			<0.005	<0.005		<0.005	0.158	<0.05
A-TK-21A	03-Jun-99	15	1.35	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			<0.005	<0.005		<0.005	0.285	1.31
A-TK-22A	03-Jun-99	15	3.98	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			<0.005	<0.005		<0.005	0.092	0.382
A-TK-22B	03-Jun-99	15	<0.5	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05		<0.05			0.711	<0.05		<0.05	<0.5	<0.5
A-TK-23A	03-Jun-99	15	29.9	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		<0.005			<0.005	<0.005		<0.005	<0.05	<0.05
A-TK-23B	03-Jun-99	15	13.5	<0.025	<0.025	<0.025		<0.025	<0.025		<0.025	0.112	<0.025	<0.025	<0.025	5.73		<0.025		<0.025			33.5	<0.025		0.928	2.4	<0.25
A-TK-24A	18-Jul-01	19.5	2.65	<0.001	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			0.13	<0.0025		<0.0025	<0.025	<0.025
A-TK-24B	18-Jul-01	19.5	118	<0.5	<1.25	<1.25		<1.25	<1.25	<12.5	<1.25	<1.25	<1.25	<1.25	<1.25	5.87	<1.25	<1.25	<1.25	<1.25			24.1	<1.25		2.8	13	<12.5
A-TK-24C	18-Jul-01	19.5	<25	<1	<2.5	<2.5		<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5			41.6	<2.5		6.1	<25	<25
A-TK-25A	18-Jul-01	19.5	4.58	<0.025	<0.025	<0.025		<0.025	<0.025	1.59	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025			0.13	<0.025		<0.025	5.77	<0.25
A-TK-25B	18-Jul-01	19.5	89.8	<0.25	<0.25	<0.25		<0.25	<0.25	2.37	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25			1.16	<0.25		0.329	5.78	<2.5
A-TK-25C	18-Jul-01	19.5	4.03	<0.05	<0.125	<0.125		<0.125	<0.125	0.515	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125			<0.125	<0.125		<0.125	2.61	<1.25
A-TK-29A	18-Jul-01	19.5	0.147	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	<0.0625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625			<0.00625	<0.00625		<0.00625	<0.0625	<0.0625
A-TK-30A	18-Jul-01	15	0.034	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025	<0.0025		<0.0025	<0.025	<0.025
A-TK-30B	18-Jul-01	15	<0.025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025	<0.0025		<0.0025	<0.025	<0.025
A-TK-31A	18-Jul-01	15	<0.025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025	<0.0025		<0.0025	<0.025	<0.025
A-TK-31B	18-Jul-01	15	0.078	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025	<0.0025		<0.0025	<0.025	0.055

* SP series of soil samples taken from stockpiled dirt during tank removal operations.

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

LOCATION	DATE	DEPTH (FT BGS)	METHYLENE CHLORIDE	MTBE	NAPHTHALENE	N-BUTYLBENZENE	N-PROPYLBENZENE	P-ISOPROPYLTOLUENE	SEC-BUTYLBENZENE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYLBENZENE	TETRACHLOROETHENE	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRICHLOROETHENE	TRICHLOROFLUOROMETHANE	VINLY ACETATE	VINYL CHLORIDE	XYLENES (M&P)	XYLENES(O)	XYLENES (TOTAL)
A-SP-01	18-Jul-01	15																					
A-SP-02	18-Jul-01	15																					
A-SS-01	25-Sep-02	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-SS-02	25-Sep-02	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.05	<0.01			<0.005
A-T-01	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.048	<0.005	<0.005		0.061	<0.005		<0.005			0.058
A-T-01	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.0074	<0.005	<0.005		0.017	<0.005		<0.005			0.0099
A-T-02	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.03	<0.005	<0.005		0.054	<0.005		<0.005			0.016
A-T-02	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.0072	<0.005	<0.005		0.023	<0.005		<0.005			<0.005
A-T-03	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.069	0.0093	<0.005		0.206	<0.005		<0.005			0.0077
A-T-03	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		0.0068	<0.005		<0.005			<0.005
A-T-04	04-Apr-99	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.221	<0.005	<0.005		0.272	<0.005		<0.005			<0.005
A-T-04	04-Apr-99	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		0.0069	<0.005		<0.005			<0.005
A-TK-01A	03-Jun-99	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	0.035	<0.005		0.009	<0.005		<0.005			<0.005
A-TK-01B	03-Jun-99	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	0.015	<0.005		<0.005	<0.005		<0.005			<0.005
A-TK-02A	03-Jun-99	15	<0.15		0.199	0.36	0.5	<0.05	0.079	<0.05		<0.05	0.059	5.14	<0.05		1.2	<0.05		<0.05			5.85
A-TK-02B	03-Jun-99	15	<0.15		0.402	1.82	6.2	<0.05	0.486	<0.05		<0.05	0.887	12.8	<0.05		2.6	<0.05		<0.05			53.6
A-TK-03A	03-Jun-99	15	<0.075		8.3	0.588	22.4	<0.025	1.1	<0.025		<0.025	0.547	291	<0.025		20.6	<0.025		<0.025			442
A-TK-03B	03-Jun-99	15	<0.015		1.48	2.28	3.78	<0.005	<0.005	<0.005		<0.005	0.065	12.4	<0.005		0.023	<0.005		<0.005			135
A-TK-04A	03-Jun-99	15	<0.15		0.242	2.66	16.1	<0.05	1.63	<0.05		<0.05	1.57	280	<0.05		7.79	<0.05		<0.05			167
A-TK-04B	03-Jun-99	15	<0.015		0.012	0.006	0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005			0.356
A-TK-17A	18-Jul-01	19.5	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	0.72	<0.125	<0.125	<0.125	<0.125	<1.25	<0.125	0.145	0.12	0.265
A-TK-17B	18-Jul-01	19.5	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	4.26	<0.125	<0.125	<0.125	<0.125	<1.25	<0.125	3.3	1.9	5.2
A-TK-17C	18-Jul-01	19.5	<0.0125	<0.00625	<0.00625	<0.00625	0.145	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	0.057	<0.00625	<0.00625	<0.00625	<0.00625	<0.0625	<0.00625	0.078	0.039	0.117
A-TK-18B	03-Jun-99	15	<0.075		0.424	0.39	0.738	<0.025	0.058	<0.025		<0.025	0.631	6.98	<0.025		0.044	<0.025		<0.025			8.25
A-TK-19A	03-Jun-99	15	0.024		<0.005	0.029	4.78	<0.005	<0.005	<0.005		<0.005	9.76	20.1	<0.005		1.82	<0.005		<0.005			25
A-TK-20B	18-Jul-01	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005			<0.005
A-TK-21A	03-Jun-99	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005			0.012
A-TK-22A	03-Jun-99	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005			<0.005
A-TK-22B	03-Jun-99	15	<0.15		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	0.175	<0.05		<0.05	<0.05		<0.05			2.99
A-TK-23A	03-Jun-99	15	<0.015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005			<0.005
A-TK-23B	03-Jun-99	15	<0.075		0.496	<0.025	1.36	<0.025	<0.025	<0.025		<0.025	0.522	176	<0.025		29	<0.025		<0.025			145
A-TK-24A	18-Jul-01	19.5	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	0.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	0.32	0.14	0.46
A-TK-24B	18-Jul-01	19.5	<2.5	<1.25	<1.25	5.96	6.6	2.96	<1.25	<1.25		<1.25	<1.25	144	<1.25	<1.25	<1.25	<1.25	<12.5	<1.25	55.5	21.4	76.9
A-TK-24C	18-Jul-01	19.5	<5	<2.5	5	8	15	<2.5	<2.5	<2.5		<2.5	<2.5	115	<2.5	<2.5	<2.5	<2.5	<25	<2.5	122	55	177
A-TK-25A	18-Jul-01	19.5	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		<0.025	<0.025	0.416	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	0.25	0.14	0.39
A-TK-25B	18-Jul-01	19.5	<0.5	<0.25	1.93	2.19	0.875	<0.25	0.6	<0.25		<0.25	<0.25	6.42	<0.25	<0.25	<0.25	<0.25	<2.5	<0.25	3.15	1.29	4.44
A-TK-25C	18-Jul-01	19.5	<0.25	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125		<0.125	<0.125	0.168	<0.125	<0.125	<0.125	<0.125	<1.25	<0.125	<0.125	<0.125	<0.25
A-TK-29A	18-Jul-01	19.5	<0.0125	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625		<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.00625	<0.0625	<0.00625	<0.00625	<0.00625	<0.0125
A-TK-30A	18-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.005
A-TK-30B	18-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.005
A-TK-31A	18-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.005
A-TK-31B	18-Jul-01	15	<0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025	<0.0025	<0.0025	<0.005

* SP series of soil samples taken from stockpiled dirt during tank removal operations.

Notes:
1. All values reported in units of mg/Kg.
2. Blank spaces = not analyzed

TABLE 5
HISTORICAL GROUND WATER ELEVATIONS
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CALIFORNIA

	Date	*A-MW-01	*A-MW-02	*A-MW-03	A-MW-04	A-MW-06	*A-MW-07	A-MW-08	A-MW-09	A-MW-10	A-MW-11	A-MW-12	**A-MW-13	**A-MW-14	**A-MW-15	A-MW-16	**A-MW-17	A-MW-18	A-MW-19	**A-MW-20	**A-MW-21	A-MW-22	**A-MW-23	**A-MW-24	**A-MW-25	A-MW-26
Top of Well Casing Elevation (ft msl)		149.87	150.42	150.79	148.27	149.39	148.62	149.63	149.16	149.41	149.12	150.09	150.22	150.66	150.6	148.32	149.03	149.63	149.2	149.14	150.02	150.67	148.42	149.9	150.64	150.83
Screened Interval (ft bgs)		40 - 60	30 - 50	29 - 49	17 - 27	20 - 30	34 - 55	30.5 - 40	31 - 46	25 - 40	30 - 40	26 - 46	53 - 63	54 - 64	54 - 64	29 - 46	56 - 66	31 - 46	31 - 46	57 - 67	54 - 64	30 - 40	71 - 81	67 - 77	71 - 81	30 - 40
Screen Elevation (ft msl)																										
Top		109.87	120.42	121.79	131.27	129.39	114.62	119.13	118.16	124.41	119.12	124.09	97.22	96.66	96.6	119.32	93.03	118.63	118.2	92.14	96.02	120.67	77.42	82.9	79.64	120.83
Bottom		89.87	100.42	101.79	121.27	119.39	93.62	109.63	103.16	109.41	109.12	104.09	87.22	86.66	86.6	102.32	83.03	103.63	103.2	82.14	86.02	110.67	67.42	72.9	69.64	110.83
Depth to Water (ft bgs)	Feb-94	30.05	28.80	29.70	23.35	24.85	24.53																			
	Nov-00	35.62	35.25	36.42	26.20	28.52	28.19																			
	Oct-01	37.41	37.91	39.19	26.35	NA	28.70																			
	Nov-01	NA	NA	NA	26.36	28.85	NA																			
	Feb-02	36.20	36.39	37.39	26.44	30.32	29.21																			
	Jun-02	37.92	38.75	39.19	26.46	NA	30.07	30.91	30.98																	
	Oct-02	42.45	43.66	44.66	26.48	30.28	34.11	32.68	34.70																	
	Dec-02	NA	43.19	44.22	26.28	FP	34.03	33.62	34.67	32.63	32.71	33.26	41.65	43.06	43.63	33.69	40.44	33.06	33.33	41.11	42.34					
	Mar-03	NA	41.07	41.35	26.36	FP	33.18	32.81	33.22	32.44	32.49	33.07	39.77	40.95	41.53	32.01	38.28	35.36	33.42	39.08	40.36					
	Jun-03	NA	39.98	39.95	26.35	FP	30.44	30.85	31.10	30.41	30.15	31.05	37.85	39.20	39.62	29.99	36.41	33.13	38.30	37.05	38.50	35.80	34.23	37.73	39.22	36.70
	Sep-03	NA	NA	NA	26.41	FP	NA	32.34	34.29	31.68	31.84	33.26	42.16	43.79	44.19	33.48	40.65	38.37	33.29	41.57	42.68	39.87	39.55	42.69	44.35	38.45
	Dec-03	NA	NA	NA	26.39	FP	NA	34.55	36.96	33.71	33.73	34.30	45.12	46.72	46.84	36.85	43.47	42.73	38.65	44.53	45.44	Dry	42.65	45.69	47.35	39.60
	Mar-04	NA	NA	NA	26.41	FP	NA	35.20	38.19	34.85	34.36	35.02	45.98	47.41	47.92	36.88	44.56	40.28	37.15	45.22	46.59	38.51	43.25	46.41	48.03	36.70
	Jun-04	NA	NA	NA	26.40	FP	NA	35.42	39.15	35.08	35.38	35.20	46.81	48.31	48.49	38.36	45.15	45.74	37.23	46.29	47.48	39.92	44.24	47.32	48.95	39.25
	Sep-04	NA	NA	NA	26.42	FP	NA	36.18	41.05	36.53	35.92	35.82	49.27	51.06	51.32	40.10	48.21	FP	38.34	48.92	50.09	Dry	46.98	49.93	51.62	NA
	Dec-04	NA	NA	NA	26.47	29.80	NA	36.02	41.69	35.63	36.26	36.32	51.18	52.71	53.18	40.34	49.57	40.50	37.23	50.59	51.62	Dry	48.54	51.35	53.22	39.52
	Mar-05	NA	NA	NA	26.43	29.90	NA	34.00	37.82	33.41	34.66	33.67	46.36	46.50	47.98	36.27	45.68	29.30	35.88	45.33	46.85	31.55	43.60	46.88	48.39	33.17
	Jun-05	NA	NA	NA	Dry	29.90	NA	33.89	35.26	33.49	34.12	33.91	41.48	41.27	42.75	34.05	40.45	34.78	34.98	39.67	41.69	39.07	38.28	41.63	43.05	33.07
	Sep-05	NA	NA	NA	Dry	29.91	NA	33.73	32.52	33.46	33.75	34.06	39.30	39.43	41.01	31.61	37.70	35.04	34.18	33.47	39.68	39.14	36.45	39.82	41.29	38.04
	Dec-05	NA	NA	NA	26.59	29.90	NA	33.26	33.56	33.00	32.71	33.28	40.33	40.72	42.14	32.23	38.83	34.85	33.71	39.68	41.20	39.88	37.65	40.98	42.44	38.98
	Mar-06	NA	NA	NA	26.50	29.89	NA	31.39	32.80	31.03	31.55	31.67	39.47	39.76	41.13	31.54	37.91	33.99	32.49	38.56	33.99	37.45	36.76	39.91	NA	32.21
	Jun-06	NA	NA	NA	26.62	30.02	NA	30.03	34.21	29.87	29.79	30.49	37.94	38.62	39.64	29.47	36.31	23.63	NA	36.69	38.41	36.99	35.15	38.41	29.94	33.71
	Sep-06	NA	NA	NA	26.51	29.99	NA	30.66	31.44	30.60	29.73	31.31	38.50	38.89	40.32	30.57	37.02	34.35	31.21	37.66	39.12	38.60	35.94	39.08	40.00	37.52
	Dec-06	NA	NA	NA	26.48	29.87	NA	31.65	33.10	31.54	31.15	32.16	40.22	40.67	42.15	31.80	38.77	35.69	31.91	39.62	40.84	39.91	37.65	40.82	42.46	39.30
	Mar-07	NA	NA	NA	26.60	29.88	NA	32.10	32.71	31.79	31.67	32.30	38.30	39.55	41.10	31.63	37.75	35.14	32.21	38.25	40.00	38.24	36.27	39.61	41.09	32.83
	Jun-07	NA	NA	NA	DRY	29.85	NA	32.14	31.71	32.98	31.58	32.45	38.60	38.92	40.05	30.83	37.07	35.36	32.00	37.65	39.20	39.05	35.60	38.88	40.47	37.86
	Sep-07	NA	NA	NA	DRY	DRY	NA	32.26	33.06	32.00	31.98	32.44	42.10	42.72	44.10	32.50	40.82	36.92	33.50	41.50	42.80	39.97	39.34	42.52	44.18	DRY
	Dec-07	NA	NA	NA	DRY	DRY	NA	33.75	36.30	33.55	33.41	33.55	45.45	46.15	47.55	35.60	44.25	41.00	34.05	44.90	46.20	DRY	42.85	45.90	47.45	DRY
	Mar-08	NA	NA	NA	DRY	DRY	NA	33.95	34.75	33.70	33.89	34.10	44.73	45.10	46.78	34.25	43.20	37.00	34.62	43.81	45.40	DRY	41.70	45.00	46.80	35.52
Water Elevation (ft msl)	Feb-94	119.82	121.62	121.09	124.92	124.54	124.09																			
	Nov-00	114.25	115.17	114.37	122.07	120.87	120.43																			
	Oct-01	112.46	112.51	111.60	121.92	NA	119.92																			
	Nov-01	NA	NA	NA	121.91	120.54	NA																			
	Feb-02	113.67	114.03	113.40	121.83	119.07	119.41																			
	Jun-02	111.95	111.67	111.60	121.81	NA	118.55	118.72	118.18																	
	Oct-02	107.42	106.76	106.13	121.79	119.11	114.51	116.95	114.46																	
	Dec-02	NA	107.23	106.57	121.99	FP	114.59	116.01	114.49	116.78	116.41	116.83	108.57	107.60	106.97	114.63	108.59	116.57	115.87	108.03	107.68					
	Mar-03	NA	109.35	109.44	121.91	FP	115.44	116.82	115.94	116.97	116.63	117.02	110.45	109.71	109.07	116.31	110.75	114.27	115.78	110.06	109.66					
	Jun-03	NA	110.44	110.84	121.92	FP	118.18	118.78	118.06	119.00	118.97	119.04	112.37	111.46	110.98	118.33	112.62	116.50	110.90	112.09	111.52	114.87	114.19	112.17	111.42	114.13
	Sep-03	NA	NA	NA	121.86	FP	NA	117.29	114.87	117.73	117.28	116.83	108.06	106.87	106.41	114.84	108.38	111.26	115.91	107.57	107.34	110.80	108.87	107.21	106.29	112.38
	Dec-03	NA	NA	NA	121.88	FP	NA	115.08	112.20	115.70	115.39	115.79	105.10	103.94	103.76	111.47	105.56	106.90	110.55	104.61	104.58	Dry	105.77	104.21	103.29	111.23
	Mar-04	NA	NA	NA	121.86	FP	NA	114.43	110.97	114.56	114.76	115.07	104.24	103.25	102.68	111.44	104.47	109.35	112.05	103.92	103.43	112.16	105.17	103.49	102.61	114.13
	Jun-04	NA	NA	NA	121.87	FP	NA	114.21	110.01	114.33	113.74	114.89	103.41	102.35	102.11	109.96	103.88	103.89	111.97	102.85	102.54	110.75	104.18	102.58	101.69	111.58
	Sep-04	NA	NA	NA	121.85	FP	NA	113.45	108.11	112.88	113.20	114.27	100.95	99.60	99.28	108.22	100.82	FP	110.86	100.22	99.93	NA	101.44	99.97	99.02	NA
	Dec-04	NA	NA	NA	121.80	119.59	NA	113.61	107.47	113.78	112.86	113.77	99.04	97.95	97.42	107.98	99.46	109.13	111.97	98.55	98.40	NA	99.88	98.55	97.42	111.31
	Mar-05	NA	NA	NA	121.84	119.49	NA	115.63	111.34	116.00	114.46	116.42	103.86	103.21	102.62	112.05	103.35	120.33	113.32	103.81	103.17	119.15	104.82	103.02	102.25	117.66
	Jun-05	NA	NA	NA	Dry	119.49	NA	115.74	113.90	115.92	115.00	116.18	108.74	108.44	107.85	114.27	108.58	114.85	114.22	109.47	108.33	111.63	110.14	108.27	107.59	117.76
	Sep-05	NA	NA	NA	Dry	119.48	NA	115.90	116.64	115.95	115.37	116.03	110.92	110.28	109.59	116.71	111.33	114.59	115.02	115.67	110.34	111.56	111.97	110.08	109.35	112.79
	Dec-05	NA	NA	NA	121.68	119.49	NA	116.37	115.60	116.41	116.41	116.81	109.89	108.99	108.46	116.09	110.20	114.78	115.49	109.46	108.82	110.82	110.77	108.92	108.20	111.85
	Mar-06	NA	NA	NA	121.77	119.50	NA	118.24	116.36	118.38	117.57	118.42	110.75	109.95	109.47	116.78	111.12	115.64	116.71	110.58	116.03	113.25	111.66	109.99	NA	118.62
	Jun-06	NA	NA	NA	121.65	119.37	NA	119.60	114.95	119.54	119.33	119.60	112.28	111.09	110.96	118.85	112.72	126.00	NA	112.45	111.61	113.71	113.27	111.49	120.70	117.12
	Sep-06	NA	NA	NA	121.76	119.40	NA	118.97	117.72	118.81	119.39	118.78	111.72	110.82	110.28	117.75	112.01	115.28	117.99	111.48	110.90	112.10	112.48	110.82	110.64	113.31
	Dec-06	NA	NA	NA	121.79	119.52	NA	117.98	116.06	117.87	117.97	117.93	110.00	109.04	108.45	116.52	110.26	113.94	117.29	109.52	109.18	110.79	110.77	109.08	108.18	111.53
	Mar-07	NA	NA	NA	121.67	119.51	NA	117.53	116.45	117.62	117.45	117.79	111.92	111.11	109.50	116.69	111.28	114.49	116.99	110.89	110.02	112.43	112.15	110.29	109.55	118.00
	Jun-07	NA	NA	NA	DRY	119.54	NA	117.49	117.45	116.43	117.54	117.64	111.62	111.74	110.55	117.49	111.96	114.27	117.20	111.49	110.82	111.62	112.82	111.02	110.17	112.97
	Sep-07	NA	NA	NA	DRY	DRY	NA	117.37	116.10	117.41	117.14	117.65	108.12	107.94	106.50	115.82	108.21	112.71	115.70	107.64	107.22	110.70	109.08	107.38	106.46	DRY
	Dec-07	NA	NA	NA	DRY	DRY	NA	115.88	112.86	115.86	115.71	116.54	104.77	104.51	103.05	112.72	104.78	108.63	115.15	104.24	103.82	DRY	105.57	104.00	103.19	DRY
	Mar-08	NA	NA	NA	DRY	DRY	NA	115.68	114.41	115.71	115.23	115.99	105.50	105.56	103.82	114.07	105.83	112.63	114.58	105.33	104.62	DRY	106.72	104.90	103.84	115.31

