TECHNICAL REPORT AND WORK PLAN

Hollywood Park Racetrack and Casino
1050 South Prairie Avenue
Inglewood, California

23 April 2008

Prepared for:

Hollywood Park Land Company, LLC

(EKI A50015.01)

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23 April 2008

Ms. Thizar Tintut-Williams
State of California Regional Water Quality
Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Technical Report and Work Plan
Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue,
Inglewood, California, SLIC Number 1207
(EKI A50015.01)

Dear Ms. Tintut-Williams:

Erler & Kalinowski, Inc. ("EKI") is pleased to submit the attached *Technical Report and Work Plan* to the California Regional Water Quality Control Board, Los Angeles Region ("RWQCB"), on behalf of Hollywood Park Land Company, LLC ("HPLC"), for the Hollywood Park Racetrack and Casino property located at 1050 South Prairie Avenue in Inglewood, California (the "Property").

On 21 December 2007, RWQCB issued a letter to HPLC providing comments regarding the *Property-Wide Subsurface Investigation Report and Soil Vapor Extraction Work Plan for Former Dry Cleaning Area, Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California*, dated 30 October 2006 ("Data Summary Report"). The Data Summary Report was prepared by EKI on behalf of HPLC to summarize screening-level subsurface investigations conducted as part of environmental due diligence activities for the Property. In its 21 December 2007 letter, RWQCB requested that HPLC respond by submitting a technical report to RWQCB by 15 March 2008. In response to this request, EKI began gathering additional technical literature and reference information regarding regional and local hydrogeology in the vicinity of the Property, obtaining available information from regulatory agency files regarding groundwater conditions at sites near the Property, and preparing the requested technical report on behalf of HPLC. In order to complete the document searches and to evaluate the information obtained, HPLC requested an extension of the submittal date for the technical report from 15 March 2008 to 30 April 2008, which was granted by the RWQCB in a letter dated 25 March 2008.

On behalf of HPLC, EKI is submitting the attached Technical Report and Work Plan before 30 April 2008. HPLC requests your review and approval of this Technical Report and Work Plan by 1 June 2008, so that timely implementation of the proposed additional environmental sampling can proceed.

If you have any questions, please contact me at (626) 432-5900, extension 201.

Very truly yours,

ERLER & KALINOWSKI, INC.

Jami Striegel Orloff

REGISTERED PROFESSIONAL ENGINEER
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Jami A. Striegel Orloff, P.E.
Project Manager

cc: Mr. Douglas M. Moreland (HPLC, c/o Wilson Meany Sullivan, LP)

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ACRONYMS AND ABBREVIATIONS

ASTM	American Society for Testing and Materials
bgs	below ground surface
CalEPA	California Environmental Protection Agency
Calscience	Calscience Environmental Laboratories, Inc.
CDPH	California Department of Public Health
Central Basin	Central Groundwater Sub-basin, DWR Basin 4-11.04
CEQA	California Environmental Quality Act
CHHSLs	California Human Health Screening Levels
CHRB	California Horse Racing Board
COPCs	chemicals of potential concern
Data Summary Report	*Property Wide Subsurface Investigation Report and Soil Vapor Extraction Work Plan for Former Dry Cleaning Area, Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California,* Erler & Kalinowski, Inc., 30 October 2006, (EKI, 2006b)
DDD	4,4'-dichlorodiphenyldichloroethene
DDT	4,4'-dichlorodiphenyltrichloroethene
DGBP	Dominguez Gap Barrier Project
DO	dissolved oxygen
DOGGR	California Department of Conservation, Division of Oil, Gas, and Geothermal Resources
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	environmental impact report
EKI	Erler & Kalinowski, Inc.
ESA	environmental site assessment
Gillibrand	P.W. Gillibrand Co., Inc.
HPLC	Hollywood Park Land Company, LLC
LACDPH	County of Los Angeles Department of Public Health
LACDPW	County of Los Angeles Department of Public Works
LAUSD	Los Angeles Unified School District
Los Angeles Basin	Coastal Plain of Los Angeles Basin
Main Track	main horse racetrack at the Property
MCL	maximum contaminant level
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mL	milliliter
mL/min	milliliter per minute

ACRONYMS AND ABBREVIATIONS

MOA	*Memorandum of Agreement Between the Department of Toxic Substances Control and the State Water Resources Control Board and the Regional Water Quality Control Boards and the California Environmental Protection Agency for the Oversight and Investigation and Cleanup Activities of Brownfields Sites*, dated 1 March 2005 (DTSC, 2005a)
MSDS	material safety data sheet
msl	mean sea level
N	nitrogen
NIU	Newport-Inglewood Uplift
NPDES	National Pollutant Discharge Elimination System
OEHHA	California Environmental Protection Agency Office of Environmental Health Hazard Assessment
OVM	organic vapor meter
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PRG	preliminary remediation goal
Property	Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue in Inglewood, California
PVC	polyvinyl chloride
ROS	regression on ordered statistics
RWQCB	California Regional Water Quality Control Board, Los Angeles Region
SMP	*Soil Management Plan, Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California*, Erler & Kalinowski, Inc., 3 July 2007 (EKI, 2007)
SOP	standard operating procedure
SP	spontaneous potential
SVE	soil vapor extraction
TBA	tertiary butyl alcohol
TPH	total petroleum hydrocarbons
TPH-g	gasoline-range total petroleum hydrocarbons
TPH-d	diesel-range total petroleum hydrocarbons
TPH-mo	motor oil-range total petroleum hydrocarbons
Training Track	horse training or practice track at the Property
USA	Underground Services Alert, or "Dig Alert"
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USTs	underground storage tanks
UTL	upper tolerance limit
VOA	volatile organics analysis

ACRONYMS AND ABBREVIATIONS

VOC	volatile organic compound
West Coast Basin	West Coast Groundwater Sub-basin, DWR Basin 4-11.03
WCBBP	West Coast Basin Barrier Project
WRDSC	Water Replenishment District of Southern California

1. INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") has prepared this *Technical Report and Work Plan* on behalf of Hollywood Park Land Company, LLC ("HPLC") for the Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue in Inglewood, California (the "Property"), in response to a request by the California Regional Water Quality Control Board, Los Angeles Region ("RWQCB"). Since HPLC's purchase of the Property in 2005, HPLC has continued the commercial horse racing facility and casino operations on the Property. In July 2006, HPLC began working with the RWQCB to review the environmental conditions at the Property (1) for its continued use as a commercial horse racing facility and casino, and (2) to develop a strategy for addressing environmental concerns during potential future redevelopment of the Property. In July 2006, HPLC and RWQCB staff agreed to implement a voluntary "two track" process for the Property. First, RWQCB staff would review and address certain environmental conditions on the Property consistent with continuation of the horse racing and casino commercial operations, i.e., "Track 1", and, second, if future redevelopment of the Property were to proceed, to review and address environmental conditions during the overall redevelopment process in the context of the planned future land uses, i.e., "Track 2". At this time, future redevelopment of the Property by HPLC remains uncertain; therefore, the Property currently remains on Track 1.

1.1 Background

The Property was purchased by HPLC in September 2005. As part of environmental due diligence by HPLC, EKI performed a general review of environmental documents, available records regarding history and use of the Property, and a recent Phase I Environmental Site Assessment ("ESA") report prepared by ENVIRON, dated 11 April 2005 (ENVIRON, 2005a). In June and July 2005, EKI conducted focused screening-level subsurface investigations at the Property in areas selected for additional investigation and evaluation based on the information reviewed. The objectives of the screening-level investigations were to evaluate subsurface environmental conditions and to screen for the presence of chemicals of potential concern ("COPCs") in soil, soil gas, and groundwater in selected areas on the Property identified during the Phase I ESA process.

On behalf of HPLC, EKI submitted to the RWQCB an *Application for Oversight Agency Selection*, dated 21 July 2006 (EKI, 2006a) seeking designation of an environmental regulatory agency to provide oversight of soil management and redevelopment of the Property in accordance with the *Memorandum of Agreement Between the Department of Toxic Substances Control and the State Water Resources Control Board and the Regional Water Quality Control Boards and the California Environmental Protection Agency for the Oversight and Investigation and Cleanup Activities of Brownfields Sites*, dated 1 March 2005 ("MOA"; DTSC, 2005a). The RWQCB was selected, in accordance with the established MOA procedures, as the environmental regulatory oversight agency for the Property's planned development Project (RWQCB, 2006).