NOTES:
ft msl denotes feet above mean sea level with respect to the North American Vertical Datum of 1988 (NAVD 88)
ft bgs denotes feet below ground surface
NA denotes results not available
FP denotes presence of LNAPL free product
MW-5 was drilled as a bore hole but not completed as a well because of unsaturated conditions encountered in the subsurface
***** denotes that well was abandoned
****** denotes deep groundwater well

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-BSB-09	Aug-02	<50	<50	522	<50	<5	<5	2100	<5	3060	1950	<100	1530	<5	<5	<5	<5	<5
A-MW-01	Jan-90			10				21		270			nd		nd			
	Feb-94	3320	12400	194	6150	<100	<600	649	<100	2210			333		1220			
	Sep-95		85200	<250	43100			1300	<250	2840			650		<2500			
	Nov-00			<2500	3100			17000	<2500	3000	20000		960		1100			
	Oct-01	<1250	<1250	125	<1250			8190	<250	1200	10300		805		<1250	185		
	Feb-02	<625	<625	231	<625		<125	20600	<125	4050	29100		875		<250	195		
	Jun-02	<25	<25	300	<25	<5	<5	18900	<5	4900	31100		1450	<5	<5	<5	<5	<5
	Oct-02	<25	<25	245	<25	<5	<5	10400	<5	3800	20700	<50	884	<5	<5	<5	<5	<5
	Dec-02	<25	<25	85.5	<25	<5	<5	1290	<5	1490	638	8350	<1	<5	<5	<5	<5	<5
	Mar-03	8430J	58200	925	30400	<5	<5	4370	<5	15200	9220	1790J	1500	<5	10600	1190J	<5	<5
	Jun-03	<25	<25	<1	<25	<5	<5	15	<5	48	41	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<25	<1	<25	<5	<5	<5	<5	<5	<5	<100	<1	<5	<5	<5	<5	<5
A-MW-02	Feb-94			<100		<100	<600	1130	<100	2460			1720		2980			
	Sep-95		191000	<250	71800			3880	<250	2570			890		9250			
	Nov-00			61	<10000			1800	<500	<500	9500		120		180			
	Oct-01	<250	<250	105	<250			1500	<50	1120	9150		197		<250	76		
	Feb-02	<62.5	204	<62.5	<62.5	37	119	2310	<12.5	1480	11100		115	22.5	18.5	64	14	26.7
	Jun-02	<25	<25	222	<25	<5	<5	2700	<5	2090	14800		147	<5	<5	89.4	<5	28.5
	Oct-02	<25	<25	177	<25	53.9	<5	2550	<5	2100	10400	<50	469	<5	<5	62.2	<5	44.2
	Dec-02	<25	<25	180	<25	<5	<5	1920	<5	2230	11800	<50	590	<5	<5	<5	<5	<5
	Mar-03	<25	<25	172	<25	<5	<5	2180	<5	2490	11300	<100	614	<5	<5	<5	<5	<5
	Jun-03	<25	<25	<1	<25	<5	4500	1140	<5	1490	2270	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<25	6	<25	<5	<5	81.8	<5	108	402	<100	<1	<5	<5	<5	<5	<5
A-MW-03	Feb-94			63		<50	<300	85	<50	2800			115		6530			
	Sep-95		100000	<250	36000			740	<250	6500			1680		<2500			
	Nov-00			73	<10000			800	<500	2900	5700		1000		5600			
	Oct-01	4130	<625	110	500			1030	<125	4090	7000		1550		<625	<125		
	Feb-02	3470	3150	108	nd	nd	nd	1350	nd	3900	7960		1360	nd	3960	122	nd	nd
	Jun-02	2850	<25	125	<25	<5	<5	1340	<5	2690	6860		1470	<5	<5	178	<5	<5
	Oct-02	1410	<25	99.2	<25	<5	<5	1130	<5	176	212	1090	945	<5	<5	59.2	<5	<5
	Dec-02	<25	<25	137	<25	<5	<5	1190	<5	196J	595	<100	1150	<5	<5	<5	<5	<5
	Mar-03	<25	<25	127	<25	<5	<5	1710	<5	1410	3090	<100	982	<5	1630	206J	<5	<5
	Jun-03	<25	<25	<1	<25	<5	11500	1020	<5	2370	5220	<100	722	<5	<5	<5	<5	<5
	Sep-03	11100	76500	400	64000	<5	1030	48500	<5	1490	9310	<100	1570	<5	<5	<5	<5	<5
A-MW-04	Feb-94			111		<100	<600	1410	<100	806			1180		4760			
	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-BSB-09	Aug-02	<5	2130	<5	3140	1060	<5	1020	608	<2	1470
A-MW-01	Jan-90	100	10		120	210					18
	Feb-94	662	560	<100	9370	7160	<100			<20	2192
	Sep-95	<250	5870		4380	<250					
	Nov-00	<2500	4000	<2500	<2500	<2500					3400
	Oct-01	<100	2470	<250	<250	<100		1590	470	1350	2770
	Feb-02	20	4880	<125	<125	20		2800	955	1060	3760
	Jun-02	24.8	6180	<5	<5	<5	<5	3850	1170	<2	5240
	Oct-02	<2	5390	<5	<5	<2	<5	2120	574	2860	3570
	Dec-02	180	<1	<5	33.2	46.7	<5	<5	<5	107	<1
	Mar-03	910J	8870	<5	27700	2070	<5	2650	500J	<2	3200
	Jun-03	169	<1	<5	<5	71.5	<5	<5	<5	<2	<1
	Sep-03	11	<1	<5	<5	11.2	<5	<5	<5	<2	<1
A-MW-02	Feb-94	2150	7390	<100	3470	3040	<100			<20	7790
	Sep-95	377	6150		1120	535					
	Nov-00	<500	57	<500	<500	<500					<500
	Oct-01	<20	26	<50	<50	<20		18.9	62.9	75	<2
	Feb-02	3.3	26.2	nd	nd	2.5J	nd	231	57.8	197	14.8
	Jun-02	<5	102	<5	<5	<5	<5	<5	57.5	<2	152
	Oct-02	<2	39	<5	<5	<2	<5	116	67.8	2710	73
	Dec-02	<2	158	<5	<5	<2	<5	232	<5	2720	355
	Mar-03	<2	<1	<5	<5	<2	<5	380J	<5	1640	316J
	Jun-03	258J	<1	<5	160J	182J	<5	<5	<5	4500	170
	Sep-03	45.1	3.1	<5	6J	18.8	<5	<5	<5	70.6	<1
A-MW-03	Feb-94	5370	579	<50	444	1730	<50			<10	1014
	Sep-95	6200	9250		1010	4350					
	Nov-00	130	3700	<500	70	1500					2500
	Oct-01	130	5150	<125	<125	100		345	145	<5	3720
	Feb-02	302	4520	<100	<100	260	120	668	126	896	3070
	Jun-02	133	4780	<5	<5	134	<5	618	<5	<2	3690
	Oct-02	39.3	4810	<5	<5	28	<5	299	57.8	12200	2570
	Dec-02	<2	5770	<5	<5	<2	<5	356	<5	12700	2900
	Mar-03	411	2310	<5	<5	1930	<5	441J	<5	7870	2100
	Jun-03	318	2080	<5	<5	806	<5	378J	<5	2380	1760
	Sep-03	<2	16000	<5	4800	<2	<5	1690	449	4220	4950
A-MW-04	Feb-94	3320	12700	<100	36200	14300	<100			<20	4362
	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-04	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-06	Feb-94			848		<50	<600	2260	1140	1240			2080		20000			
	Sep-95		8800	560	5900			1800	<250	6200			2030		3850			
	Oct-01	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-07	Feb-94			46		<5	<30	2130	31	151			45		<50			
	Sep-95		<2500	<2500	2800			2730	<250	635			<250		<2500			
	Nov-00			65	1400			2800	<500	350	210		82		180			
	Oct-01	625	1190	55	980			2670	<25	355	194		107		<125	85		
	Feb-02	376	746	63.2	<50	15.9	17	5490	43.4	778	268		94.4	nd	<20	74.8	18.4	nd
	Jun-02	388	<25	<1	<25	<5	<5	4150	<5	423	238		124	<5	<5	116	<5	<5
	Oct-02	276	<25	121	<25	<5	<5	5680	<5	547	311	27200	213	<5	<5	<5	<5	<5
	Dec-02	<25	<25	<1	<25	<5	<5	3530	<5	538	268	11500	50	<5	<5	<5	<5	<5
	Mar-03	<25	<25	62.6	<25	<5	248	3750	<5	213	225	21900	100	<5	<5	110J	<5	<5
	Jun-03	<25	<25	61	<25	<5	311	3470	<5	364	214	22300	85.3	<5	<5	80.3	<5	<5
A-MW-08	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	<500	<500	254	<500		143	22300	<200	1690	5080	101	1270		<200			117
	Jun-05	<100	<100	268	<100		48	23000	<40	12580	5490	190	1230		<40			132
	Sep-05	<500	1300	428	<500		<200	45000	<200	1960	9740	5110	1120		<200			177
	Dec-05	<50	<50	286	<50		111	33000	<20	1100	5890	167	1780		<20			232
	Mar-06	<1000	<1000	244	<1000		<400	25700	<400	490J	2030	47.4	1320		<400			<400
	Jun-06	<100	<100	110	<100		<40	3400	<40	118	661	45.2	497		<40			<40
	Sep-06	<100	<100	68.8	<100		<40	3360	<40	210	1940	53.1	603	59.4J	<40			161
	Dec-06	<100	<100	69.4	<100		<40	4520	<40	244	1390	18.4	768		<40			181
	Mar-07	<500	<500	102	<500		<100	7,430	<100	509	2,720	<2,000	246		<100	86	59.4	
	Jun-07	<1,250	<1,250	145	<1,250		<250	16,900	<250	205	1,520	<5,000	424		<250	140	75	

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-04	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-06	Feb-94	2130	15300	<50	118000	1450	<50			<20	4710
	Sep-95	880	17200		189000	7650					
	Oct-01	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-07	Feb-94	134	398	<5	90	45	<5			<1	186
	Sep-95	<250	398		<250	<250					
	Nov-00	<500	800	<500	<500	<500					247
	Oct-01	100	975	<25	<25	<10		200	25	188	301
	Feb-02	8.2	1330	<10	<10	6.8	nd	234	45.6	517	280
	Jun-02	<5	1280	<5	<5	<5	<5	238	<5	<2	354
	Oct-02	<2	2560	<5	<5	<2	<5	327	<5	684	576
	Dec-02	<2	541	<5	<5	<2	<5	<5	<5	423	121
	Mar-03	<2	938	<5	<5	<2	<5	225	30J	200	318
	Jun-03	<2	724	<5	<5	<2	<5	152	<5	360	238
A-MW-08	Dec-02	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	<200	6170	<200	321	<200		2420	579	1340	4590
	Jun-05	<40	4510	<40	302	<40		2760	700	1510	4850
	Sep-05	<200	4290	<200	527	<200		2850	811	3760	5810
	Dec-05	<20	4080	<20	71.1	<20		4200	859	4050	5690
	Mar-06	<400	3740	<400	<400	<400		2600	664J	1410	4690
	Jun-06	<40	350	<40	<40	<40		1710	521	185	873
	Sep-06	<40	66.8	<40	<40	<40		1510	81.6J	206	511
	Dec-06	<40	153	<40	<40	<40		1540	471	419	550
	Mar-07	<40	43.2	<100	<100	<40		108	<100	923	117
	Jun-07	<100	80	<250	<250	<100		277	45	1,010	164

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TABLE 6
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FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-08	Sep-07	<2,500	<2,500	218	<2,500		<500	18,500	<500	200	1,310	<10,000	516		<500	191	81	
	Dec-07	<2,500	<2,500	135	<2,500		<500	11,600	<500	<500	286	<10,000	127		<500	82	<500	
	Mar-08	<2,500	<2,500	252	<2,500		<500	18,900	<500	<500	<500	<10,000	456		<500	<500	<500	
A-MW-09	Jun-02	<25	<25	90.8	<25	<5	<5	1210	<5	1540	612		<1	<5	<5	<5	<5	<5
	Oct-02	<25	<25	893	<25	<5	<5	1390	<5	1620	736	6290	<1	<5	<5	<5	<5	<5
	Dec-02	<25	<25	85.2	<25	<5	<5	1190	<5	1480	630	6540	<1	<5	<5	<5	<5	<5
	Mar-03	<25	<50	54	<25	<5	<5	1020	11.5J	1100	483	7200	<1	9J	<5	<5	<5	<5
	Jun-03	<25	<50	64.4	<25	<5	<5	1480	<5	1290	552	12800	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<50	75	<25	<5	<5	1950	<5	1620	648	7150	<1	<5	<5	<5	<5	<5
	Dec-03	<5	<50	2.1	<5		<2	50	<2	43.5	21.3	<50	<1		<2			<20
	Mar-04	<50	<50	29.3	<50		<20	965	<20	1260	391	<500	<10		<20			<20
	Jun-04	<10	<10	26.8	<10		<4	910	4.6	1100	370	4,000	<2		<4			<4
	Sep-04	<25	<25	23.9	<25		<10	628	<10	909	327	1,310	<5		<10			<10
	Dec-04	<25	<25	17	<25		<10	496	<10	731	315	468	<5		<10			<10
	Mar-05	<12.5	<12.5	28	<12.5		6.8	1230	<5	1240	340	2670	<2.5		<5			<5
	Jun-05	<50	<50	30.4	<50		<20	1640	<20	1260	413	3,550	<10		<20			<20
	Sep-05	370	160	41.7	<50		<20	2570	<20	2200	636	28700	16.5		<20			<20
	Dec-05	<50	<50	36.4	<50		<20	2430	<20	2000	594	24100	<20		<20			<20
	Mar-06	<100	<100	44.2	<100		<40	2130	<40	2090	524	6950	<20		<40			<40
	Jun-06	<50	<50	54.7	<50		<10	1230	<20	1240	581	19700	<10	<20	<20			<20
	Sep-06	<50	<50	51.3	<50		<10	1470	<20	1460	586	9,160	<10		<20			<20
	Dec-06	<50	<50	24.5	<50		<20	1290	<20	965	477	16,700	<1		<20			<20
	Mar-07	<250	<250	44.7	<250		<50	1,140	<50	1,340	740	8,100	<10		<50	<50	<50	
	Jun-07	<250	<250	52.4	<250		<50	1,020	<50	1,620	847	7,940	<10		<50	<50	<50	
	Sep-07	<250	<250	21.6	<250		<50	838	<50	809	568	8,840	<10		<50	<50	<50	
	Dec-07	<125	<125	31.3	<125		<25	917	<25	1,040	513	10,600	<5		<25	<25	<25	
	Mar-08	<250	<250	30.9	<250		<50	1,150	<50	1,100	641	11,300	<10		<50	<50	<50	
A-MW-10	Dec-02	<25	29900	<1	15300	<5	<5	42400	<5	2640	23300	<100	1480	<5	<5	<5	<5	<5
	Mar-03	8160	25600	302	21100	<5	<5	41900	<5	2550	20900	<100	1280	<5	<5	568	<5	<5
	Jun-03	6020	46400	250	20200	<5	5000	51700	<5	3370	24600	<100	1400	<5	<5	450J	<5	<5
	Sep-03	10900	73000	340	58000	<5	940J	47400	<5	1760	9290	<100	1360	<5	<5	<5	<5	<5
	Dec-03	3120	19200	292	4080		626	53500	<400	2750	17200	<10,000	1450		<400	<400		<400
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	<1,000	<1000	<200	<1000		<400	44000	<400	2750	9860	26	1990		<400			<400
	Sep-05	<1,250	<2290	<250	<1250		1040	46600	<500	1530	6800	<500	1260		<500			<500
	Dec-05	<1,250	<1250	<250	<1250		668	33100	<500	1170	4380	124	1820		<500			1690
	Mar-06	<1000	<1000	<200	<1000		672J	26000	<400	524J	1900	<10,000	1510		<400			<400
	Jun-06	<250	<250	76	<250		124J	12800	<100	364	778	<2,500	1550	<100	<100			177J
	Sep-06	<250	<250	61.5	<250		112J	12400	<100	134J	121J	15	1430		<100			96J
	Dec-06	<500	<500	55	<500		2030	8250	<200	<200	<200	10.1	1840		<200			194J
	Mar-07	<625	<625	61.5	<625		3,300	3,980	<125	84	85.3	<2,500	1,410		<125	263	134	
	Jun-07	<1,250	<1,250	<50	<1,250		2,200	732	<250	<250	<250	<5,000	857		<250	257	<250	
	Sep-07	<1,250	<1,250	36	<1,250		2,460	589	<250	<250	<250	<5,000	865		<250	210	<250	
	Dec-07	<1,250	<1,250	27.5	<1,250		1,090	310	<250	<250	<250	<5,000	843		<250	204	<250	
	Mar-08	<500	<500	26.4	<500		1,300	369	<100	<100	<100	<2,000	375		<100	246	1,060	
A-MW-11	Dec-02	3540	662	431	1160	<5	<5	19400	<5	3460	6700	<100	967	<5	<5	<5	<5	259
	Mar-03	3680	6760	974	15600	<5	989	48800	228	2940	10100	<100	1650	251J	<5	222	<5	462
	Jun-03	5340	13600	520	5860	<5	760J	37800	<5	1480	8740	<100	940	<5	<5	<5	<5	<5
	Sep-03	1370	6950	775	5580	<5	1700	43000	103J	1050	6950	<100	1010	165	<5	<5	<5	303
	Dec-03	<1,000	2240	768	<1000		1550	49200	<400	1810	1830	<10,000	1140		<400	<400		<400
	Mar-04	<250	33000	935	13600		4670	52700	130	520	5650	546	1080		<100			355
	Jun-04	<250	888	715	<250		3960	55000	45	435	4150	416	833		<100			210