1.1.1 Environmental Planning and Investigations under Track 1

On behalf of HPLC, and for purposes of continued commercial operations on Track 1, EKI submitted to the RWQCB the results of the screening-level subsurface environmental investigations, conducted by EKI and others during 2005 and 2006, in a data summary report prepared by EKI, dated 30 October 2006 (EKI, 2006b; the "Data Summary Report"). Based on these 2005 screening-level subsurface investigations, residual chemical concentrations were detected in soil and soil gas in some locations on the Property, apparently resulting from historic oil field operations and ancillary uses of the property supporting the commercial horse racing facility and casino, e.g., related to vehicle maintenance and a former dry cleaning operation. Residual, low concentrations of chemicals were detected in groundwater; however, the chemicals detected and the concentrations at which they were detected are (1) consistent with regional groundwater quality in the vicinity of the Property, or (2) appear to be associated with confirmed releases on other nearby sites currently being monitored, or previously closed, by the RWQCB and from which those chemicals have migrated onto the Property, as discussed in this report.

The Data Summary Report included a work plan for implementation of soil vapor extraction ("SVE") in one focused area of the Property where dry cleaning operations were conducted by a previous owner of the Property. The RWQCB issued a letter on 8 May 2007, approving SVE remediation of this area (RWQCB, 2007a). HPLC subsequently installed an SVE system in this area that is currently operating, and HPLC will submit quarterly progress reports of SVE operation to the RWQCB during 2008.

1.1.2 Environmental Planning and Investigations under Track 2

On behalf of HPLC, as part of planning and in preparation for potential future redevelopment of the Property, i.e., Track 2, EKI prepared a *Soil Management Plan* ("SMP") to describe procedures and protocols for environmental risk management that would occur during planned redevelopment activities on the Property (EKI, 2007). The SMP summarized the known environmental conditions on the Property and developed Property-Specific Criteria for soil and soil gas for potential future land uses, including residential redevelopment. These screening criteria were applied to Property areas where soil and soil gas data had been collected, and soil and soil gas in certain areas were determined to be consistent with the residential use screening criteria and to need no additional investigations. The SMP also identified recommended areas to be addressed prior to and during future property grading following demolition of existing structures. The planned property redevelopment and preliminary grading plan was outlined in the SMP, with discussion of specific areas to be addressed prior to, or during, grading. General soil management procedures and construction risk management measures were also described in the SMP to reduce risk to human health and the environment during and after construction. The SMP described planned future, contingent response actions for soil, if identified, in areas containing COPCs above Property-Specific Criteria, in the event that Property redevelopment were to proceed.

Recently, RWQCB staff provided comments regarding the 2006 Data Summary Report in a letter, dated 21 December 2007, and requested submittal of a technical report by HPLC by 15 March 2008 (RWQCB, 2007b). A copy of this letter from the RWQCB is provided in Appendix A. HPLC sought and obtained an extension of this deadline to 30 April 2008. EKI conducted additional technical research and analysis regarding environmental conditions on and near the Property and has prepared this *Technical Report and Work Plan* on behalf of HPLC, to summarize the findings of this additional work conducted in response to RWQCB's comments.

This report is organized as follows:

- Section 1 – Introduction
- Section 2 – Evaluation of Regional and Local Hydrogeology and Groundwater Quality
- Section 3 – Evaluation of Naturally-Occurring Local Background Levels of Arsenic in Soil
- Section 4 – Evaluation of Fill Soil on the Property
- Section 5 – Characterization of Environmental Conditions at Specific Areas
- Section 6 – Composite Soil Sampling during Screening-Level Subsurface Investigations
- Section 7 – Conclusions and Recommendations
- Section 8 – References

1.2 Property Setting

The Property area is approximately 238 acres and is currently occupied by the actively operating commercial operation, the Hollywood Park Racetrack and Casino. The location of the Property is shown on Figure 1. Existing facilities on the Property include a main horse racetrack (referred to herein as the "Main Track"), Grandstand Building and clubhouse, Pavilion/Casino Building, horse training or practice track (referred to herein as the "Training Track"), horse stable area, equine hospital, track and vehicle maintenance facilities, and associated paved parking and landscaped areas. Additional information regarding these areas is provided in the Data Summary Report (EKI, 2006b). The Property is currently owned by HPLC.

The Property was developed as a horse racetrack facility between 1930 and 1938. Prior to 1938, the western portion of the Property was used for agricultural and residential purposes and unpaved rural roads crossing the Property, apparent row crops, fields, and small structures are visible on historical aerial photos and topographic maps for this time period (ENVIRON, 2005a). Copies of historical aerial photographs and topographic maps for the Property are provided in Appendix B.

The northern and eastern portions of the Property are located within the boundary of the former Potrero Oil Field, as defined by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR"; DOGGR, 2003). Localized areas within the eastern portion of the Property appeared to be in oil field use prior to 1938, based on the review of a 1928 aerial photograph. Historically, attempts were made to drill six oil and gas wells on the Property. Three abandoned former oil wells and other oil field-related facilities were historically located on the Property at locations within the boundary of the former Potrero Oil Field, and three dry holes were drilled and then abandoned at other locations on the Property, outside the boundary of the former Potrero Oil Field (DOGGR, 2003). Additional information regarding these former oil wells is provided in the Data Summary Report and SMP (EKI, 2006b; EKI, 2007).

The Property is currently bounded to the north by paved parking areas and the former Texaco (now Chevron) Cypress Fee site. The former Cypress Fee site included an oil field and gasoline manufacturing plant and has recently been redeveloped as the Renaissance residential community by Watt Communities. The Property is bounded to the east by older single family residential housing and a recently developed retail shopping center; to the south by West Century Boulevard and mixed commercial uses beyond West Century Boulevard; and to the west by South Prairie Avenue and mixed older residential and commercial uses beyond South Prairie Avenue.

1.3 Current Plans for Property and Response to RWQCB Comments

In July 2006, following HPLC's purchase of the Property, HPLC and RWQCB staff agreed to implement a voluntary "two track" process for the Property intended to achieve the following:

- Track 1. First, HPLC requested RWQCB review of conditions in the Former Dry Cleaning Area, because HPLC had continued the ongoing commercial horse racetrack and casino operations on the Property, following its purchase of the Property in September 2005, and based on the results of the screening-level subsurface environmental investigations conducted by EKI and others during environmental due diligence in 2005, the Former Dry Cleaning Area was identified as the only area of the Property considered to have a release of COPCs to soil and soil gas that potentially could impact the existing and continued commercial land use of the Property. These findings and HPLC's plans associated with this "commercial track" for the Property were summarized in the Data Summary Report (EKI, 2006b).

- Track 2. Second, HPLC notified the RWQCB of its plans for potential future redevelopment of the Property, and worked with RWQCB staff to establish a preliminary plan for implementing management of environmental conditions during the overall potential redevelopment process in the context of the planned future land uses for the Property, if and when that occurred. The process discussed with RWQCB and HPLC's plans associated with this potential future "redevelopment track" for the Property were summarized in the SMP (EKI, 2007).

HPLC notes that the comments provided by RWQCB staff in the 21 December 2007 letter (see Appendix A), which were prepared in response to the Data Summary Report, appear to be related to a presumption of future redevelopment and residential use of the Property, and which would not be consistent with the "commercial track", i.e., Track 1, identified above. Although HPLC is currently working through the California Environmental Quality Act ("CEQA") process and the redevelopment planning process with the City of Inglewood, the draft environmental impact report ("EIR") has not yet been finalized and circulated, and HPLC has not gone through the formal entitlement approval process. Therefore, HPLC is currently uncertain whether future redevelopment of the Property will proceed.

As discussed with RWQCB staff, the Former Dry Cleaning Area was identified as the sole area warranting immediate attention, and it is currently being remediated by an SVE system installed in accordance with a RWQCB-approved work plan (RWQCB, 2007a). Therefore, HPLC requests that RWQCB staff focus on current commercial use of the Property, consistent with the Track 1 for the Property described above, while reviewing this technical report responding to RWQCB's 21 December 2007 letter. HPLC will arrange a meeting with RWQCB staff, at its convenience, to discuss the new information presented herein, if needed. HPLC requests your review and approval of this Technical Report and Work Plan by 1 June 2008, so that timely implementation of the proposed additional environmental sampling can proceed.

HPLC also requests the opportunity to meet with RWQCB staff, in the future, to discuss any further actions or reports by HPLC that may be appropriate under Track 2, when the draft EIR is finalized and ready for circulation and HPLC has proceeded with the formal entitlement approval process, thereby confirming that redevelopment of the Property for mixed and residential land use will likely proceed.

2. EVALUATION OF REGIONAL AND LOCAL HYDROGEOLOGY AND GROUNDWATER QUALITY

In its 21 December 2007 letter, RWQCB staff requested submittal of a technical report in response to its comments regarding the Data Summary Report (EKI, 2006b), which summarized environmental conditions identified on the Property based on subsurface investigations performed during environmental due diligence of the Property. The RWQCB comment letter is provided in Appendix A.