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FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-08	Sep-07	<200	112	<500	<500	<200		166	<500	727	178
	Dec-07	<200	100	<500	<500	<200		<500	<500	209	111
	Mar-08	<200	233	<500	<500	<200		204J	<500	247	173
A-MW-09	Jun-02	122	<1	<5	<5	<5	<5	<5	<5	<2	<1
	Oct-02	190	<1	<5	92	56.5	<5	<5	<5	123	<1
	Dec-02	204	<1	<5	32.3	50.4	<5	<5	<5	107	<1
	Mar-03	136	<1	<5	35	39	<5	<5	<5	92	<2
	Jun-03	132	<1	<5	18.6J	41.9	<5	<5	<5	173	<1
	Sep-03	131	<1	<5	<5	47	<5	<5	<5	296	<1
	Dec-03	4.5	<1	<2	<2	1.7		<20	<20	5.2	<1
	Mar-04	149	<10	<20	11.1	37.2		<20	<20	155	<10
	Jun-04	136	<2	<4	24	29.6		<4	<4	191	<2
	Sep-04	123	<5	<10	27.9	28.3		<10	<10	111	<5
	Dec-04	57.9	<5	<10	27.8	21.4		<10	<10	32.9	<5
	Mar-05	98.6	4.8	<5	14.4	31.9		<5	<5	310	5.5
	Jun-05	149	<10	<20	<20	19		<20	<20	278	<20
	Sep-05	137	40.8	<20	<20	114		43.4	23.9	470	45.7
	Dec-05	152	<20	<20	<20	88.1		<20	<20	340	<20
	Mar-06	120	<20	<40	<40	76J		<40	<40	271	<40
	Jun-06	110	<10	<20	<20	57.7		<20	<20	170	<20
	Sep-06	165	<10	<20	<20	128		<20	<20	315	<20
	Dec-06	153	<10	<20	<20	75.9		<20	<20	193	<20
	Mar-07	68	<10	<50	<50	41.8		<50	<50	288	<20
	Jun-07	95.8	<10	<50	<50	51.9		<50	<50	287	<20
	Sep-07	73.1	<10	<50	<50	37.8		<50	<50	137	<20
	Dec-07	73.6	<5	<25	<25	42.9		<25	<25	175	<10
	Mar-08	70.8	<10	<50	<50	41.4		<50	<50	230	<20
A-MW-10	Dec-02	<2	19600	<5	13800	<2	<5	<5	<5	4100	4690
	Mar-03	<2	12000	<5	12300	<2	<5	1590J	404	3690	2330
	Jun-03	<2	10900	<5	8430	<2	<5	1740	398J	3410	4590
	Sep-03	<2	13800	<5	4510	<2	<5	1430	320J	4510	4460
	Dec-03	<400	13300	<400	7460	<400		1640	412	3700	4590
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	<400	12800	<400	1410	<400		6840	1680	3700	7600
	Sep-05	<500	11900	<500	1040	<500		2510	610	1470	4290
	Dec-05	<500	15000	<500	2570	<500		2680	680	608	6490
	Mar-06	<400	11200	<400	420J	<400		2140	518J	834	6080
	Jun-06	<100	10500	<100	<100	<100		2760	767	169	6220
	Sep-06	<100	10400	<100	122J	<100		2410	684	187	5610
	Dec-06	<200	9500	<200	<200	<200		2510	517	95J	5810
	Mar-07	<50	9,510	<125	79.5	<50		2,130	510	154	5,320
	Jun-07	<100	5,910	<250	<250	<100		1,480	419	76	3,300
	Sep-07	<100	5,990	<250	<250	<100		1,530	371	48	3,960
	Dec-07	<100	2,910	<250	<250	<100		1,420	344	<100	3,520
	Mar-08	<40	5,940	<100	<100	<40		1,550	482	23	4,450
A-MW-11	Dec-02	<2	1230	<5	52.8J	<2	<5	2120	675	198	748
	Mar-03	<2	3830	<5	<5	<2	<5	2950	903	1180	1620
	Jun-03	<2	4620	<5	<5	<2	<5	1400	440J	1830	1560
	Sep-03	<2	4030	<5	<5	<2	<5	1830	570	1510	1320
	Dec-03	<400	6570	<400	852	<400		1582	506	1530	2020
	Mar-04	<100	6050	<100	170	<100		2060	375	1190	2170
	Jun-04	<100	9000	<100	250	<100		1410	455	3320	1930

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-11	Sep-04	<125	566	709	<125		3080	29400	<50	434	3730	304	1160		<50			230
	Dec-04	<500	<500	1040	<500		3400	85300	<200	360	13600	<2	1360		<200			327
	Mar-05	1200	151000	423	18000		14410	34800	<200	339	3540	847	860		<200			220
	Jun-05	<500	8950	449	<500		1390	27900	<200	418	4410	230	1060		<200			<200
	Sep-05	<500	1130	611	<500		2700	45200	<200	911	9240	<200	1360		<200			270
	Dec-05	<500	<500	524	<500		2810	34100	<200	800	5350	<200	1650		<200			248
	Mar-06	<1000	<1000	354	<1000		1350	41300	<400	956J	12800	<10,000	714		<400			598J
	Jun-06	<500	<500	401	<500		1400	49900	<200	417J	9780	<5,000	619	<200	<200			<200
	Sep-06	<1,250	<1250	570	<1250		4500	34100	<500	248J	4830	71.6	1290		<500			668
	Dec-06	<1,000	<1000	462	<1000		5450	33000	<400	276J	3920	49.5	1080		<400			<400
	Mar-07	<5,000	<5,000	440	<5,000		6,770	27,200	<1,000	188	<1,000	<20,000	844		<1,000	<1,000	<1,000	
	Jun-07	<2,500	<2,500	476	<2,500		13,700	17,300	<500	<500	694	<10,000	751		<500	<500	258	
	Sep-07	<2,500	<2,500	465	<2,500		11,700	17,300	<500	120	1,680	<10,000	1,030		<500	<500	<500	
	Dec-07	<2,500	<2,500	506	<2,500		4,140	18,500	<500	209	2,520	<10,000	1,030		<500	<500	110	
	Mar-08	<2,500	<2,500	288	<2,500		7,030	10,600	<500	137	950	<10,000	1,270		<500	<500	172	
A-MW-12	Dec-02	<25	<25	19.5	<25	<5	<5	3930	<5	154	180	<100	270	89.5	<5	97	46.5	89.5
	Mar-03	<25	<250	13.3	<25	<5	<5	1600	<5	16.5J	18.6J	<25	200	68.8	<5	134	25.4J	191
	Jun-03	<25	<125	<1	<25	<5	<5	354	<5	29.2	24.8	<100	11.1	<5	<5	<5	<5	<5
	Sep-03	<25	<12.5	5.5	<25	<5	<5	505	<5	14.5	8J	<100	52.5	17	<5	22	<5	45
	Dec-03	<12.5	<12.5	9.1	<12.5		<5	735	<5	7.3	5.1	<125	157		<5			123
	Mar-04	<12.5	<12.5	7.5	<12.5		<5	485	<5	7.3	3.8	<125	254		<5			237
	Jun-04	<10	<10	2.2	<10		<4	300	<4	4.5	<4	2.9	74.4		<4			142
	Sep-04	<10	<10	0.6	<10		<4	160	<4	4.5	1.6	<2	160		<4			184
	Dec-04	<5	<5	<1	<5		<2	156	<2	1.8	2	<2	84.8		<2			128
	Mar-05	<12.5	<12.5	<2.5	<12.5		<5	191	<5	5.7	<5	<2	61		<5			122
	Jun-05	<5	<5	<1	<5		7.7	49.1	<2	<2	3.4	<2	42.7		<2			117
	Sep-05	<5	<5	<1	<5		18.8	63.4	<2	<2	3	<2	21.2		<2			139
	Dec-05	<5	<5	<1	<5		<2	20.5	<2	<2	4.4	<2	10.3		<2			105
	Mar-06	<5	<5	<1	<5		<2	1.5J	<2	<2	<2	<2	<1		<2			5.8
	Jun-06	<5	<5	<1	<5		<2	2.7	<2	<2	<2	<2	<1	<2	<2			2.3J
	Sep-06	<5	<5	<1	<5		<2	2	<2	<2	<2	<2	<1		<2			2.7J
	Dec-06	<5	<5	<1	<5		<2	2.4	<2	<2	1.5J	<2	<1		<2			11.4
	Mar-07	<25	<25	<1	<25		<5	4.4	<5	<5	3.4	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	2.4	<5	<5	1.6	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	1.9	<5	<5	<5	<100	<1		<5	<5	<5	
	Dec-07	<25	<25	<1	<25		<5	4.7	<5	<5	7.5	<100	2.5		<5	2.7	23.1	
	Mar-08	<25	<25	<1	<25		<5	7.5	<5	<5	2.6	<100	<1		<5	<5	<5	
A-MW-13	Dec-02	<25	<25	1	<25	<5	<5	17.3	<5	38.5	46.5	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<5	<1	<25	<5	<5	<5	<5	27.2	25.2	<100	2	<5	<5	<5	<5	<5
	Dec-03	<5	<5	<1	<5		<2	2.3	<2	10.8	10.8	<50	<1	<2	<2	<2		<2
	Mar-04	<5	<5	<1	<5		<2	2.5	<2	6.7	11.2	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<5	<1	<5		<2	8.8	<2	30.7	35	<2	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	2.8	<2	13.9	16.7	<2	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	17.4	<2	22.7	31.7	<2	<1	<2	<2	<2		<2
	Mar-05	<5	<1	<1	<5		<2.5	15.5	<2	34.9	18.3	<2	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	11.5	<2	34.9	23.7	7.9	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	8.9	<2	46.7	18	9	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	5.5	<2	49.8	11.3	<2	<1	<2	<2	<2		<2
	Mar-06	<5	<5	<1	<5		<2	4.9J	<2	65.8	12.7	2.5	<1	<2	<2	<2		<2
	Jun-06	<5	<5	<1	<5		<2	2.2	<2	2.2J	7.5	<2	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	3.8	<2	4.6	2J	<2	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	3.6	<2	10.7	3.5J	<2	<1	<2	<2	<2		<2
	Mar-07	<25	<25	<1	<25		<5	1.1	<5	62.8	8.5	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	<2	<5	56.5	7.5	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	<2	<5	52.9	3.3	<100	<1		<5	<5	<5	
	Dec-07	<25	<25	<1	<25		<5	<2	<5	4.7	8.6	<100	<1		<5	<5	<5	

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-11	Sep-04	<50	16200	<50	485	<50		925	500	2550	3200
	Dec-04	<200	16300	<200	290	<200		2910	1440	5410	4310
	Mar-05	<200	6580	<200	158	<200		1540	488	1280	2420
	Jun-05	<200	7830	<200	117	<200		1720	522	2030	2890
	Sep-05	<200	10700	<200	<200	<200		2750	786	1440	4150
	Dec-05	<200	7400	<200	<200	<200		2240	764	2160	4470
	Mar-06	<400	4400	<400	<400	<400		1030	368J	2270	2220
	Jun-06	<200	4810	<200	<200	<200		974	426J	262	1450
	Sep-06	<500	6360	<500	<500	<500		6600	280J	4650	3180
	Dec-06	<400	5040	<400	<400	<400		1170	346J	3750	2600
	Mar-07	<400	5,720	<1,000	<1,000	<400		1,520	504	3,820	2,350
	Jun-07	<200	5,730	<500	<500	<200		986	390	1,100	1,730
	Sep-07	<200	4,260	<500	<500	<200		1,280	4,211	2,070	2,640
	Dec-07	<200	4,390	<500	<500	<200		1,250	373	2,650	2,710
	Mar-08	<200	4,090	<500	<500	<200		1,640	641	1,140	3,110
A-MW-12	Dec-02	<2	29.5	<5	21	<2	<5	1640	765	1100	242
	Mar-03	<2	14.5	<5	14J	<2	<5	703	411	66.6	28.1
	Jun-03	<2	<1	<5	19	<2	<5	20	19	36	<1
	Sep-03	12.5	<1	<5	8.7J	7.5	<5	110	92	36	9
	Dec-03	3.8	9.7	5	10.7	<5		498	619	13.1	157
	Mar-04	3.8	<2.5	<5	8.3	<5		1200	340	8.5	231
	Jun-04	2.8	3.6	<4	2.5	<4		555	410	10.4	18.9
	Sep-04	3	1.5	<4	2.4	<4		769	290	10	150
	Dec-04	<2	<1	<2	<2	<2		473	175	3.6	2.5
	Mar-05	5.4	<2.5	<5	<5	<5		211	127	12.8	53.2
	Jun-05	6.8	<1	<2	<2	<2		143	35.3	4.1	35.6
	Sep-05	5.9	<1	<2	<2	2.2		78.6	30.6	8.8	17.5
	Dec-05	4.2	<1	<2	<2	1.3		49.6	<2	4.4	8.4
	Mar-06	5.5	<1	<2	<2	1.2J		12.4	<2	1J	<2
	Jun-06	15.7	<1	<2	<2	3.6		4.1J	<2	<1	<2
	Sep-06	17.9	<1	<2	<2	4		<2	<2	<1	<2
	Dec-06	17.6	<1	<2	<2	4.3		<2		1.1J	<2
	Mar-07	22.6	<1	<5	<5	46.9		<5	<5	2.1	<2
	Jun-07	14.4	<1	<5	<5	4.5		<5	<5	1.2	<2
	Sep-07	13.3	<1	<5	<5	2.8		<5	<5	<2	<2
	Dec-07	7.4	<1	<5	<5	2.6		<5	<5	2	<2
	Mar-08	6.2	<1	<5	<5	2.3		<5	<5	2.6	<2
A-MW-13	Dec-02	97.1	1.2	<5	<5	77.2	14.4	<5	<5	6.2	<1
	Sep-03	145	<1	<5	<5	95.2	<5	<5	<5	<2	<1
	Dec-03	36.3	<1	<2	<2	47		<2	<2	<2	<1
	Mar-04	51.4	<1	<2	<2	18.5		<2	<2	<1	<1
	Jun-04	177	<1	<2	<2	52.7		<2	<2	<1	<1
	Sep-04	239	<1	<2	<2	39.2		<2	<2	<1	<1
	Dec-04	58.8	<1	<2	<2	24.3		<2	<2	<1	<1
	Mar-05	56.9	<1	<2	<2	134		<2	<2	6.2	<1
	Jun-05	43.7	<1	<2	<2	54.9		<2	<2	2.2	<2
	Sep-05	40.1	<1	<2	2.3	120		<2	<2	<1	<2
	Dec-05	28.4	<1	<2	<2	28.9		<2	<2	<1	<2
	Mar-06	125	<1	<2	<2	92.7		<2	<2	<1	<2
	Jun-06	88.1	<1	<2	<2	71		<2	<2	<1	<2
	Sep-06	2.1	<1	<2	<2	5.6		<2	<2	<1	<2
	Dec-06	5.2	<1	<2	<2	12.6		<2	<2	<1	<2
	Mar-07	168	<1	<5	<5	117		<5	<5	<2	<2
	Jun-07	122	<1	<5	<5	95		<5	<5	<2	<2
	Sep-07	207	<1	<5	<5	92.7		<5	<5	<2	<2
	Dec-07	<2	<1	<5	<5	40.4		<5	<5	<2	<2