This section provides responses to RWQCB Comment Nos. 2, 3, and 8 regarding groundwater quality and groundwater flow directions at the Property location. EKI determined that additional information should be gathered regarding regional and local hydrogeology and groundwater conditions in the vicinity of the Property to respond to the RWQCB staff comments regarding groundwater. This section summarizes new information gathered by EKI in response to RWQCB's request and provides an evaluation and clarifications regarding regional hydrogeology and groundwater quality in the general area of the West Coast Basin, where the Property is located, followed by focused evaluations of local hydrogeology and groundwater quality at the Property location. A work plan for installation of groundwater monitoring wells on the Property is presented in Section 2.6.

2.1 Regional Hydrogeology

EKI gathered additional technical information regarding the regional hydrogeology in the vicinity of the Property and evaluated available Property-specific information in the context of the anticipated regional groundwater conditions. EKI's observations regarding regional hydrogeology are summarized below.

2.1.1 West Coast Basin

The Property is located within, and near the eastern edge of, the West Coast Groundwater Sub-basin, identified as California Department of Water Resources ("DWR") Basin 4-11.03 or the "West Coast Basin" (DWR, 2003), which is within the larger Coastal Plain of Los Angeles Basin ("Los Angeles Basin"). The West Coast Basin, shown on Figure C-1 in Appendix C, is bounded by the following (DWR, 2003):

- the Ballona Escarpment on the north, which is an abandoned channel of the Los Angeles River;
- the Newport-Inglewood Uplift ("NIU") and associated fault zone on the east, which separates the West Coast Basin from the Central Groundwater Sub-basin (DWR Basin 4-11.04; "Central Basin"); and
- the Pacific Ocean and consolidated bedrock of the Palos Verdes Hills on the west and south.

2.1.2 Principle Aquifer Systems

The geology and hydrogeology of the Los Angeles area in general and of the West Coast and Central Basins in particular have been studied extensively by, among others, Poland et al. (1956; 1959), Yerkes et al. (1965), DWR (1961), and Reichard et al. (2003). The principle strata of hydrogeologic interest in the Los Angeles Basin include the following, with increasing depth (Reichard et al., 2003):

- Holocene-aged "Recent" deposits including dune sands,
- Upper Pleistocene Lakewood Formation,
- Lower Pleistocene San Pedro Formation, and
- Upper Pliocene Pico Formation, which is considered less transmissive than the overlying units.

The hydrostratigraphy of the West Coast and Central Basins consists of some eleven individual aquifer zones, which have been grouped into three or four aquifer systems by various investigators. For example, on the basis of "unconformities, lithology, depositional characteristics, geochemistry, and vertical water-level differences," Reichard et al. (2003) grouped the aquifers into the following four aquifer systems, with increasing depth:

- the Recent,
- the Lakewood,
- the Upper San Pedro, and
- the Lower San Pedro.

Geologic maps of the region show that the Recent deposits are not present in the vicinity of the Property (Jennings, 1962; CGS, 2003), and that the Lakewood Formation is the surficial, first unit present below the Property. For this reason, the discussions below focus on the Lakewood Formation, and the Recent aquifer system is not discussed further.

The Lakewood aquifer system includes, with increasing depth, the Exposition, Artesia, Gardena, and Gage aquifers. The sediments that make up the Lakewood aquifers are unconsolidated to semi-consolidated deposits consisting of a mixture of sand, silty sands, sandy silts, and sands with some gravel towards the base. The Exposition and Artesia aquifers are contemporaneous and fluvial in origin. The Gage and Gardena aquifers are contemporaneous deposits of fluvial to shallow water origin. Between the individual aquifers, lower permeability aquicludes exist (Reichard et al., 2003). The thickness for the entire Lakewood aquifer system ranges between 150 and 400 feet (Reichard et al., 2003).

In the vicinity of the Property, the stratigraphically higher Exposition and Artesia aquifers are reported to be absent (DWR, 1961). Collectively, in the vicinity of the Property, the Gardena and Gage aquifers extend from the ground surface to approximately 150 to 250 feet below ground surface ("bgs"). Ground surface elevations at the Property generally range from approximately 90 to 150 feet above mean sea level ("+90 to +150 feet msl"). Therefore, the elevation of the base of these aquifers is expected to be approximately 50 to 100 feet below mean sea level ("-50 to -100 feet msl") at the Property location. During EKI's preliminary groundwater investigations in 2005, boreholes PS-GW-1 through PS-GW-6 were advanced to depths ranging from approximately 85 feet bgs to 181 feet bgs (i.e., approximately -31 feet msl to +6 feet msl), which is within the anticipated depth of the Gardena and Gage aquifers within the Lakewood aquifer system in the vicinity of the Property. The strata encountered in EKI's boreholes PS-GW-1 through PS-GW-6 are consistent with those of the Gardena and Gage aquifers. In 2005, groundwater was observed in EKI boreholes PS-GW-1 through PS-GW-6 at elevations between approximately -23 feet msl and +18 feet msl. Historical groundwater elevations as observed in the monitoring wells associated with the former Cypress Fee site, between August 1992 and December 2007, including wells located on the Property, have ranged from approximately -19 feet msl to -49 feet msl (Arcadis BBL, 2008).[1] These groundwater elevations are also believed to be within the Lakewood aquifer system.