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FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-13	Mar-08	<50	<50	<2	<50		<10	<4	<10	8.6	10.2	<200	<2		<10	<10	<10	
A-MW-14	Dec-02	<25	<625	<1	<25	<5	<5	171	<5	142	664	<100	334	<5	<5	<5	<5	<5
	Sep-03	<25	<5	5.5	<25	<5	<5	101	<5	274	49	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<10	<10	14.6	<10		<4	219	9.2	675	113	<100	<2	<4	<4	<4		<4
	Mar-04	<5	<5	4.5	<5		<2	110	<5	264	69.8	38.8	<1	<2	<2	<2		<2
	Jun-04	<5	<5	1.9	<5		<2	45.9	<2	96.9	36.9	93	<1	<2	<2	<2		<2
	Sep-04	<5	<5	3.2	<5		<2	151	<6	346	110	276	<1	<2	<2	<2		<2
	Dec-04	<10	<10	<2	<10		<4	101	<4	185	79.2	51	<2	<4	<4	<4		<4
	Mar-05	<5	<5	1.1	<5		<2	63.6	<2	140	55.3	63.9	<1	<2	<2	<2		<2
	Jun-05	<5	<5	4.1	<5		<2	181	6.4	396	109	472	<1	<2	<2	<2		<2
	Sep-05	<10	<5	53.3	<10		<4	151	3.9	452	84.3	701	46.6	<4	<4	4.7		6.6
	Dec-05	<10	42	<2	<10		<4	77.2	<2	262	56.9	<100	<4	<4	<4	<2		<4
	Mar-06	<5	<5	<1	<5		<2	7.9	<2	46.9	8.4	38.7	<1	<2	<2	<2		<2
	Jun-06	<10	<10	4.3	<10		<4	137	<4	404	46.3	681	<2	<4	<4	<4		<4
	Sep-06	<10	<10	5.7	<10		<4	190	<4	566	56.6	1060	<2	<4	<4	<4		<4
	Dec-06	<10	<10	4.2	<10		<4	199	<4	572	54	1110	<1	<4	<4	<4		<4
	Mar-07	<125	<125	6.4	<125		<25	286	<25	728	70.9	1,430	<5		<25	<25	<25	
	Jun-07	<125	<125	4.2	<125		<25	201	<25	610	65.9	1,430	<5		<25	<25	<25	
	Sep-07	<125	<125	4.5	<125		<25	218	<25	465	49.2	1,270	<5		<25	<25	<25	
	Dec-07	<125	<125	4.7	<125		<25	319	<25	562	128	1,750	<5		<25	<25	<25	
	Mar-08	<125	<125	6.8	<125		<25	379	<25	610	177	1590J	<5		<25	<25	<25	
A-MW-15	Dec-02	<25	<250	<1	<25	<5	<5	79.8	<5	52.4	332	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<25	5.6	<25	<5	<5	88	<5	98	436	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<12.5	<12.5	12.9	<12.5		<5	262	<5	234	1570	<125	<2.5	<5	<5	<5		<5
	Mar-04	<5	<5	36.1	<5		49.4	672	2.1	725	2890	54.4	6.7	<2	<2	<2		<2
	Jun-04	<5	3.4	3.4	<5		<2	53.6	<2	40.5	102	8.4	2.5	<2	<2	<2		<2
	Sep-04	<5	<5	14.6	<5		<2	168	<2	198	790	90	4.7	<2	<2	<2		<2
	Dec-04	<5	<5	1.8	<5		<2	101	<2	70.2	72.2	42	<1	<2	<2	<2		<2
	Mar-05	<5	<5	22.4	<5		10.9	693	<2	945	3450	336	2.4	<2	<2	<2		<2
	Jun-05	<100	<100	55.2	<100		<40	961	<40	858	3830	333	<20	<40	<40	<40		<40
	Sep-05	<5	<100	7.1	<5		9.6	108	<2	142	176	39.7	1.8	<2	<2	<2		<2
	Dec-05	<5	<5	27.5	<5		30.4	262	<3	89.1	265	51.1	7.2	<2	<2	<2		<2
	Mar-06	<10	<10	1.6J	<10		<4	50.3	<4	120	187	17.6	<2	<4	<4	<4		<2
	Jun-06	<25	<25	29.5	<25		<10	556	<10	141	1040	432	<5	<10	<10	<10		<10
	Sep-06	<50	<50	33.6	<50		<20	554	<20	134	803	243J	<10	<20	<20	<20		<20
	Dec-06	<10	<10	16.5	<10		42.3	225	<4	44.4	196	262	16.5	<4	<4	<4		<4
	Mar-07	<250	<250	46.9	<250		355	89.1	<50	<50	13.5	241	89.9		<50	<50	<50	
	Jun-07	<250	<250	42	<250		284	84.9	<50	<50	6.7	1,420	95.6		<50	<50	<50	
	Sep-07	<250	<250	31.8	<250		178	72	<50	<50	12	355	86.9		<50	<50	<50	
	Dec-07	<25	<25	15.9	<25		69	45	<5	8.6	15.6	255	2.1		<5	1.4	<5	
	Mar-08	<25	<25	22.2	<25		93.2	94.5	<5	25.7	63.3	181	<1		<5	<5	<5	
A-MW-16	Dec-02	<25	<25	79	<25	25	<5	3930	28	1530	975	16500	<1	<5	<5	<5	<5	<5
	Mar-03	<25	<625	82.5	<25	26J	<5	3130	57.5	2470	1150	6850	<1	<5	<5	55.3J	<5	<5
	Jun-03	<25	<25	97.5	<25	<5	<5	3330	<5	3500	1540	12000	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<125	72	<25	<5	<5	4450	<5	2470	998	<100	<1	<5	<5	<5	<5	<5
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	<125	61.3	61.3	<125		126	3030	43	1840	2260	16.6	342		<50			81
	Jun-05	<250	102	102	<250		<100	2590	<100	1370	1510	1,760	323		<100			<100
	Sep-05	<100	<250	67.8	<100		<40	4060	<40	3430	2800	13500	221		<40			48.2
	Dec-05	<100	<100	87.2	<100		<40	3990	42.6	3480	4110	10300	242		<40			30.6
	Mar-06	<100	<100	176	<100		<40	3390	14J	2380	4,470	4120	219		<40			27.8J
	Jun-06	<100	<100	53	<100		<40	1910	<40	732	3080	518J	68.8	<40	<40			60.8J

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-13	Mar-08	212	<2	<10	<10	47.5		<10	<10	<4	<4
A-MW-14	Dec-02	<2	2840	<5	230	<2	<5	270	106J	<2	1760
	Sep-03	28.3	<1	<5	8.9	12.1	<5	<5	<5	5.2	<1
	Dec-03	42.4	<2	<4	<4	22.6		<4	<4	6.1	<2
	Mar-04	42	<1	<2	<2	16.1		<2	<2	<1	<1
	Jun-04	41.8	<1	<2	<2	<2		<2	<2	2	<1
	Sep-04	40.5	<1	<2	<2	19.8		<2	<2	5.5	<1
	Dec-04	19.2	<2	<4	<4	24.2		<4	<4	<2	<2
	Mar-05	23.7	<1	<2	<2	9.6		<2	<2	4.5	<1
	Jun-05	47.5	<1	<2	<2	14.4		<2	<2	7.9	<2
	Sep-05	64.8	204	<4	<4	23.5		74.5	24.1	19.8	277
	Dec-05	25.7	<4	<4	<4	15.3		<2	<4	22	<4
	Mar-06	70.2	<1	<2	<2	13.7		<2	<2	1.5J	<2
	Jun-06	23.7	<2	<4	<4	8.1		<4	<4	5.6	<4
	Sep-06	26.5	<2	<4	<40	9.5		<4	<4	12.5	<4
	Dec-06	24.4	1.4	<4	<4	7.6		<4	<4	12.4	<4
	Mar-07	20.4	4.4	<25	<25	10.2		<25	<25	34.6	<10
	Jun-07	9.8	<5	<25	<25	6.8		<25	<25	16.1	<10
	Sep-07	10.8	<5	<25	<25	5.1		<25	<25	23.2	<10
	Dec-07	22.7	<5	<25	<25	7.5		<25	<25	16.6	<10
	Mar-08	17.6	<5	<25	<25	7.5J		<25	<25	40.1	<10
A-MW-15	Dec-02	<2	14.4	<5	<5	<2	<5	<5	<5	93.1	<1
	Sep-03	36	2	<5	6.4J	16	<5	<5	<5	51	<1
	Dec-03	12.1	3.2	<5	<5	9.3		<5	<5	134	<2.5
	Mar-04	63.2	54.8	29.4	7.7	17.9		15	3.4	546	27.3
	Jun-04	53.1	43.3	<2	4.5	21.5		<2	<2	138	9.8
	Sep-04	56.5	101	<2	5.2	12.1		3.1	<2	272	22.1
	Dec-04	38.2	33.5	<2	2.2	47		<2	<2	34.7	3.5
	Mar-05	87.6	42.2	<2	<2	49.7		<2	<2	724	10
	Jun-05	45.8	180	<40	<40	<40		<40	<40	1320	24
	Sep-05	89.6	27.5	<2	<2	23.5		<2	<2	174	2.8
	Dec-05	26.6	54.5	<2	<2	5.5		5.7	<2	418	30.8
	Mar-06	87.5	7.4	<4	<4	28.6		1.2	<4	23.7	3.2J
	Jun-06	18.8	79.3	<10	<10	8.4J		<10	<10	649	22.1
	Sep-06	23.3	81.3	<20	<20	10		<20	<20	1220	33.5
	Dec-06	24.2	165	<4	<4	6.2		6J	<4	488	41.9
	Mar-07	<20	1,760	<50	<50	<20		48.7	<50	72.2	388
	Jun-07	<20	1,420	<50	<50	<20		47.2	<50	103	345
	Sep-07	<20	520	<50	<50	<20		39.5	<50	29.7	214
	Dec-07	31.3	5.7	<5	<5	13.5		6.5	<5	15.9	5.3
	Mar-08	62	1.2	<5	<5	22.2		<5	<5	73.2	<2
A-MW-16	Dec-02	268	<1	<5	<5	274	<5	<5	<5	555	<1
	Mar-03	350	<1	<5	33.5	400	<5	238	<5	387	<2
	Jun-03	485	<1	<5	42.5J	438	<5	<5	<5	395	<1
	Sep-03	273	<1	<5	<5	2530	<5	<5	<5	588	<1
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	88.8	32.5	<50	50	164		3250	411	1180	544
	Jun-05	173	149	<100	<100	107		2210	322	488	297
	Sep-05	369	29.4	<40	49.2	271		2120	252	1080	126
	Dec-05	209	<20	<40	83.2	180		1450	92	721	90.2
	Mar-06	115	<20	<40	50J	162		968	21.8J	562	157
	Jun-06	39	<20	<40	12.4J	72		795	58.4J	495	56.8

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-16	Sep-06	<100	<100	64.4	<100		<40	2840	<40	2240	3,360	7990	270		<40			31.6J
	Dec-06	<100	<100	51	<100		<40	2710	<40	2280	5,890	6740	245		<40			<40
	Mar-07	<500	<500	53.6	<500		<100	2,930	<100	2,820	6,650	3,130	170		<100	196	<100	
	Jun-07	<1,250	<1,250	50	<1,250		<250	2,230	<250	2,380	8,240	3,620	140		<250	196	<250	
	Sep-07	<1,250	<1,250	50	<1,250		<250	3,000	<250	2,040	8,300	3,870	192		<250	186	<250	
	Dec-07	<1,250	<1,250	44.5	<1,250		<250	2,530	<250	1,480	7,230	3,040	166		<250	185	<250	
	Mar-08	<1,250	<1,250	41	<1,250		<250	3,010	<250	1,650	9,590	4990J	118		<250	97J	<250	
A-MW-17	Dec-02	<25	<25	<1	<25	<5	<5	13	<5	18.6	36	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<25	<1	<25	<5	<5	<5	<5	14.2	<5	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<5	<5	<1	<5		<2	<2	<2	7.8	<2	<50	<1	<2	<2	<2		<2
	Mar-04	<5	<5	<1	<5		<2	<1	<2	3.8	2.2	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<5	<1	<5		<2	4.3	<2	24.7	8.7	<2	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	<2	<2	2.9	1.5	<2	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	<1	<2	5.5	10.1	<2	<1	<2	<2	2.4		<2
	Mar-05	<5	<5	<1	<5		<2	<1	<2	10.2	8.7	<2	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	<1	<2	7.1	5.2	<2	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	<1	<2	15.2	3.6	2	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	<1	<2	11.3	3	<2	<1	<2	<2	<2		<2
	Mar-06	<5	<5	<1	<5		<2	<1	<2	21.7	3.4J	<2	<1	<2	<2	<2		<2
	Jun-06	<5	<5	<1	<5		<2	<1	<2	1.6	<2	<2	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	1.4J	<2	2.7J	2.3J	<2	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	<1	<2	5.4	3.4J	<2	<1	<2	<2	<2		<2
	Mar-07	<25	<25	<1	<25		<5	<2	<5	2.2	3.3	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	<2	<5	2.5	5.4	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	<2	<5	1.6	2.5	<100	<1		<5	<5	<5	
	Dec-07	<25	<25	<1	<25		<5	<2	<5	6.2	5.4	<100	<1		<5	<5	<5	
	Mar-08	<25	<25	<1	<25		<5	<2	<5	5.3	10.6	<100	<1		<5	<5	<5	
A-MW-18	Dec-02	<25	26000	610	9300	<5	<5	4390	<5	6850	18100	<100	425	<5	<5	<5	<5	<5
	Mar-03	7400J	39700	<1	23900	<5	<5	6700	<5	5290	21200	<100	1050	<5	<5	1130J	<5	<5
	Jun-03	12600	62700	392	29800	<5	1970	9820	<5	4610	23900	<100	1010	<5	<5	276J	<5	<5
	Sep-03	4100	44200	380	32000	<5	460J	7040	<5	4260	15900	<100	740	<5	<5	<5	<5	<5
	Dec-03	1330	415	415	23700		<200	5440		4170	14500	<5,000	690					230
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-06	233	1670	162	562J		<200	9660	<200	833	11200	<5,000	2020		<200			944
	Dec-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-07	842	22,200	278	10,300		<500	18,200	<500	2,720	17,800	<500	1,740		<500	603	392	
	Jun-07	652	17,200	247	9,050		<500	18,400	<500	2,810	25,600	<500	2,980		<500	635	869	
	Sep-07	528	2,400	150	1,780		<1,000	9,500	<1,000	1,330	11,200	<1,000	1,950		<1,000	3,461	<1,000	
	Dec-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
A-MW-19	Dec-02	<25	70000	1160	18500	<5	<5	5150	<5	17700	11800	<100	1710	<5	<5	<5	<5	<5
	Mar-03	10100J	70200	1100	28900	<5	<5	5110	<5	18600	11100	<100	2270	<5	12500	1610J	<5	<5
	Jun-03	14400	105000	1390	43800	<5	2860	6840	<5	24200	13000	<100	2480	<5	12600	3250	<5	<5
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-16	Sep-06	180	<20	<40	72J	184		1120	28J	562	91.2
	Dec-06	101	<20	<40	63.8J	81.6		686	<40	690	42
	Mar-07	184	27.4	21.6	<100	352		609	<100	597	44.2
	Jun-07	65	34	26.5	82	325		451	<250	445	48
	Sep-07	40.5	<50	<250	93	349		547	<250	487	27.5
	Dec-07	173	<50	<250	69	280		406	<250	339	48
	Mar-08	121	<50	<250	56.5J	240		423	<250	449	<100
A-MW-17	Dec-02	8.1	<1	<5	6	3	<5	<5	<5	<2	<1
	Sep-03	15.1	<1	<5	8	3.9	<5	<5	<5	<2	<1
	Dec-03	18	<1	<2	2.2	7.3		<2	<2	<2	<1
	Mar-04	36.2	<1	<2	<2	9.5		<2	<2	<1	<1
	Jun-04	37.6	<1	<2	7.4	9.1		<2	<2	<1	<1
	Sep-04	20.4	<1	<2	<2	17.3		<2	<2	<1	<1
	Dec-04	81.1	<1	<2	<2	29.3		<2	<2	<1	<1
	Mar-05	117	<1	<2	<2	23.8		<2	<2	<1	<1
	Jun-05	72.4	<1	<2	<2	21.2		<2	<2	<1	<2
	Sep-05	76.8	<1	<2	<2	25.8		<2	<2	<1	<2
	Dec-05	36.3	<1	<2	<2	18.9		<2	<2	<1	<2
	Mar-06	40.9	<1	<2	<2	6.7		<2	<2	<1	<2
	Jun-06	17.9	<1	<2	<2	6.5		<2	<2	<1	<2
	Sep-06	24	<1	<2	<2	8.8		<2	<2	<1	<2
	Dec-06	85.9	<1	<2	<2	12.1		<2	<2	<1	<2
	Mar-07	40.4	<1	<5	<5	8.1		<5	<5	<2	<2
	Jun-07	69.6	<1	<5	<5	13.2		<5	<5	<2	<2
	Sep-07	58.2	<1	<5	<5	8.4		<5	<5	<2	<2
	Dec-07	118	<1	<5	<5	24.6		<5	<5	<2	<2
	Mar-08	187	<1	<5	<5	33		<5	<5	<2	<2
A-MW-18	Dec-02	534	1730	<5	1150	946	<5	1880	528	<2	2690
	Mar-03	<2	4970	<5	665J	610J	<5	2490	635J	<2	4200
	Jun-03	<2	5510	<5	260J	176J	<5	2070	506J	<2	3650
	Sep-03	<2	3700	<5	420J	<2	<5	1680	400J	800	2620
	Dec-03		2350	<200	1130	169		1810	459	<200	2610
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-06	<200	3970	<200	126J	<200		13300	445	196J	10100
	Dec-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-07	<500	9,720	<500	720	<500		5,680	1,540	1,370	6,220
	Jun-07	<500	11,500	<500	518	<500		4,360	2,870	1,420	11,100
	Sep-07	<1,000	7,600	<1,000	280	<1,000		3,810	966	660	6,930
	Dec-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
A-MW-19	Dec-02	1240	13500	<5	21500	1740	<5	2500	<5	<2	3940
	Mar-03	1480	11600	<5	37800	2360	<5	4660	845J	630J	4960
	Jun-03	1460	13300	<5	61200	3820	<5	8090	1530	<2	6040
	Sep-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-03	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-19	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
A-MW-20	Dec-02	<25	<25	<1	<25	<5	<5	16.2	<5	25.6	9.3	176	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<5	<1	<25	<5	<5	28.5	<5	45.7	4.6	88J	<1	<5	<5	<5	<5	<5
	Dec-03	<5	1.3	1.3	<5		<2	123	<2	43.8	26.7	<50	<1	<2	<2	<2		22.9
	Mar-04	<5	<5	<1	<5		<2	89.2	<2	21	18.8	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<5	<1	<5		<2	12.8	<2	78.1	4	5.3	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	2.5	<2	10.5	3.7	<2	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	1.9	<2	14.6	5.5	<2	<1	<2	<2	<2		<2
	Mar-05	<5	<5	<1	<5		<2	7.7	<2	12.1	7.5	7.9	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	7.3	<2	18.7	2.3	6	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	17.4	<2	41.8	7.7	40.2	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	27.1	<2	57.4	7.3	96.5	<1	<2	<2	<2		<2
	Mar-06	<5	<5	<1	<5		<2	3.6J	<2	<2	3.7J	2.5	<1	<2	<2	<2		<2
	Jun-06	<5	<5	<1	<5		<2	8.5	<2	16.3	<2	62.7	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	16.6	<2	26.8	3.6J	92.8	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	10.6	<2	51.8	3.6J	33.6	<1	<2	<2	<2		<2
	Mar-07	<5	<5	<5	<5		<5	3.2	<5	49.5	6.9	<5	<5		<5	<5	<5	
	Jun-07	<5	<5	<5	<5		<5	12.3	<5	195	7.5	<5	<5		<5	<5	<5	
	Sep-07	<5	<5	<5	<5		<5	<5	<5	5.4	4.9	<5	<5		<5	<5	<5	
	Dec-07	<5	<5	<5	<5		<5	<5	<5	2.3	3.2	<5	<5		<5	<5	<5	
	Mar-08	<25	<25	<1	<25		<5	<2	<5	7.2	7.4	<100	<1		<5	<5	<5	
A-MW-21	Dec-02	<25	<125	7.9	<25	<5	<5	141	<5	207	324	<100	<1	<5	<5	<5	<5	<5
	Sep-03	<25	<25	53	<25	<5	<5	1370	<5	1800	2450	<100	5.5	16.5J	<5	<5	<5	10.5J
	Dec-03	<100	<12.5	64	<100		<40	2300	<40	1960	4400	<1,000	<1		<40	20		<40
	Mar-04	<12.5	92.7	92.7	<12.5		<5	2240	17.5	2540	4090	314	6.8		<10	53.5		14.3
	Jun-04	<10	<10	5	<10		<4	203	1.8	299	437	28	<2		<4	<4		<4
	Sep-04	<10	<10	116	<10		<4	2760	18.3	2730	5370	676	9.4		<4	70		13.4
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	<50	<50	116	<50		<20	1440	<20	1690	2,930	<500	860	177	<20	216		315
	Sep-06	<125	<125	64.5	<125		<50	920	<50	1160	2060	<1,250	437		<50	168		209
	Dec-06	<250	<250	78.5	<250		<100	1550	<100	1850	3390	<2,500	545	180J	<100	255		331
	Mar-07	<5	<5	33.2	<5		<5	943	<5	1,040	1,940	<5	<5		<5	<5	<5	
	Jun-07	<250	<250	30.2	<250		<50	737	<50	1,170	2,080	<1,000	<10		<50	<50	<50	
	Sep-07	<500	<500	56.2	<500		<100	1,480	<100	1,330	2,260	<2,000	<20		<100	<100	<100	
	Dec-07	<100	<100	31.6	<100		<100	3,610	<100	732	1,240	<100	<100		<100	<100	<100	
	Mar-08	<500	<500	54.6	<500		<100	2,640	<100	1,820	2,910	<2,000	<20		<100	<100	<100	
A-MW-22	Dec-02	1560	<25	131	<25	<5	<5	1270	<5	215J	331	<100	1180	<5	<5	<5	<5	<5

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-19	Sep-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-07	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
A-MW-20	Dec-02	9.7	3.3	<5	<5	2.9	<5	<5	<5	<2	<1
	Sep-03	18.3	<1	<5	8.6	6.2	<5	<5	<5	<2	<1
	Dec-03	3.4	14.6	<2	81.7	4.4		33.1	13.8	<2	22
	Mar-04	9.3	<1	<2	20.9	2.5		<2	<2	<1	<1
	Jun-04	25	<1	<2	3.4	6.7		<2	<2	<1	<1
	Sep-04	35.6	<1	<2	3.2	12.2		<2	<2	<1	<1
	Dec-04	27.1	<1	<2	<2	14.6		<2	<2	<1	<1
	Mar-05	108	<1	<2	<2	25		<2	<2	1.2	<1
	Jun-05	39.8	<1	<2	<2	8.6		<2	<2	<1	<2
	Sep-05	85.3	<1	<2	<2	21.2		<2	<2	<1	<2
	Dec-05	21.3	1.7	<2	2.2	12.9		<2	<2	<1	<2
	Mar-06	88.6	<1	<2	3.2J	6.7		<2	<2	<1	<2
	Jun-06	12.4	<1	<2	<2	5		<2	<2	<1	<2
	Sep-06	21.1	<1	<2	<2	7.7		<2	<2	<1	<2
	Dec-06	32.2	<1	<2	<2	9.4		<2	<2	<1	<2
	Mar-07	79.2	<5	<5	<5	14.6		<5	<5	<5	<5
	Jun-07	82.4	<5	<5	<5	15.4		<5	<5	<5	<5
	Sep-07	116	<5	<5	<5	16.6		<5	<5	<5	<5
	Dec-07	84.6	<5	<5	<5	11.1		<5	<5	<5	<5
	Mar-08	131	<1	<5	<5	20.9		<5	<5	<2	<2
A-MW-21	Dec-02	53.1	6.7	<5	<5	55.7	<5	<5	<5	28.1	<1
	Sep-03	232	10	12J	150	180	<5	20.5J	<5	31.5	93
	Dec-03	133	<1	<40	132	140		<40	<40	47.3	91.1
	Mar-04	347	17.5	14.5	186	240		30	5.5	66	175
	Jun-04	228	1.7	2	13.5	108		2	<4	13.6	5.3
	Sep-04	491	94	24	312	321		151	<4	202	200
	Dec-04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Sep-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Dec-05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Mar-06	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	Jun-06	128	305	<20	564	516		5510	732	14J	2800
	Sep-06	80.5	177	<50	290	178		2030	115J	16J	1560
	Dec-06	130	141	<100	330	187		<100	722	241	2120
	Mar-07	<5	<5	<5	132	90.4		80	<5	95.8	95
	Jun-07	136	<10	<50	136	82.4		<50	11.6	39.1	64.5
	Sep-07	173	<20	<100	145	100		<100	<100	271	59.6
	Dec-07	193	<100	<100	62.2	93		<100	<100	455	<100
	Mar-08	191	<20	<100	70.4J	154		<100	<100	739	40.6
A-MW-22	Dec-02	<2	6700	<5	<5	<2	<5	345	<5	13200	3100

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TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-22	Jun-03	<25	<25	13.5	<25	15.2J	<5	1200	<5	155	3860	<100	<1	<5	113	494	<5	<5
	Sep-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-04	<10	<10	34	<10		104	1900	11.7	440	6020	936	<2		6.6			<4
	Jun-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-05	<100	<100	26.2	<100		104	1390	<40	564	3040	123	<20		<40			<40
	Jun-05	<100	<100	25	<100		97.8	1620	<40	441	3260	N A	<20		<40			<20
	Sep-05	<100	<100	27.8	<100		42.6	1870	<40	526	3280	576	<20		<40			<40
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	<100	<100	<20	<100		<40	1060	<40	77J	2250	<1,000	<1		<40			<40
	Jun-06	<50	<50	<10	<50		<20	597	<20	50.7	1890	<500	<10		<20			<20
	Sep-06	<50	<50	<10	<50		<20	921	<20	93	2,260	<500	<10		<20			<20
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	<25	<25	<1	<25		<5	40.7	<5	2.3	71.3	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	53.9	<5	4.3	125	60.4	<1		<5	<5	<5	
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-23	Sep-03	<25	<5	<1	<25	<5	<5	3.1J	<5	<5	8.7	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<25	<25	<1	<5		<2	<2	<2	6	2.4	<50	<1	<2	<2	<2		<2
	Mar-04	<25	<5	<1	<5		<2	<2	<2	4.4	<2	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<1	<1	<5		<2	<1	<2	9.7	2.8	NA	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	2.9	<2	0.7	8	<200	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	<1	6.1	3.2	4.5	NA	<1	<2	<2	<2		<2
	Mar-05	<5	<5	<1	<5		<2	9.4	<2	<2	4.2	NA	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	6.3	<2	<2	2.3	NA	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	4	<2	57.8	6.1	<50	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	51.5	<2	636	24.9	<50	<1	<2	<2	<2		<2
	Mar-06	<5	<5	<1	<5		<2	<1	<2	21.3	6.2	<50	<1	<2	<2	<2		<2
	Jun-06	<5	<5	<1	<5		<2	<1	<2	4.1	4J	<50	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	<1	<2	5.7	4.7J	<50	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	<1	<2	4.9	5.3	<50	<1	<2	<2	<2		<2
	Mar-07	<25	<25	<1	<25		<5	<2	<5	4.7	9.5	37.6	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	<2	<5	10.9	8.6	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	<2	<5	5.8	6.2	<100	<1		<5	<5	<5	
	Dec-07	<25	<25	<1	<25		<5	<2	<5	11.1	6	<100	<1		<5	<5	<5	
	Mar-08	<25	<25	<1	<25		<5	<2	<5	83	8.8	<100	<1		<5	<5	<5	
A-MW-24	Sep-03	<25	<25	<1	<25	<5	<5	<5	<5	<5	<5	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<25	<5	<1	<5		<2	2	<2	14.6	8.8	<50	<1	<2	<2	<2		<2
	Mar-04	<25	<5	<1	<5		<2	2	<2	7.6	11.7	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<5	<1	<5		<2	<1	<2	15.6	16.2	NA	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	52.1	<2	1.7	4.6	<200	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	<1	13.9	8.6	5.9	NA	<1	<2	<2	<2		<2
	Mar-05	<5	<5	<1	<5		<2	2.3	<2	17.7	6.5	NA	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	1	<2	16.5	3.2	NA	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	5.4	<2	22.9	5	<50	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	5.9	<2	50.6	14.5	<50	<1	<2	<2	<2		<2
	Mar-06	<5	<5	<1	<5		<2	7.2	<2	56.6	16.5	<50	<1	<2	<2	<2		<2
	Jun-06	<5	<5	<1	<5		<2	1.5	<2	17.6	7.2	<50	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	5	<2	39.1	18.1	<50	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	14.4	<2	76.1	33	<50	<1	<2	<2	<2		<2
	Mar-07	<25	<25	<1	<25		<5	3	<5	27.7	12.9	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	<2	<5	26.1	7.8	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	1.7	1.5	48.9	11.8	<100	<1		<5	<5	<5	

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-22	Jun-03	<2	<1	<5	<5	<2	<5	<5	<5	88.9	<1
	Sep-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-04	4	16.4	32.3	<4	<4		6.6	<4	860	8.8
	Jun-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Sep-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-05	<40	22.8	<40	<40	<40		<40	<40	1340	<20
	Jun-05	<40	22.8	<40	<40	<40		<40	<40	1080	<40
	Sep-05	<40	34.2	<40	<40	<40		<40	<40	1530	<40
	Dec-05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-06	<40	<20	<40	<40	<40		<100	<40	230	<40
	Jun-06	<20	<10	<20	<20	<20		<20	<20	71.2	<20
	Sep-06	<20	<10	<20	<20	<20		<20	<20	369	<20
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	<2	<1	<5	<5	<2		<5	<5	3.1	<2
	Jun-07	<2	<1	2	<5	<2		<5	<5	19	<2
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
A-MW-23	Sep-03	4.1	<1	<5	<5	<2	<5	<5	<5	<2	<1
	Dec-03	30.6	<1	<2	3.2	11.3		<2	<2	<2	<1
	Mar-04	38.2	<1	<2	<2	14.7		<2	<2	<2	<1
	Jun-04	34.5	<1	<2	3.4	22.9		<2	<2	<1	<1
	Sep-04	1.7	<1	<2	<2	<2		<2	<2	<1	<1
	Dec-04	52.1	<1	<2	<2	27.7		<2	<2	<1	<1
	Mar-05	69.1	<1	<2	<2	36.3		<2	<2	<1	<1
	Jun-05	49.1	<1	<2	<2	31.2		<2	<2	<1	<2
	Sep-05	124	<1	<2	<2	50.1		<2	<2	<1	<2
	Dec-05	142	<1	<2	16.3	19.3		<2	<2	<1	<2
	Mar-06	139	<1	<2	<2	31.9		<2	<2	<1	<2
	Jun-06	95.6	<1	<2	<2	19.9		<2	<2	<1	<2
	Sep-06	99.5	<1	<2	<2	24.7		<2	<2	<1	<2
	Dec-06	124	<1	<2	<2	24.5		<2	<2	<1	<2
	Mar-07	141	<1	<5	<5	26.8		<5	<5	<2	<2
	Jun-07	132	<1	<5	<5	32.8		<5	<5	<2	<2
	Sep-07	129	<1	<5	<5	25.8		<5	<5	<2	<2
	Dec-07	141	<1	<5	<5	32.5		<5	<5	<2	<2
	Mar-08	195	<1	<5	<5	104		<5	<5	<2	<2
A-MW-24	Sep-03	10.7	<1	<5	<5	11.5	<5	<5	<5	<2	<1
	Dec-03	75.4	<1	<2	2.3	51.4		<2	<2	<2	<1
	Mar-04	263	<1	<2	<2	74.5		<2	<2	<2	<1
	Jun-04	120	<1	<2	<2	85.7		<2	<2	<1	<1
	Sep-04	<2	<1	<2	<2	<2		<2	<2	<1	<1
	Dec-04	75.1	<1	<2	<2	33.9		<2	<2	<1	<1
	Mar-05	74.7	<1	<2	<2	51.9		<2	<2	<1	<1
	Jun-05	47.2	<1	<2	<2	74		<2	<2	<1	<2
	Sep-05	52.1	<1	<2	<2	100		<2	<2	<1	<2
	Dec-05	86	<1	<2	5.2	86		<2	<2	<1	<2
	Mar-06	86.7	<1	<2	<2	50.4		<2	<2	<1	<2
	Jun-06	87.6	<1	<2	4.1	37.8		<2	<2	<1	<2
	Sep-06	144	<1	<2	8.8	45.1		<2	<2	<1	<2
	Dec-06	216	<1	<2	7.5	66.1		<2	<2	<1	<2
	Mar-07	102	<1	<5	<5	55.1		<5	<5	<2	<2
	Jun-07	129	<1	<5	<5	69.3		<5	<5	<2	<2
	Sep-07	212	<1	<5	<5	86.4		<5	<5	<2	<2

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	METHYL ISOBUTYL KETONE (MIBK)	ACETONE	BENZENE	METHYL ETHYL KETONE (MEK)	CHLOROBENZENE	CHLOROETHANE	1,1-DICHLOROETHANE (1,1-DCA)	1,2-DICHLOROETHANE (1,2-DCA)	1,1-DICHLOROETHENE (1,1-DCE)	CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	1,4-DIOXANE	ETHYLBENZENE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	N-BUTYLBENZE	N-PROPYLBENZENE
A-MW-24	Dec-07	<50	<50	<2	<50		<10	2.2	<10	51	9.3	<200	<2		<10	<10	<10	
	Mar-08	<25	<25	<1	<25		<5	<2	<5	41.2	11.4	<100	<1		<5	<5	<5	
A-MW-25	Sep-03	<25	<5	<1	<5	<5	<5	5	<5	<5	2.8J	<100	<1	<5	<5	<5	<5	<5
	Dec-03	<25	<5	<1	<5		<2	<2	<2	7.4	3.4	<50	<1	<2	<2	<2		<2
	Mar-04	<25	<5	<1	<5		<2	<2	<2	7.4	<2	<50	<1	<2	<2	<2		<2
	Jun-04	<5	<5	<1	<5		<2	<1	<2	7.9	1.8	NA	<1	<2	<2	<2		<2
	Sep-04	<5	<5	<1	<5		<2	<1	<2	<2	<2	<200	<1	<2	<2	<2		<2
	Dec-04	<5	<5	<1	<5		<2	<1	2.4	9	2.2	NA	<1	<2	<2	<2		<2
	Mar-05	<5	<5	<1	<5		<2	<1	<2	17.5	5	NA	<1	<2	<2	<2		<2
	Jun-05	<5	<5	<1	<5		<2	<1	<2	5.3	2.6	NA	<1	<2	<2	<2		<2
	Sep-05	<5	<5	<1	<5		<2	<1	<2	10.3	3.4	<50	<1	<2	<2	<2		<2
	Dec-05	<5	<5	<1	<5		<2	<1	<2	8.2	2.7	<50	<1	<2	<2	<2		<2
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	<5	<5	<1	<5		<2	<1	<2	5.4	3.9J	<50	<1	<2	<2	<2		<2
	Sep-06	<5	<5	<1	<5		<2	<1	<2	3.9	2.1	<50	<1	<2	<2	<2		<2
	Dec-06	<5	<5	<1	<5		<2	<1	<2	4.2	2.1	<50	<1	<2	<2	<2		<2
	Mar-07	<25	<25	<1	<25		<5	<2	<5	4.7	4	<100	<1		<5	<5	<5	
	Jun-07	<25	<25	<1	<25		<5	<2	<5	5.3	4.2	<100	<1		<5	<5	<5	
	Sep-07	<25	<25	<1	<25		<5	<2	<5	19.7	7.5	<100	<1		<5	<5	<5	
	Dec-07	<25	<25	<1	<25		<5	<2	2.5	104	6.2	<100	<1		<5	<5	<5	
	Mar-08	<25	<25	<1	<25		<5	<2	<5	32	3.3	<100	<1		<5	<5	<5	
A-MW-26	Jun-03	9250	34100	125	11300	<5	<5	931	<5	2340	939	<100	1620	<5	10600	135J	<5	<5
	Sep-03	7350	24500	270	11000	<5	<5	1670	<5	5600	2130	<100	2900	<5	14600	125J	<5	<5
	Dec-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-04	6600	10200	225	6050		2000	3620	<100	7740	5130	816	3180		9300			<100
	Jun-04	5320	7220	142	2260		<40	1750	<40	8150	6550	NA	2830		11900			<40
	Sep-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-05	5550	7170	174	9250		<100	1670	<100	8040	5900	311	3060		4730			<100
	Jun-05	4880	64200	170	10500		<100	2010	<100	9250	9950	395	3530		5050			<100
	Sep-05	4190	23800	150	1800		<100	2230	<100	11100	11200	<2500	1950		8500			<100
	Dec-05	7120	9440	257	4120		<100	2300	<100	9210	10600	<2500	2070		10000			170
	Mar-06	686J	6870	132	781		<200	1850	<400	9050	9920	<5,000	1670		5960			261J
	Jun-06	2420J	17200	140	6350		<200	1570	<200	7370	13100	<5,000	2380	<200	2610			382J
	Sep-06	<500	7680	80J	1970		<200	952	<200	5100	7650	<5,000	1150		3010			<200
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	<1,250	10,300	115	2,610		<250	1,850	<250	7,940	12,900	<5,000	1,260		5,750	<250	<250	
	Jun-07	<2,500	5,450	101	1,460		<500	1,410	<500	7,460	14,200	<10,000	1,050		5,870	<500	<500	
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	<2,500	8,800	86J	2030J		<500	1,790	<500	7,170	17,900	<10,000	1,390		6,360	<500	<500	

DENOTES DEEP WELLS

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 6
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

LOCATION	DATE	TETRACHLOROETHENE (PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE (TRANS 1,2-DCE)	1,1,1-TRICHLOROETHANE (1,1,1-TCA)	TRICHLOROETHENE (TCE)	TRICHLOROFLUOROMETHANE (FREON 11)	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE (VC)	XYLENES (TOTAL)
A-MW-24	Dec-07	171	<2	<10	<10	86.5		<10	<10	<4	<4
	Mar-08	281	<1	<5	<5	81.9		<5	<5	<2	<2
A-MW-25	Sep-03	51	<1	<5	<5	25	<5	<5	<5	<2	<1
	Dec-03	37.2	<1	<2	<2	39.4		<2	<2	<2	<1
	Mar-04	30.3	<1	<2	<2	34.9		<2	<2	<2	<1
	Jun-04	31.7	<1	<2	<2	42.9		<2	<2	<1	<1
	Sep-04	3.6	<1	<2	<2	3.7		<2	<2	<1	<1
	Dec-04	86.1	<1	<2	<2	65.2		<2	<2	<1	<1
	Mar-05	48.6	<1	<2	<2	101		<2	<2	1.8	<1
	Jun-05	51.6	<1	<2	<2	46.9		<2	<2	<1	<2
	Sep-05	63.7	<1	<2	<2	63.8		<2	<2	<1	<2
	Dec-05	41	<1	<2	<2	41		<2	<2	<1	<2
	Mar-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Jun-06	88.3	<1	<2	<2	41.7		<2	<2	<1	<2
	Sep-06	59.4	<1	<2	<2	53.3		<2	<2	<1	<2
	Dec-06	54.6	<1	<2	<2	66.9		<2	<2	<1	<2
	Mar-07	58.6	<1	<5	<5	45		<5	<5	<2	<2
	Jun-07	68.6	<1	<5	<5	51.5		<5	<5	<2	<2
	Sep-07	177	<1	<5	<5	58.9		<5	<5	<2	<2
	Dec-07	207	<1	<5	<5	139		<5	<5	<2	<2
	Mar-08	47.7	<1	<5	<5	98.7		<5	<5	<2	<2
A-MW-26	Jun-03	1920	<1	<5	1250	1330	<5	<5	<5	<2	1050
	Sep-03	2930	10500	120	1790	2100	<5	555	170J	<2	6870
	Dec-03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-04	4160	15200	<100	7350	3000		1140	300	450	9320
	Jun-04	1830	14500	<40	5730	<40		832	189	<40	8320
	Sep-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-04	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-05	2840	16900	<100	3900	3560		984	218	138	9530
	Jun-05	2960	14200	<100	6200	5050		1180	277	<50	11800
	Sep-05	1070	15400	<100	3980	2540		332	<100	<50	5550
	Dec-05	2160	16400	<100	4710	2160		594	614	<50	6070
	Mar-06	1970	12500	<200	3890	2800		492J	<200	<100	5970
	Jun-06	1040	17600	<200	4170	3460		741	241	<100	9110
	Sep-06	849	8360	<200	1740	764		345J	<200	<100	4240
	Dec-06	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-07	814	9,670	<250	3,250	2,050		436	101	<100	4,080
	Jun-07	104	7,590	<500	1,950	58		208	<500	<200	2,750
	Sep-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Dec-07	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	Mar-08	1,130	5,860	<500	2,140	335		347	116	<200	3,260