The San Pedro Formation unconformably underlies the Lakewood Formation in most of the Los Angeles Basin. The boundary between the San Pedro Formation and the overlying Lakewood Formation is identified by a change in the character of geophysical logs, namely gamma, resistivity, and spontaneous potential ("SP") logs (Reichard et al., 2003).

The Upper San Pedro aquifer system is comprised of the following aquifers, with increasing depth:

- the Hollydale,
- Jefferson,
- Lynwood, and
- Silverado.

The Lower San Pedro Aquifer system includes the Sunnyside aquifer. As in the Lakewood aquifer system, the aquifers of the San Pedro aquifer system are separated by aquicludes (Reichard et al., 2003).

The Silverado aquifer is the most productive of the aquifers in the San Pedro Formation and in the West Coast Basin as a whole, reportedly providing 80 to 90 percent of the total water extracted from the basin annually (DWR, 2003). In the vicinity of the Property, the Silverado and Sunnyside aquifers occur at a minimum depth of roughly 250 feet below ground surface (i.e., approximately -100 to -150 feet msl).

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[1] The historical high groundwater elevation of -19.14 feet msl was measured in former Cypress Fee monitoring well MW-5 on 18 September 1995, and the historical low elevation of -48.79 feet msl was measured in this same well, MW-5, during two consecutive events on 11 December 1996 and 13 March 1997 (Arcadis BBL, 2008). This fluctuation may be the result of groundwater extraction that occurred between 1994 and 1998 as part of remedial efforts associated with the Cypress Fee plume (Hart Crowser, 2003b).

The San Pedro aquifer system is relevant locally only in that intensive, regional groundwater extraction from the San Pedro aquifer system controls regional groundwater gradients and, therefore, likely impacts regional flow directions in the shallower Lakewood aquifer system in the vicinity of the Property.

2.1.3 Newport-Inglewood Uplift

The primary structural feature in the region is the NIU, a northwest-trending zone of folding and faulting extending from Beverly Hills in the north to Newport Beach in the south, and offshore to the south at least 45 more miles (Reichard et al., 2003). The NIU separates the West Coast Basin from the Central Basin to the east, and its associated structures "in some cases exert considerable barrier influence upon the movement of subsurface water" (DWR, 1961). The Water Replenishment District of Southern California ("WRDSC") and other local water resource investigators have supported the finding that these faults act to restrict groundwater flow (e.g., Reichard et al., 2003; WRDSC, 2007). Another major fault/ fault zone, the Charnock fault, runs through the West Coast Basin approximately three miles west of and roughly parallel to the NIU. Fault zones in the vicinity of the Property are shown on Figure C-2 in Appendix C, based on DWR (1991) and geotechnical evaluations of the Property.

Locally, the NIU is expressed as the Rosecrans Hills topographic ridge and includes the Potrero fault, which crosses the northeastern portion of the Property, and another parallel fault trace (referred to variously as the Townsite fault or the Inglewood fault) that may cross the southwestern portion of the Property. Geotechnical engineers have assessed the significance of the Potrero fault and the Inglewood (Townsite) fault in terms of seismic risk and concluded that only the Potrero fault is considered an active fault, based on seismic and geologic evaluations since 1976 (Geomatrix, 2005; Geomatrix 2007). However, as discussed further below, both faults likely restrict groundwater flow regionally and locally at the Property.

2.1.4 Regional Groundwater Recharge and Discharge

Regionally, the Central Basin receives recharge water from infiltration along surface water channels (where they are unlined), runoff from upland areas to the east and north, and most importantly from spreading basins along the San Gabriel River and Rio Hondo in the Montebello Forebay area. Groundwater recharge to the West Coast Basin occurs by flow across the NIU from the Central Basin, by injection of imported and recycled water as part of the West Coast Basin Barrier Project ("WCBBP") and the Dominguez Gap Barrier Project ("DGBP"), and by return flow from irrigation and direct infiltration of rainfall (Land et al., 2004b). Groundwater discharge from the West Coast Basin reportedly currently occurs solely through extraction.[2,3]

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[2] Prior to development of the Los Angeles Basin in the early 1900s and the associated drawdown resulting from groundwater extraction, groundwater in the West Coast Basin discharged to wetlands or to the Pacific Ocean offshore (Reichard et al., 2003).