ALL UNITS REPORTED IN ug/L. BLANK SPACES = NOT ANALYZED FP = FREE PRODUCT IN WELL

TABLE 7
HISTORICAL FREE PRODUCT ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

	Date	A-MW-6	A-MW-8	A-MW-10	A-MW-16	A-MW-18	A-MW-19
Screened Interval (feet bg)		20-30	30.5-40.5	25-40	29-46	21-46	30-45
VOCs							
Acetone	Oct-01	<25,000					
	Mar-04	NA	NA	<1,250,000	NA	<1,250,000	<1,250,000
	Sep-04	NA	<2,500,000	<2,500,000	NA	NA	<2,500,000
Benzene	Oct-01	110,000					
	Mar-04	NA	NA	<250,000	NA	<250,000	365,000
	Sep-04	NA	<100,000	<100,000	NA	NA	464,000
Methyl Ethyl Ketone (MEK)	Oct-01	<25,000					
	Mar-04	NA	NA	<1,250,000	NA	<1,250,000	<1,250,000
	Sep-04	NA	<2,500,000	<2,500,000	NA	NA	<2,500,000
Chloroethane	Mar-04	NA	NA	<500,000	NA	<500,000	<500,000
	Sep-04	NA	<200,000	<200,000	NA	NA	<200,000
1,1-Dichloroethane (1,1-DCA)	Oct-01	592,000					
	Mar-04	NA	NA	3,190,000	NA	1,590,000	625,000
	Sep-04	NA	4,040,000	5,740,000	NA	NA	1,326,000
1,2-Dichloroethane (1,2-DCA)	Oct-01	<5,000					
	Mar-04	NA	NA	<500,000	NA	<500,000	<500,000
	Sep-04	NA	<200,000	<200,000	NA	NA	<200,000
1,1-Dichloroethene (1,1-DCE)	Oct-01	417,000					
	Mar-04	NA	NA	730,000	NA	928,000	4,840,000
	Sep-04	NA	782,000	710,000	NA	NA	5,860,000
cis 1,2-Dichloroethene (cis-1,2-DCE)	Oct-01	1,060,000					
	Mar-04	NA	NA	1,530,000	NA	1,620,000	1,630,000
	Sep-04	NA	1,765,000	1,900,000	NA	NA	2,793,000
trans 1,2-Dichloroethene (trans-1,2-DCE)	Oct-01	<5,000					
	Mar-04	NA	NA	<500,000	NA	<500,000	<500,000
	Sep-04	NA	<200,000	<200,000	NA	NA	<200,000
1,4 Dioxane	Mar-04	NA	NA	<12,500,000	NA	<12,500,000	<12,500,000
	Sep-04	NA	<5,000,000	<5,000,000	NA	NA	<5,000,000
Ethylbenzene	Oct-01	4,320,000					
	Mar-04	NA	NA	5,330,000	FP	7,080,000	6,960,000
	Sep-04	NA	5,910,000	7,280,000	NA	NA	8,770,000
Methylene Chloride	Oct-01	<5,000					
	Mar-04	NA	NA	<500,000	NA	<500,000	<500,000
	Sep-04	NA	<200,000	<200,000	NA	NA	<200,000
4-Methyl-2-pentanone	Oct-01	<25,000					
	Mar-04	NA	NA	<1,250,000	NA	<1,250,000	<1,250,000
	Sep-04	NA	<2,500,000	<2,500,000	NA	NA	<2,500,000
Naphthalene	Oct-01	1,680,000					
	Mar-04	NA	NA	1,980,000	NA	1,620,000	4,120,000
	Sep-04	NA	3,260,000	2,890,000	NA	NA	6,000,000
NA= Not Analyzed.							

ALL UNITS REPORTED IN ug/L NA = NOT AVAILABLE FP = FREE PRODUCT

TABLE 7
HISTORICAL FREE PRODUCT ANALYTICAL RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

	Date	A-MW-6	A-MW-8	A-MW-10	A-MW-16	A-MW-18	A-MW-19
Screened Interval (feet bg)		20-30	30.5-40.5	25-40	29-46	21-46	30-45
VOCs							
n-Propylbenzene	Mar-04	FP	FP	2,820,000	NA	3,230,000	2,980,000
	Sep-04	NA	3,787,000	3,700,000	NA	NA	4,240,000
Tetrachloroethene	Oct-01	531,000					
	Mar-04	NA	NA	<500,000	NA	543,000	4,820,000
	Sep-04	NA	<200,000	<200,000	NA	NA	2,870,000
1,1,1-Trichloroethane	Oct-01	28,100,000					
	Mar-04	NA	NA	8,870,000	NA	4,140,000	35,000,000
	Sep-04	NA	5,460,000	7,330,000	NA	NA	45,700,000
Trichloroethene	Oct-01	753,000					
	Mar-04	NA	NA	<500,000	NA	<500,000	560,000
	Sep-04	NA	<200,000	<200,000	NA	NA	300,000
1,2,4-Trimethylbenzene	Oct-01	22,100,000					
	Mar-04	NA	NA	31,900,000	NA	30,600,000	45,400,000
	Sep-04	NA	43,400,000	37,000,000	NA	NA	60,100,000
1,3,5-Trimethylbenzene	Oct-01	5,400,000					
	Mar-04	NA	NA	8,560,000	NA	9,020,000	9,480,000
	Sep-04	NA	11,746,000	10,100,000	NA	NA	13,500,000
Toluene	Oct-01	9,010,000					
	Mar-04	NA	NA	8,620,000	NA	15,300,000	11,400,000
	Sep-04	NA	9,010,000	15,200,000	NA	NA	16,400,000
Vinyl Chloride	Oct-01	<5,000					
	Mar-04	NA	NA	<500,000	NA	<500,000	<500,000
	Sep-04	NA	<100,000	<100,000	NA	NA	<100,000
Xylenes	Oct-01	10,370,000					
	Mar-04	NA	NA	17,600,000	NA	22,500,000	16,000,000
	Sep-04	NA	21,400,000	26,300,000	NA	NA	22,100,000
NA= Not Analyzed.							

ALL UNITS REPORTED IN ug/L NA = NOT AVAILABLE FP = FREE PRODUCT

TABLE 8
HISTORICAL FREE PRODUCT REMOVAL DATA
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CA

Well ID	Date	Product Thickness (feet)	Volume Removed (mL)
A-MW-01	11/30/2000	Sheen	0
	10/30/2001	Sheen	0
	2/15/2002	0.02	0
	11/13/2002	0.03	0
A-MW-04	10/30/2001	Sheen	0
	2/15/2002	0.06	0
	10/7/2002	Not measured	0
	6/30/2004	0.2	0
	7/23/2004	0.17	0
	9/16/2004	0.16	15
	9/28/2004	0.14	0
	10/11/2004	0.14	15
	10/22/2004	0.12	0
	11/11/2004	0.12	0
	11/24/2004	0.12	0
	12/21/2004	0.13	10
	1/4/2005	0.12	0
A-MW-06	11/30/2000	Not measured	0
	10/30/2001	0.5	0
	1/18/2002	0.69	3785
	2/15/2002	0.94	1892
	6/7/2002	1	3785
	6/10/2002	0.6	1892
	6/13/2002	0.34	1893
	6/14/2002	Not measured	1893
	10/7/2002	Not measured	0
	12/2/2002	0.37	0
	9/16/2004	0.02	0
	9/28/2004	0.02	0
	10/11/2004	0.01	0
	10/22/2004	0.01	0
	11/11/2004	0.09	0
	11/24/2004	0.05	0
	12/21/2004	0.04	25
	1/4/2005	0.02	0
A-MW-08	6/7/2002	0.84	7570
	6/10/2002	0.11	0
	6/13/2002	0.87	3785
	6/14/2002	Not Measured	11355
	12/2/2002	0.44	0
	12/18/2002	Not Measured	3785
	12/18/2002	0.26	1000
	2/8/2004	0.24	100
	2/10/2004	0.36	100
	2/11/2004	0.1	0
	2/14/2004	0.15	50
	2/17/2004	0.08	0
	2/18/2004	0.08	0
	3/19/2004	0.19	150
	4/30/2004	0.75	250
	5/27/2004	0.3	50
	6/30/2004	0.37	50
	7/9/2004	0.1	10
	7/23/2004	0.34	20
	8/13/2004	0.34	50

TABLE 8
HISTORICAL FREE PRODUCT REMOVAL DATA
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CA

Well ID	Date	Product Thickness (feet)	Volume Removed (mL)
A-MW-08	9/16/2004	0.46	250
	9/28/2004	0.41	300
	10/11/2004	0.36	350
	10/22/2004	0.4	400
	11/11/2004	0.15	75
	11/24/2004	0.18	50
	12/8/2004	0.32	250
	12/21/2004	0.24	150
	1/4/2005	0.21	125
A-MW-10	3/19/2004	0.29	946
	4/30/2004	0.4	100
	5/27/2004	0.82	1893
	6/30/2004	0.51	946
	7/9/2004	0.12	15
	7/23/2004	0.26	10
	8/13/2004	1.18	3785
	9/16/2004	1.43	4731
	9/28/2004	0.57	500
	10/11/2004	0.54	600
	10/22/2004	0.63	500
	11/11/2004	0.29	200
	11/24/2004	0.2	75
	12/8/2004	0.15	50
	12/21/2004	0.18	100
	1/4/2005	0.11	50
	1/20/2005	0.11	100
	2/1/2005	0.12	100
	2/16/2005	0.06	50
	3/11/2005	0.01	0
A-MW-16	1/29/2004	0.51	0
	2/8/2004	0.51	250
	2/10/2004	0.37	150
	2/11/2004	0.29	100
	3/19/2004	0.19	150
	4/30/2004	0.41	100
	5/27/2004	0.08	25
	6/30/2004	0.34	25
	7/9/2004	0.24	10
	7/23/2004	0.24	10
	8/13/2004	0.28	50
	9/16/2004	0.12	20
	9/28/2004	0.13	20
	10/11/2004	0.06	0
	10/22/2004	0.11	15
	11/11/2004	0.04	0
	11/24/2004	0.02	0
	12/21/2004	0.03	5
A-MW-18	2/8/2004	4.96	17033
	2/10/2004	3.76	11355
	2/11/2004	3.92	12301
	2/13/2004	3.86	12301
	2/14/2004	4.3	17033
	2/16/2004	4	14194
	2/17/2004	3.8	13248
	2/18/2004	3.3	11355

TABLE 8
HISTORICAL FREE PRODUCT REMOVAL DATA
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CA

Well ID	Date	Product Thickness (feet)	Volume Removed (mL)
A-MW-18	3/4/2004	Not Measured	11355
	3/5/2004	Not Measured	5678
	3/9/2004	2.96	15140
	3/10/2004	Not Measured	3785
	3/19/2004	2.77	11355
	4/30/2004	3.5	14194
	5/27/2004	4.6	9463
	6/30/2004	2.99	5678
	7/9/2004	1.75	3785
	7/23/2004	2.04	3785
	8/13/2004	1.65	2839
	9/16/2004	0.23	100
	11/11/2004	0.22	75
	11/24/2004	0.79	500
	12/8/2004	0.96	600
	12/21/2004	0.91	600
	1/4/2005	1.22	700
	1/20/2005	0.36	200
	2/1/2005	0.66	350
	2/16/2005	0.58	300
	3/11/2005	0.13	50
	4/2/2005	0.34	200
	4/5/2005	0.04	380
	4/7/2005	0.04	380
	4/9/2005	0.04	380
	4/11/2005	0.04	380
	4/13/2005	0.04	380
	4/15/2005	0.04	380
	4/19/2005	0.04	380
	4/20/2005	0.04	380
	4/22/2005	0.04	380
	4/25/2005	0.04	380
	4/27/2005	0.04	380
	4/29/2005	0.04	380
	5/4/2005	0.04	380
	5/6/2005	0.04	380
	5/10/2005	0.03	300
	5/13/2005	0.03	300
	5/18/2005	0.03	300
	5/21/2005	0.03	200
	5/27/2005	0.04	200
	6/3/2005	0.04	100
	6/11/2005	0.03	100
	6/18/2005	0.04	100
	6/25/2005	0.04	100
	7/2/2005	0.03	100
	7/9/2005	0.03	100
	7/16/2005	0.03	100
	7/16/2005	0.03	100
	7/23/2005	0.03	100
	7/30/2005	0.03	100
	8/6/2005	0.03	100
	8/13/2005	0.03	100
	8/20/2005	0.03	100
	8/27/2005	0.02	100

TABLE 8
HISTORICAL FREE PRODUCT REMOVAL DATA
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CA

Well ID	Date	Product Thickness (feet)	Volume Removed (mL)
A-MW-18	9/3/2005	0.02	100
	9/10/2005	0.02	50
	9/19/2005	0.03	50
	10/1/2005	0.03	50
	10/8/2005	0.02	50
	10/15/2005	0.02	50
	10/24/2005	0.02	50
	10/31/2005	0.02	50
	11/12/2005	Sheen	0
	3/11/2006	Sheen	25
	6/16/2006	Sheen	0
	12/18/2007	0.65	200
	12/28/2007	0.88	220
	3/13/2008	Sheen	20
A-MW-19	1/29/2004	1.75	0
	2/8/2004	0.43	200
	2/10/2004	0.7	300
	2/11/2004	0.27	100
	2/13/2004	Not Measured	0
	2/14/2004	0.6	250
	2/16/2004	0.3	100
	2/17/2004	0.25	100
	2/18/2004	0.23	100
	3/19/2004	1.51	2839
	4/30/2004	2.05	4731
	5/27/2004	2.2	4731
	6/30/2004	2.04	3785
	7/9/2004	1.1	1893
	7/23/2004	0.77	1514
	8/13/2004	1.07	1893
	9/16/2004	1.38	1893
	9/28/2004	0.94	400
	10/11/2004	0.75	450
	10/22/2004	0.53	250
	11/11/2004	0.66	450
	11/24/2004	0.78	500
	12/8/2004	0.88	500
	12/21/2004	1	600
	1/4/2005	1.05	600
	1/20/2005	0.95	500
	2/1/2005	0.65	375
	2/16/2005	0.5	300
	3/11/2005	0.35	100
	4/2/2005	0.42	250
	4/5/2005	0.04	380
	4/7/2005	0.04	380
	4/9/2005	0.04	380
	4/11/2005	0.04	380
	4/13/2005	0.04	380
	4/15/2005	0.04	380
	4/19/2005	0.04	380
	4/20/2005	0.04	380
	4/22/2005	0.04	380
	4/25/2005	0.04	380
	4/27/2005	0.04	380

TABLE 8
HISTORICAL FREE PRODUCT REMOVAL DATA
FORMER ANGELES CHEMICAL SITE
SANTA FE SPRINGS, CA

Well ID	Date	Product Thickness (feet)	Volume Removed (mL)
A-MW-19	4/29/2005	0.04	380
	5/4/2005	0.04	380
	5/6/2005	0.04	380
	5/10/2005	0.03	300
	5/13/2005	0.03	300
	5/18/2005	0.03	300
	5/21/2005	0.03	200
	5/27/2005	0.05	200
	6/3/2005	0.04	300
	6/11/2005	0.04	200
	6/18/2005	0.04	200
	6/25/2005	0.04	200
	7/2/2005	0.03	200
	7/9/2005	0.03	200
	7/16/2005	0.03	200
	7/16/2005	0.03	200
	7/23/2005	0.03	200
	7/30/2005	0.03	200
	8/6/2005	0.03	200
	8/13/2005	0.03	200
	8/20/2005	0.03	200
	8/27/2005	0.02	150
	9/3/2005	0.02	150
	9/10/2005	0.02	150
	9/19/2005	0.03	150
	10/1/2005	0.03	150
	10/8/2005	0.02	100
	10/15/2005	0.02	100
	10/24/2005	0.02	100
	10/31/2005	0.02	100
	11/12/2005	0.02	250
	12/12/2005	0.02	200
	1/12/2006	0.01	150
	2/11/2006	0.01	150
	3/11/2006	0.01	125
	4/22/2006	Sheen	100
	5/20/2006	Sheen	100
	6/16/2006	Sheen	60
	9/19/2006	0.05	40
	12/7/2006	0.01	25
	3/19/2007	0.005	20
	6/27/2007	0.0005	30
	9/26/2007	Sheen	20
	12/18/2007	Sheen	20
	3/13/2008	Sheen	5
MW-21	12/8/2004	2.98	1500
	12/13/2004	0.22	50
	12/21/2004	0.04	5
	1/4/2005	0.04	0
	2/1/2005	0.002	3

TABLE 9
DETECTED CHEMICALS AND CORRESPONDING MEDIA
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

Chemicals	Shallow Soil (0-10 feet bgs)	Shallow Soil Gas (approximately 5 feet bgs)	Shallow Soil Gas (approximately 8 feet bgs)	Shallow Soil Gas (approximately 15 feet bgs)	Shallow Soil Gas (approximately 20 feet bgs)	Shallow Groundwater (approximately 29 feet bgs)
1,1,1-Trichloroethane	X	X	X	X	X	X
1,1,2-Trichloroethane	X		X			
1,2-Dichlorobenzene	X					
1,1-Dichloroethane	X	X	X	X	X	X
1,1-Dichloroethene	X	X	X	X	X	X
1,2,4-Trimethylbenzene	X					X
1,2-Dichloroethane	X					X
1,3,5-Trimethylbenzene	X					X
2-Butanone	X					X
4-Chlorotoluene	X					
2-Methyl naphthalene	X					
4-Methyl-2-pentanone	X	X		X		X
Acetone	X	X		X		X
Benzene	X	X	X	X	X	X
bis(2-Ethylhexyl)phthalate	X					
Carbon tetrachloride	X		X		X	
Chlorobenzene	X					
Chloroethane	X	X	X	X	X	X
cis-1,2-Dichloroethene	X	X	X	X	X	X
Cymene	X					
Ethylbenzene	X	X	X		X	X
Isopropylbenzene	X					
isopropyltoluene	X					
m,p-Xylenes	X					
Methylene chloride (Dichloromethane)	X	X	X	X	X	X
Naphthalene	X					X
n-Butylbenzene	X					
n-Propylbenzene	X					X
o-Xylene	X					
p-Dioxane	X					
sec-Butylbenzene	X					
Styrene	X					
tert-Butylbenzene	X					
Tetrachloroethene	X	X	X	X	X	X
Toluene	X	X	X	X	X	X
trans-1,2-Dichloroethene		X	X	X		
Trichloroethene	X	X	X	X	X	X
Trichlorofluoromethane (CFC-11)	X	X				
Trifluorotrichloroethane (Freon 113)		X	X		X	
Trimethylbenzene	X					
Vinyl chloride	X	X	X	X	X	X
Xylenes	X	X	X	X	X	X

bgs = below ground surface
X = chemical detected above laboratory reporting limits

TABLE 10
SUMMARY OF EXPOSURE POINT CONCENTRATIONS (EPCs)
FUTURE COMMERCIAL/INDUSTRIAL SCENARIO
FORMER ANGELES CHEMICAL PLANT, 8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

	SOIL CONCENTRATION				AMBENT AIR CONCENTRATION	AMBENT AIR CONCENTRATION	SOIL GAS AND ESTIMATED INDOOR AIR CONCENTRATION								GROUNDWATER AND ESTIMATED INDOOR AIR CONCENTRATION	
Chemical Detected in Soil	Maximum Detected Concentration in Shallow Soil (mg/kg)	Shallow Soil 95%UCL Concentration (mg/kg)	Shallow Soil EPC (mg/kg)	EPC Selection (Maximum or 95%UCL)	EPC of Particulates and VOCs in Ambient Air During Construction (mg/m^3)	EPC of Particulates and VOCs in Ambient Air After Redevelopment (mg/m^3)	Maximum Soil Gas Concentration(5-foot depth) (ug/m^3)	EPC of Soil Gas (5-foot depth) VOCs in Indoor Air (mg/m^3)	Maximum Soil Gas Concentration (8-foot depth) (ug/m^3)	EPC of Soil Gas (8-foot depth) VOCs in Indoor Air (mg/m^3)	Maximum Soil Gas Concentration(15-foot depth) (ug/m^3)	EPC of Soil Gas (15-foot depth) VOCs in Indoor Air (mg/m^3)	Maximum Soil Gas Concentration(20-foot depth) (ug/m^3)	EPC of Soil Gas (20-foot depth) VOCs in Indoor Air (mg/m^3)	Maximum Groundwater Concentration (29-foot depth) (ug/l)	EPC of Groundwater (29-foot depth) VOCs in Indoor Air (mg/m^3)
1,1,1-Trichloroethane	1.90E+04	1.42E+03	1.42E+03	95%UCL	1.29E+00	3.12E-01	5.37E+06	9.83E-01	3.50E+06	4.09E-01	2.40E+06	1.52E-01	9.00E+07	5.12E+00	2.14E+03	4.70E-02
1,1,2-Trichloroethane	4.00E+00	2.31E+00	2.31E+00	95%UCL	6.80E-04	1.64E-04	-	-	7.20E+04	8.44E-03	-	-	-	-	-	-
1,1-Dichloroethane	2.20E+00	3.08E-01	3.08E-01	95%UCL	2.44E-04	5.89E-05	5.22E+05	9.16E-02	1.10E+05	1.23E-02	1.61E+06	9.75E-02	1.00E+07	5.42E-01	1.89E+04	1.30E-01
1,1-Dichloroethene	8.30E+00	2.73E-01	2.73E-01	95%UCL	4.01E-04	9.70E-05	1.96E+06	4.05E-01	1.50E+05	1.99E-02	1.24E+06	8.96E-02	9.40E+06	6.12E-01	7.46E+03	2.88E-01
1,2,4-Trichlorobenzene	6.31E+02	nc	6.31E+02	Maximum	2.98E-02	7.20E-03	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	4.74E+02	1.08E+02	1.08E+02	95%UCL	2.98E-02	2.63E-03	-	-	-	-	-	-	-	-	4.36E+03	2.63E-02
1,2-Dichlorobenzene	3.48E+00	nc	3.48E+00	Maximum	4.72E-04	1.14E-04	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	1.04E+01	3.71E-01	3.71E-01	95%UCL	1.73E-04	3.46E-05	-	-	-	-	-	-	-	-	2.50E+00	4.17E-06
1,3,5-Trimethylbenzene	1.99E+02	1.32E+01	1.32E+01	95%UCL	3.24E-03	7.83E-04	-	-	-	-	-	-	-	-	4.21E+03	1.15E-02
1,4-Dioxane	4.20E+01	5.56E+00	5.56E+00	95%UCL	5.56E+00	5.56E+00	-	-	-	-	-	-	-	-	-	-
2-Butanone	6.03E+01	7.23E+00	7.23E+00	95%UCL	6.19E-04	1.50E-04	-	-	-	-	2.49E+05	1.72E-02	-	-	9.05E+03	8.23E-04
2-Methylnaphthalene	5.40E+01	8.96E+00	8.96E+00	95%UCL	8.96E+00	8.96E+00	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	9.42E-03	7.19E-03	7.19E-03	95%UCL	2.25E-06	5.45E-07	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	1.16E+01	8.61E-01	8.61E-01	95%UCL	7.38E-05	1.78E-05	2.60E+04	4.68E-03	-	-	9.50E+04	5.91E-03	-	-	6.52E+02	1.20E-04
4-Methylphenol	1.02E+00	nc	1.02E+00	Maximum	5.00E-02	5.00E-02	-	-	-	-	-	-	-	-	-	-
Acetone	3.10E+03	2.40E+02	2.40E+02	95%UCL	4.17E-02	1.01E-02	1.15E+05	3.23E-02	-	-	8.53E+05	8.83E-02	-	-	1.72E+04	1.67E-03
Benzene	3.10E-01	2.17E-02	2.17E-02	95%UCL	1.54E-05	3.71E-06	1.12E+05	2.27E-02	1.40E+03	1.82E-04	5.00E+03	3.55E-04	3.00E+05	1.91E-02	5.06E+02	4.04E-03
bis(2-Ethylhexyl)phthalate	8.80E+00	2.59E+00	2.59E+00	95%UCL	2.59E+00	2.59E+00	-	-	-	-	-	-	-	-	-	-
TPH (C4-C12) aliphatic	3.72E+03	1.64E+03	1.64E+03	95%UCL	1.64E+03	1.64E+03	-	-	-	-	-	-	-	-	-	-
TPH (C4-C12) aromatic	3.17E+03	1.40E+03	1.40E+03	95%UCL	1.40E+03	1.40E+03	-	-	-	-	-	-	-	-	-	-
TPH (C13-C23) aliphatic	6.21E+02	9.02E+01	9.02E+01	95%UCL	9.02E+01	9.02E+01	-	-	-	-	-	-	-	-	-	-
TPH (C13-C23) aromatic	5.29E+02	7.69E+01	7.69E+01	95%UCL	7.69E+01	7.69E+01	-	-	-	-	-	-	-	-	-	-
TPH (C24-C40) aliphatic	2.92E+01	1.87E+01	1.87E+01	95%UCL	1.87E+01	1.87E+01	-	-	-	-	-	-	-	-	-	-
TPH (C24-C40) aromatic	2.48E+01	1.59E+01	1.59E+01	95%UCL	1.59E+01	2.48E+01	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	-	-	-	-	-	-	-	-	2.50E+03	2.92E-04	-	-	3.70E+06	2.10E-01	-	-
CFC113	-	-	-	-	-	-	1.10E+04	2.01E-03	4.70E+03	5.49E-04	-	-	1.50E+05	8.53E-03	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	1.68E-01	nc	1.68E-01	Maximum	2.52E-04	6.10E-05	3.60E+03	1.67E-03	1.60E+04	5.26E-03	1.90E+04	3.71E-03	4.30E+04	7.62E-03	1.37E+04	5.09E-01
cis-1,2-Dichloroethene	4.27E+01	9.86E+00	9.86E+00	95%UCL	6.46E-03	1.56E-03	1.19E+06	2.08E-01	4.10E+05	4.55E-02	5.99E+05	3.60E-02	1.50E+07	8.08E-01	2.56E+04	1.27E-01
Dichloromethane (mehtylene chloride)	7.96E+00	9.00E-01	9.00E-01	95%UCL	6.52E-04	1.58E-04	8.74E+05	1.99E-01	1.70E+05	2.51E-02	5.23E+05	4.23E-02	4.70E+06	3.42E-01	6.36E+03	2.31E-02
Ethylbenzene	2.10E+02	2.55E+01	2.55E+01	95%UCL	9.32E-03	2.25E-03	1.40E+04	2.48E-03	9.00E+04	1.02E-02	4.00E+04	2.44E-03	2.10E+06	1.15E-01	2.98E+03	2.85E-02
Isopropylbenzene	2.98E+01	1.72E+00	1.72E+00	95%UCL	9.49E-04	2.29E-04	-	-	-	-	-	-	-	-	-	-
Isopropyltoluene	2.35E+01	8.16E+00	8.16E+00	Maximum	4.51E-03	1.09E-03	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes*	1.80E+02	5.18E+01	5.18E+01	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	2.17E+02	nc	2.17E+02	Maximum	1.03E-02	2.49E-03	-	-	-	-	-	-	-	-	3.46E+03	1.64E-03
n-Butylbenzene	4.32E+01	3.48E+00	3.48E+00	95%UCL	6.08E-04	1.47E-04	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	7.37E+01	4.52E+00	4.52E+00	95%UCL	7.89E-04	1.91E-04	-	-	-	-	-	-	-	-	1.06E+03	1.10E-02
o-Xylene*	5.40E+01	7.09E+00	7.09E+00	95%UCL	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	5.50E-01	nc	5.50E-01	Maximum	5.50E-01	5.50E-01	-	-	-	-	-	-	-	-	-	-
sec-Butylbenzene	2.10E+01	nc	2.10E+01	Maximum	5.01E-03	1.21E-03	-	-	-	-	-	-	-	-	-	-
Styrene	4.00E-02	8.26E-03	8.26E-03	95%UCL	1.22E-06	2.95E-07	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	1.45E-02	nc	1.45E-02	Maximum	2.84E-06	6.87E-07	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	2.30E+03	2.32E+02	2.32E+02	95%UCL	1.83E-01	4.42E-02	2.24E+05	3.83E-02	5.40E+04	5.87E-03	6.20E+04	3.64E-03	3.10E+06	1.63E-01	1.13E+03	2.43E-02
Toluene	9.43E+02	8.15E+01	8.15E+01	95%UCL	4.03E-02	9.73E-03	3.72E+05	7.47E-02	1.30E+06	1.68E-01	5.89E+05	4.14E-02	3.30E+07	2.08E+00	1.15E+04	1.08E-01
trans-1,2-Dichloroethene	-	-	-	-	-	-	4.10E+04	6.90E-03	1.40E+03	1.50E-04	1.74E+04	1.00E-03	-	-	2.65E+01	2.91E-04
Trichloroethene	1.00E+02	8.79E+00	8.79E+00	95%UCL	5.34E-03	1.29E-03	1.10E+05	2.03E-02	1.30E+05	1.54E-02	1.64E+05	1.05E-02	2.70E+06	1.55E-01	3.49E+02	4.64E-03
Trichlorofluoromethane (CFC-11)	-	-	-	-	-	-	1.40E+03	2.81E-04	-	-	-	-	-	-	-	-
Vinyl chloride	9.80E-03	nc	9.80E-03	Maximum	2.08E-05	5.02E-06	3.25E+05	7.67E-02	7.30E+05	1.12E-01	6.20E+03	5.24E-04	2.50E+05	1.90E-02	2.65E+03	1.25E-01
Xylenes (total)	1.45E+03	1.31E+02	1.31E+02	95%UCL	4.23E-02	1.02E-02	3.20E+04	5.79E-03	3.08E+05	3.97E-02	1.35E+05	9.49E-03	9.20E+06	5.81E-01	1.11E+04	1.06E-01

nc = not calculated

TABLE 11
SUMMARY OF EXPOSURE POINT CONCENTRATIONS (EPCs)
HYPOTHETICAL FUTURE RESIDENTIAL SCENARIO
FORMER ANGELES CHEMICAL PLANT, 8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

	SOIL CONCENTRATION	AMBENT AIR CONCENTRATION	AMBENT AIR CONCENTRATION		
Chemical Detected in Soil	**Maximum Detected Concentration in Shallow Soil (mg/kg)**	**EPC of Particulates and VOCs in Ambient Air During Construction (mg/m^3)**	**EPC of Particulates and VOCs in Ambient Air After Redevelopment (mg/m^3)**	**Maximum Soil Gas Concentration (5-foot depth) (ug/m^3)**	**EPC of Soil Gas (5-foot depth) VOCs in Indoor Air (mg/m^3)**
1,1,1-Trichloroethane	1.90E+04	1.3E+00	3.2E+00	5.4E+06	2.0E+00
1,1,2-Trichloroethane	4.00E+00	6.8E-04	2.2E-04	-	-
1,1-Dichloroethane	2.20E+00	2.4E-04	3.2E-04	5.2E+05	1.8E-01
1,1-Dichloroethene	8.30E+00	4.0E-04	2.3E-03	2.0E+06	8.1E-01
1,2,4-Trichlorobenzene	6.31E+02	3.0E-02	5.6E-03	-	-
1,2,4-Trimethylbenzene	4.74E+02	0.029774107	8.9E-03	-	-
1,2-Dichlorobenzene	3.48E+00	4.7E-04	8.8E-05	-	-
1,2-Dichloroethane	1.04E+01	1.7E-04	9.0E-04	-	-
1,3,5-Trimethylbenzene	1.99E+02	3.24E-03	9.13E-03	-	-
1,4-Dioxane	4.20E+01	5.56E+00	4.20E+01	-	-
2-Butanone	6.03E+01	6.19E-04	9.63E-04	-	-
2-Methyl naphthalene	5.40E+01	8.96E+00	5.40E+01	-	-
4-Chlorotoluene	9.42E-03	2.25E-06	3.16E-03	-	-
4-Methyl-2-pentanone	1.16E+01	7.38E-05	1.85E-04	2.60E+04	9.37E-03
4-Methylphenol	1.02E+00	5.00E-02	1.02E+00	-	-
Acetone	3.10E+03	4.17E-02	1.00E-01	1.15E+05	6.46E-02
Benzene	3.10E-01	1.54E-05	4.09E-05	1.12E+05	4.54E-02
bis(2-Ethylhexyl)phthalate	8.80E+00	2.59E+00	8.80E+00	-	-
TPH (C4-C12) aliphatic	3.72E+03	1.64E+03	3.72E+03	-	-
TPH (C4-C12) aromatic	3.17E+03	1.40E+03	3.17E+03	-	-
TPH (C13-C23) aliphatic	6.21E+02	9.02E+01	6.21E+02	-	-
TPH (C13-C23) aromatic	5.29E+02	7.69E+01	5.29E+02	-	-
TPH (C24-C40) aliphatic	2.92E+01	1.87E+01	2.92E+01	-	-
TPH (C24-C40) aromatic	2.48E+01	1.59E+01	2.48E+01	-	-
Carbon tetrachloride	-	-	-	-	-
CFC113	-	-	-	1.10E+04	4.03E-03
Chlorobenzene	-	-	-	-	-
Chloroethane	1.68E-01	2.52E-04	4.71E-05	3.60E+03	3.35E-03
cis-1,2-Dichloroethene	4.27E+01	6.46E-03	5.22E-03	1.19E+06	4.16E-01
Dichloromethane (mehtylene chloride)	7.96E+00	6.52E-04	1.08E-03	8.74E+05	3.97E-01
Ethylbenzene	2.10E+02	9.32E-03	1.43E-02	1.40E+04	4.96E-03
Isopropylbenzene	2.98E+01	9.49E-04	3.07E-03	-	-
Isopropyltoluene	2.35E+01	4.51E-03	2.42E-03	-	-
m,p-Xylenes*	1.80E+02	-	-	-	-
Naphthalene	2.17E+02	1.03E-02	1.92E-03	-	-
n-Butylbenzene	4.32E+01	6.08E-04	1.41E-03	-	-
n-Propylbenzene	7.37E+01	7.89E-04	2.40E-03	-	-
o-Xylene*	5.40E+01	-	-	-	-
Phenol	5.50E-01	5.50E-01	5.50E-01	-	-
sec-Butylbenzene	2.10E+01	5.01E-03	9.34E-04	-	-

TABLE 11
SUMMARY OF EXPOSURE POINT CONCENTRATIONS (EPCs)
HYPOTHETICAL FUTURE RESIDENTIAL SCENARIO
FORMER ANGELES CHEMICAL PLANT, 8915 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

	SOIL CONCENTRATION	AMBENT AIR CONCENTRATION	AMBENT AIR CONCENTRATION		
Chemical Detected in Soil	**Maximum Detected Concentration in Shallow Soil (mg/kg)**	**EPC of Particulates and VOCs in Ambient Air During Construction (mg/m^3)**	**EPC of Particulates and VOCs in Ambient Air After Redevelopment (mg/m^3)**	**Maximum Soil Gas Concentration (5-foot depth) (ug/m^3)**	**EPC of Soil Gas (5-foot depth) VOCs in Indoor Air (mg/m^3)**
Styrene	4.00E-02	1.22E-06	1.10E-06	-	-
tert-Butylbenzene	1.45E-02	2.84E-06	5.30E-07	-	-
Tetrachloroethene	2.30E+03	1.83E-01	3.38E-01	2.24E+05	7.66E-02
Toluene	9.43E+02	4.03E-02	8.69E-02	3.72E+05	1.49E-01
trans-1,2-Dichloroethene	-	-	-	4.10E+04	1.38E-02
Trichloroethene	1.00E+02	5.34E-03	1.13E-02	1.10E+05	4.06E-02
Trichlorofluoromethane (CFC-11)	-	-	-	1.40E+03	5.62E-04
Vinyl chloride	9.80E-03	2.08E-05	3.87E-06	3.25E+05	1.53E-01
Xylenes	1.45E+03	4.23E-02	8.75E-02	3.20E+04	1.16E-02

nc = not calculated

TABLE 12
SUMMARY OF REPRESENTATIVE PHYSICAL DATA IN UPPER 29 FEET OF SOIL
FORMER ANGELES CHEMICAL, 8915 SORENSEN AVENUE
SANTA FE SRINGS, CALIFORNIA
32942-000