[3] The WCBBP and DGBP are networks of injection wells installed along the Pacific Ocean coastline and are intended to prevent seawater intrusion into the West Coast Basin aquifers. Over the first half of the

Figure C-3 in Appendix C shows the approximate locations and pumping rates for water year 2005-2006[4] of groundwater extraction wells located within the West Coast and Central Basins (WRDSC, 2007). Inspection of Figure C-3 shows that the majority of groundwater extraction occurs in the Central Basin and in the southern portion of the West Coast Basin, although some significant extraction occurs in the vicinity of the Property to the south. In a five-section by five-section block centered on the Property (approximately 5 miles by 5 miles), there was an average of 6,745 acre-feet per year of groundwater extracted over water year 2004-2005 through water year 2006-2007, which is approximately 17% of the total groundwater extracted from the West Coast Basin over the same period. Since adjudication in the early 1960s, total groundwater extraction from the West Coast Basin has ranged between approximately 37,000 and 64,000 acre-feet per year (WRDSC, 2007).

2.1.5 Regional Groundwater Gradients and Flow Directions

Before development of the Los Angeles area in the early 1900s, the predominant flow direction of groundwater in the West Coast Basin was from the recharge areas in the east and northeast (i.e., the Montebello Forebay) to discharge zones to the west and south, essentially following the surface topography. As development proceeded in the first half of the 20th century, groundwater extraction began, and groundwater levels were depressed to elevations below mean sea level, leading to seawater intrusion and elevated chloride levels in many coastal wells (Reichard et al., 2003). Facing serious overdraft problems, the West Coast and Central Basins were placed under adjudication in the early 1960s, which placed limits on the amount of groundwater that could be extracted, leading to a long term recovery of water levels. The DWR is the legally appointed Watermaster for both basins.

In 1995, the United States Geological Survey ("USGS") and the WRDSC began a long-term study to investigate the groundwater conditions in the West Coast and Central Basins (Land et al., 2004a). This project included, among other things, the installation and monitoring of 24 new multi-level monitoring wells that enabled a horizontal and vertical characterization of groundwater levels and quality. Groundwater level maps have been constructed from the data collected and indicate the presence of complex flow patterns resulting from the hydraulic effects of faults, extraction, injection at the barrier projects, and recharge at spreading basins (WRDSC, 2001). Figures C-4 and C-5 in Appendix C show the regional groundwater elevation contours measured in the spring

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20th century, overuse of groundwater within the Central and West Coast Basins caused water levels to drop by as much as 100 feet in places, reducing the water table to elevations below sea level and causing seawater to flow inland into the aquifers. The barrier projects began operation in the 1960s and, in conjunction with decreased extraction and increased recharge from spreading basins location upstream, have helped to restore partially the water levels in many areas. The injection wells have also created a groundwater "ridge" near the coast, which essentially pushes back against intruding seawater, and increases the flow of non-saline water in an easterly (WCBBP) and northerly (DGBP) direction (WRDSC, 2007).

[4] WRDSC defines a "Water Year" as the period from 1 October through 30 September (WRDSC, 2007).

and fall of 2006, respectively (WRDSC, 2007).[5] In the area between the NIU and the Charnock fault, where the Property is located, the regional groundwater flow direction tendency is from the northwest towards the southeast, likely due to groundwater extraction in the Gardena area and the restricted groundwater inflows to this area that are caused by the presence of these faults. This regional flow pattern, while consistent between the spring and fall 2006 measurement periods, could fluctuate if there are significant variabilities in groundwater extraction rates and patterns.

Flow in the Central and West Coast Basins was simulated by Reichard et al. (2003) using the well-established MODFLOW groundwater model (McDonald and Harbaugh, 1988). The calibrated model, which includes four aquifer depth zones and explicitly considers the partial flow barriers caused by faults in the region, predicts that regional hydraulic gradients in the Lakewood Formation aquifer system generally mimic those in the deeper San Pedro aquifer system in the vicinity of the Property (i.e., groundwater tends to flow to the southeast toward Gardena).