SAMPLE ID.	DENSITY BULK (g/cm^3)	POROSITY (2), cm^3/cm^3 TOTAL	WATER FILLED	CALCULATED AIR FILLED
Soil Layer 1 (0-16 feet bgs)				
E-1-9	1.93	0.286	0.139	0.147
E-1-14	1.97	0.258	0.128	0.130
VP-1-10	1.96	0.276	0.154	0.122
VP-1-15	1.89	0.307	0.181	0.126
VP-2-5	1.46	0.460	0.273	0.187
VP-2-10	1.69	0.374	0.130	0.244
VP-2-15	1.63	0.376	0.0560	0.320
VP-3-5	1.58	0.416	0.193	0.223
VP-3-10	1.75	0.351	0.142	0.209
VP-3-15	1.65	0.391	0.210	0.181
MW -12 (13.5-14.5)	1.74	0.371	0.285	0.0860
MW - 16 (13.5-14.5)	1.71	0.378	0.250	0.128
Average	**1.75**	**0.354**	**0.178**	**0.175**
Soil Layer 2 (16-25 feet bgs)				
E-1-19	2.03	0.233	0.0240	0.209
VP-1-19	1.85	0.333	0.0470	0.286
MW12 (21-22)	1.66	0.376	0.0430	0.333
MW12 (31-32)	1.35	0.493	0.0480	0.445
MW15 (13.5-14.5)	1.71	0.382	0.246	0.136
MW15 (23.5-24.5)	1.66	0.375	0.0770	0.298
MW16 (23.5-24.5)	1.47	0.445	0.0470	0.398
Average	**1.68**	**0.377**	**0.0760**	**0.301**
Soil Layer 3 (25-29 feet bgs)				
MW16 (28.5-29.5)	1.49	0.454	0.311	0.143
Average	**1.490**	**0.454**	**0.311**	**0.143**

Notes

bgs = below ground surface

TABLE 13
RECEPTOR EXPOSURE PARAMETERS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

EXPOSURE ASSUMPTIONS

Receptor: Onsite Commercial/Industrial Worker After Site Redevelopment (Adult)

Complete Pathways:

- Incidental ingestion of soil
- Dermal contact with soil
- Inhalation of fugitive dust (particulates) in ambient air
- Inhalation of vapors in ambient air
- Inhalation of vapors in indoor air

Parameter	Reasonable Maximum Exposure (RME)
General Parameters:	
Body Weight (BW)	Value: 70 kg Rationale: Default value; EPA 1997, 2002, 2004a; OEHHA 2005; Cal/EPA 2005; DTSC 1999, 2005
Exposure Frequency (EF)	Value: 250 days/year (50 weeks per year, 5 days per week) Rationale: Default values; DTSC 1999, 2005; EPA 1996a, b; 1997; 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005
Exposure Duration (ED)	Value: 25 years Rationale: Default values; DTSC 1999, 2005; EPA 1996a, b; 1997; 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005
Averaging Time (AT)	Value: Carcinogenic Effects: 70 years (25,550 days) Noncarcinogenic Effects: AT = Exposure duration Rationale: Default values; DTSC 1999, 2005; EPA 1996a, b; 1997; 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005
Inhalation of Particulates/VOCs in Ambient Air:	
Inhalation Rate (IR_{air})	Value: 14 m^3/day (assumes an 8-hour day) Rationale: Default value; DTSC 2005
Inhalation of VOCs in Indoor Air:	
Inhalation Rate (IR_{air})	Value: 14 m^3/day (assumes an 8-hour day) Rationale: Default value; DTSC 2005
Dermal Contact with Soil:	
Soil Adherence Factor (AF)	Value: 0.2 mg/cm^2-event Rationale: Default values, EPA 1996a, b, 2004a; Cal/EPA 2005; OEHHA 2005; DTSC, 2005
Event Frequency (EV)	Value: 1 event/day Rationale: Default value; DTSC 1999, 2005; Cal/EPA 1996, 2005; OEHHA 2005; EPA 1996a, b, 2004a, b

TABLE 13
RECEPTOR EXPOSURE PARAMETERS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

Parameter	Reasonable Maximum Exposure (RME)
Skin Surface Area (SA)	Value: 5,700 $cm^{2,}$ Rationale: Default values, DTSC, 2005
Dermal Absorption Fraction (ABS_d)	Value: Chemical-specific Rationale: EPA 2004b, DTSC 1999, OEHHA 2005; DTSC 2005
Incidental Soil Ingestion:	
Ingestion Rate (IR_{soil})	Value: 100 mg/day Rationale: Default values, DTSC 1999, 2005; EPA 1996a, b, 2004a; Cal/EPA 2005; OEHHA 2005
Relative Absorption Factor (RAF)	Value: 1.0 Assumed total dose is absorbed.

Receptor: Onsite Construction Worker During Site Redevelopment (Adult)

Complete Pathways:

- Incidental ingestion of soil
- Dermal contact with soil
- Inhalation of fugitive dust (particulates) in ambient air
- Inhalation of vapors in ambient air

Parameter	Reasonable Maximum Exposure (RME)
General Parameters:	
Body Weight (BW)	Value: 70 kg Rationale: Default value; EPA 1997, 2002, 2004a; OEHHA 2005; Cal/EPA 2005; DTSC 1999, 2005
Exposure Frequency (EF)	Value: 250 days/year (50 weeks per year, 5 days per week) Rationale: Default values; DTSC 1999, 2005; EPA 1996a, b; 1997; 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005
Exposure Duration (ED)	Value: 1 year Rationale: Professional judgment
Averaging Time (AT)	Value: Carcinogenic Effects: 70 years (25,550 days) Noncarcinogenic Effects: AT = Exposure duration Rationale: Default values; DTSC 1999, 2005; EPA 1996a, b; 1997; 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005
Inhalation of Particulates in Ambient Air:	
Inhalation Rate (IR_{air})	Value: 20 m^3/day Rationale: Default value; EPA 1997, 2002, 2004a; Cal/EPA 1996, 2005; OEHHA 2005

TABLE 13
RECEPTOR EXPOSURE PARAMETERS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

Parameter	Reasonable Maximum Exposure (RME)
Dermal Contact with Soil:	
Soil Adherence Factor (AF)	Value: 0.8 mg/cm^3 Rationale: Default value, DTSC 2005
Event Frequency (EV)	Value: 1 event/day Rationale: Default value, EPA 2002, 2004b
Skin Surface Area (SA)	Value: 5,700 cm^2 Rationale: Default value, DTSC, 2005
Dermal Absorption Fraction (ABS_d)	Value: Chemical-specific Rationale: EPA 2004b, DTSC 1999, OEHHA 2005; DTSC 2005
Incidental Soil Ingestion:	
Ingestion Rate (IR_{soil})	Value: 330 mg/day Rationale: Default value; EPA 2002; Based on 95th percentile value for adult soil intake rates and recommended screening-level value for construction workers
Relative Absorption Factor (RAF)	Value: 1.0 Rationale: Assumed total dose is absorbed

Receptor: Hypothetical Future On-Site Resident After Site Redevelopment (Child/Adult)

Complete Pathways:

- Incidental ingestion of vadose zone soil
- Dermal contact with vadose zone soil
- Inhalation of fugitive dust (particulates) in ambient air
- Inhalation of VOCs in ambient air
- Inhalation of VOCs in indoor air

PARAMETER	REASONABLE MAXIMUM EXPOSURE (RME)
General Parameters:	
Body Weight (BW)	Value: 15 kg (child/teen); 70 kg (adult) Rationale: Default value used in EPA risk assessments and derivation of cancer slope factors and unit risks, EPA 1997, 2002b; OEHHA 2005; CalEPA 2005
Exposure Frequency (EF)	Value: 24 hrs/day, 350 days/yr Rationale: DTSC 1999
Exposure Duration (ED)	Value: 6 years (Child); 24 years (Adult) Rationale: DTSC 1999

TABLE 13
RECEPTOR EXPOSURE PARAMETERS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

PARAMETER	REASONABLE MAXIMUM EXPOSURE (RME)
Averaging Time (AT)	Value: Carcinogenic Effects: 70 years (25,550 days) Noncarcinogenic Effects: AT = Exposure duration Rationale: Default value used in EPA risk assessments and derivation of cancer slope factors and unit risks, EPA 1997, 2002b, 2004b; OEHHA 2005; CalEPA 2005; DTSC 2005a
Inhalation of Particulates/VOCs and Indoor Air:	
Inhalation Rate (IR_{air})	Value: Child/teen: 10 m^3/day (24 hours) Adult: 20 m^3/day (24 hours) Rationale: Standard default inhalation rate for long-term exposures, EPA 1991, 2002a, 2004b; OEHHA 2005; CalEPA 2005; DTSC 2005a
Dermal Contact with Soil:	
Soil Adherence Factor (AF)	Value: 0.2 mg/cm^2 (Child); 0.07 mg/cm^2 (Adult) Rationale: Default value used in EPA risk assessments, EPA 1996a, b; 2002b
Event Frequency (EV)	Value: 1 event/day Rationale: EPA 2004a
Skin Surface Area (SA)	Value: 2,900 cm^2 (Child); 5,700 cm^2 (Adult) Rationale: Default value used in EPA risk assessments, EPA 1996a, b; 2002b
Dermal Absorption Fraction (ABS_d)	Value: Value: Chemical-specific Rationale: EPA 2004a, DTSC 1999, OEHHA 2005
Incidental Soil Ingestion:	
Ingestion Rate (IR_{soil})	Value: 200 mg/day (Child); 100 mg/day (Adult) Rationale: Default value used in EPA risk assessments, EPA 1996a, b; 2002b
Relative Absorption Factor (RAF)	Value: 1.0 Assumed total dose is absorbed.

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TABLE 14
SUMMARY OF TOXICITY VALUES
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

CAS No	Chemical Name	CLASS	CA Chronic RfDi (inh)	Ref.	CA Chronic RfDo (oral)	Ref.	CA Chronic RfDo (dermal)	Ref.	CA SFi (inh)	Ref.	CA SFo (oral)	Ref.	CA SFo (dermal)	Ref.
71-55-6	1,1,1-Trichloroethane (1,1,1-TCA, methyl chloroform)	VOC	2.86E-01	b,c,d	2.86E-01	a	2.8E-01	a	na	a,b	na	a,b	na	a,b
79-00-5	1,1,2 -TCA	VOC	4.0E-03	a	4.0E-03	a	4.0E-03	a	5.7E-02	b,c	7.2E-02	b	7.2E-02	b
75-34-3	1,1-Dichloroethane (1,1-DCA)	VOC	1.4E-01	a	1.0E-01	a	1.0E-01	a	5.7E-03	a,b,c	5.7E-03	a,b	5.7E-03	a,b
75-35-4	1,1-Dichloroethylene (1,1-DCE)	VOC	2.0E-02	c,d	5.0E-02	a	5.0E-02	a	na	a	na	a	na	a
95-63-6	1,2,4-Trimethylbenzene	VOC	1.7E-03	a	5.0E-02	a	5.0E-02	a	na	a,b	na	b	na	b
541-73-1	1,2-Dichlorobenzene	VOC	1.0E-03	a	1.0E-02	a	1.0E-02	a	na	a,b	3.6E-03	b	na	a,b
107-06-2	1,2-Dichloroethane (EDC)	VOC	1.14E-01	c,d	2.0E-02	a	2.0E-02	a	7.2E-02	b	4.7E-02	b	4.7E-02	b
108-67-8	1,3,5-Trimethylbenzene	VOC	1.70E-03	a	5.0E-02	a	5.0E-02	a	na	a,b	na	b	na	b
78-93-3	2-Butanone	VOC	2.86E-01	a,c	6.0E-01	a	6.0E-01	a	na	a,b	na	a,b	na	a,b
591-78-6	2-Hexanone (as MIBK)	VOC	8.6E-01	a	8.0E-02	a	8.0E-02	a	na	a,b	na	a,b	na	a,b
91-57-6	2-Methylnaphthalene (as Pyrene)	PAH	3.0E-02	a	3.0E-02	a	3.0E-02	a	na	a,b	na	a,b	na	a,b
106-43-4	4-Chlorotoluene	VOC	2.0E-02	a	2.0E-02	a	2.0E-02	a	na	a,b	na	a,b	na	a,b
108-10-1	4-Methyl-2-pentanone (MIBK)	VOC	8.6E-01	a	8.0E-02	a	8.0E-02	a	na	a,b	na	a,b	na	a,b
67-64-1	Acetone	VOC	9.0E-01	a	9.0E-01	a	9.0E-01	a	na	a,b	na	a,b	na	a,b
71-43-2	Benzene	VOC	1.71E-02	b,c,d	4.0E-03	a	4.0E-03	a	1.0E-01	b,c	1.0E-01	b	1.0E-01	b
117-81-7	Bis(2-ethylhexyl)phthalate	SVOC	2.0E-02	c	2.0E-02	a	2.0E-02	a	8.4E-03	b,c	3.0E-03	b,c	3.0E-03	b
56-23-5	Carbon tetrachloride	VOC	1.14E-02	b,c,d	7.0E-04	a	7.0E-04	a	1.5E-01	b,c	1.5E-01	b	1.5E-01	b
108-90-7	Chlorobenzene	VOC	2.86E-01	b,c,d	2.0E-02	c	2.0E-02	c	na	a,b	na	a,b	na	a,b
75-00-3	Chloroethane (ethyl chloride)	VOC	8.57E+00	b,c,d	4.0E-01	a	4.0E-01	a	2.9E-03	a	2.9E-03	a	2.9E-03	a
156-59-2	cis-1,2-dichloroethene	VOC	2.3E-01	a	1.00E-01	a	1.00E-01	a	na	a,b	na	a,b	na	a,b
99-87-6	Cymene (surr=isopropylbenzene)	VOC	1.1E-01	a	1.0E-01	a	1.0E-01	a	na	a,b	na	a,b	na	a,b
75-71-8	Dichlorodifluoromethane	VOC	5.7E-02	a	2.0E-01	a	2.0E-01	a	na	a,b	na	a,b	na	a,b
75-09-2	Dichloromethane (methylene chloride)	VOC	1.1E-01	b,c,d	6.0E-02	a	6.0E-02	a	3.5E-03	b,c	1.4E-02	b	1.4E-02	b
100-41-4	Ethylbenzene	VOC	5.71E-01	c,d	1.0E-01	a	1.0E-01	a	na	a,b,c	na	a,b,c	na	a,b,c
1634-04-4	MTBE	VOC	2.29E+00	c,d	8.6E-01	a	8.6E-01	a	9.1E-04	b	1.8E-03	b	1.8E-03	b
91-20-3	Naphthalene	PAH	2.57E-03	b,c,d	2.0E-02	a	2.0E-02	a	1.2E-01	a,b	1.2E-01	a,b	1.2E-01	a,b
104-51-8	n-Butylbenzene	VOC	4.00E-02	b	4.0E-02	a	4.0E-02	a	na	a,b	na	a,b	na	a,b
103-65-1	n-Propylbenzene	VOC	4.0E-02	a	4.0E-02	a	4E-02	a	na	a,b	na	a,b	na	a,b
123-91-1	p-Dioxane	SVOC	8.6E-01	b,c,d	na	a,b,c	na	a,b,c	2.7E-02	b,c	2.7E-02	b	2.7E-02	b
135-98-8	sec-Butylbenzene	VOC	4.0E-02	a	4.0E-02	a	4.0E-02	a	na	a,b	na	a,b	na	a,b
100-42-5	Styrene	VOC	2.57E-01	b,c,d	2.0E-01	a	2.0E-01	a	na	a,b	na	a,b	na	a,b
98-06-6	tert-butylbenzene	VOC	4.0E-02	b	4.0E-02	a	4.0E-02	a	na	a,b	na	a,b	na	a,b
127-18-4	Tetrachloroethylene (PCE)	VOC	1.0E-02	c,d	1.0E-02	a	1.0E-02	a	2.1E-02		5.4E-01	b	5.4E-01	b
108-88-3	Toluene	VOC	8.57E-02	b,c,d	2.0E-01	a	2.0E-01	a	na	a,b	na	a,b	na	a,b
156-60-5	trans-1,2-Dichloroethylene (trans-1,2-DCE)	VOC	2.0E-02	a	2.0E-02	a	2.0E-02	a	na	a,b	na	a,b	na	a,b
79-01-6	Trichloroethlyene (TCE)	VOC	1.7E-01	b	3.0E-04	a	3.0E-04	a	7.0E-03	b	1.3E-02	b	1.3E-02	b

75-69-4	Trichlorofluoromethane (Freon 11)	VOC	2.0E-01	a,c	3.0E-01	a	3.0E-01	a	na	a,b	na	a,b	na	a,b
75-01-4	Vinyl chloride	VOC	7.43E-03	c	3.0E-03	a	3.0E-03	a	2.7E-01	b,c	2.7E-01	b	2.7E-01	b
1330-20-7	Xylenes	VOC	2.00E-01	c,d	2.0E-01	a	2.0E-01	a	na	a,b	na	a,b	na	a,b

References:

a EPA Region 9, Preliminary Remediation Goals (PRGs), October 2004.
b Cal-EPA Office of Environmental Health Hazard Assessment (OEHHA), Toxicity Criteria Database and 10 August 2005 California Cancer Potency Values, http://www.oehha.ca.gov/risk/chemicalDB/index.asp
c Cal-EPA, Air Resources Board (ARB), Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values, 25 April 2005, http://www.arb.ca.gov/toxics/healthval/healthval.htm
d Cal-EPA Office of Environmental Health Hazard Assessment (OEHHA), Chronic Reference Exposure Levels (RELs) for Airborne Toxicants, February 2005, http://www.oehha.org/air/chronic_rels/AllChrels.html

* PCBs - The low and high risk Aroclor slope factors are not listed on the OEHHA Database and are from the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values

TABLE 15
SUMMARY OF RISK ASSESSMENT RESULTS
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

RECEPTOR	PATHWAY	ILCR	HI
Future On-site Construction Worker	Soil Ingestion and Dermal Contact	2×10^{-5}	9.0
	Inhalation of Particulates (non-volatiles) in Ambient Air	6×10^{-5}	0.20
	Inhalation of Volatiles in Ambient Air	1×10^{-5}	15
	Total	$\mathbf{9 \times 10^{-5}}$	**24**
Future On-ste Commercial/Industrial Worker	Soil Ingestion and Dermal Contact	1×10^{-4}	1.2
	Inhalation of Particulates (non-volatiles) in Ambient Air	6×10^{-12}	0.000060
	Inhalation of Volatiles in Ambient Air	6×10^{-5}	2.2
	Inhalation of Volatiles in Indoor Air (from soil gas)	4×10^{-3}	32
	Total	$\mathbf{4 \times 10^{-3}}$	**35**
Hypothetical Future On-site Resident	Soil Ingestion and Dermal Contact	3×10^{-3}	9.4
	Inhalation of Particulates (non-volatiles) in Ambient Air	8×10^{-12}	0.000061
	Inhalation of Volatiles in Ambient Air	1×10^{-3}	42
	Inhalation of Volatiles in Indoor Air (from soil gas)	2×10^{-2}	298
	Total	$\mathbf{3 \times 10^{-2}}$	**349**

ILCR = Incremental Lifetime Cancer Risk
HI = Hazard Index

TABLE 16
ESTIMATED RISKS ASSUMING VAPOR INTRUSION ASSOCIATED WITH VOLATILIZATION OF VOLATILE ORGANIC COMPOUNDS FROM GROUNDWATER
FORMER ANGELES CHEMICAL PLANT
SANTA FE SPRINGS, CALIFORNIA

RECEPTOR	PATHWAY	ILCR	HI
Future On-site Commercial/Industrial Worker	Inhalation of Volatiles in Indoor Air (groundwater)	2.E-03	10
Hypothetical Future On-site Resident	Inhalation of Volatiles in Indoor Air (groundwater)	1.E-02	94

ILCR = Incremental Lifetime Cancer Risk
HI = Hazard Index