2.2 Regional Groundwater Quality

General water quality characteristics were assessed as part of the joint USGS-WRDSC study of the West Coast and Central Basin hydrogeology (Land et al., 2004a; Land et al., 2004b). Water quality data were obtained from the network of multi-level monitoring wells. In the vicinity of the Property, the nearest of these wells is "Inglewood-1," located approximately 1.7 miles to the northwest of the Property,[6] near the intersection of North Oak Street and North Eucalyptus Avenue (see Figure 2). Based on regional groundwater gradients as discussed above, the location of the Inglewood-1 well is upgradient from the Property. Groundwater quality in the West Coast Basin is generally suitable for industrial and public supply (Reichard et al., 2003). In some areas, particularly in the shallow units and coastal areas, total dissolved solids concentrations can exceed 500 milligrams per liter ("mg/L"), which corresponds to the lower end of the recommended California secondary maximum contaminant level ("MCL") range for total dissolved solids.

Several COPCs detected in low concentrations in grab groundwater samples at the Property, i.e., nitrate, tetrachloroethene ("PCE"), perchlorate, total petroleum hydrocarbons ("TPH"), and tertiary butyl alcohol ("TBA"), have also been detected in groundwater monitoring wells elsewhere in the West Coast Basin at concentrations that exceed available federal or state MCLs. Regional occurrences of three of these COPCs are summarized below, based on information compiled by the WRDSC and the USGS (WRDSC, 2001, 2006, 2007).

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[5] It is not stated in the WRDSC (2007) *Regional Groundwater Monitoring Report* from which aquifer(s) water levels are being plotted in order to create the groundwater elevation contour maps; however, based on comparison with the USGS MODFLOW model (Reichard et al., 2003) it appears that the data plotted are from the most regionally important aquifer for water production, i.e., the Silverado aquifer in the San Pedro Formation.

[6] Well Inglewood-1 is located at 33°58'1.06" north latitude, 118°21'34.79" west longitude, approximately 1.7 miles northwest of the center of the Main Track at the Property.

- Nitrate concentrations in 2006 (see Figure C-6 in Appendix C) exceeded the primary MCL of 10 mg/L (nitrate as nitrogen, "N") in the shallowest zones of the Gardena-1 and Chandler-3a wells, with measured concentrations of 12 to 14 mg/L and 27 to 30 mg/L, respectively. Samples collected from the shallow interval of the Inglewood-1 well (e.g., from 150 to 170 feet bgs in the Gage aquifer), contained nitrate concentrations of 9.3 and 9.4 mg/L on 25 May 2006 and 28 September 2006, respectively, only marginally below the primary MCL. Regarding the source of nitrates found in the shallow zone groundwater, the WRDSC states that "shallow zone occurrences of nitrate with deeper zones below detection limits may be attributable to local surface recharge from former agricultural activities prior to the extensive land development that began in the 1950s" (WRDSC, 2007).

- PCE has been detected in groundwater samples collected from the shallow interval of the hydraulically upgradient Inglewood-1 monitoring well, i.e., corresponding to the Gage aquifer, at concentrations above the primary MCL for drinking water of 5 micrograms per liter ("µg/L"). PCE was detected at concentrations ranging from 17 µg/L on 22 May 2000, to 3.7 µg/L on 30 March 2005. PCE was also detected in two groundwater samples, at concentrations of 2.7 and 3.1 µg/L, collected during 2004 from monitoring wells on the Great Western Forum Property, which is located north of the Property, as discussed in Section 2.4 below. This information suggests that an upgradient source(s) and release(s) of PCE existed at one time, and that residuals of this PCE release may still be impacting groundwater quality below the Property.

- Perchlorate was detected at concentrations of 6.1 and 6.8 µg/L, slightly above the California MCL of 6 µg/L, in groundwater samples collected from at least two of the monitoring wells screened within the Gage aquifer within the West Coast Basin system during water year 2001, and perchlorate was reportedly detected in samples from a third well in the West Coast Basin between 1998 and 2000 (see Figure C-7 in Appendix C; WRDSC, 2001). Testing for perchlorate in the 24 multi-level well monitoring network is not performed semi-annually as is typically done for the other constituents; thus, the infrequent sampling schedule may underestimate perchlorate distribution in the basin. WRDSC did not report perchlorate results for the 2005-2006 water year (WRDSC, 2007).

Thus, it is clear that there are regional and upgradient sources of nitrate, PCE, and perchlorate in the West Coast Basin, which are clearly unrelated to the Property and that have resulted in groundwater occurrences of these COPCs at concentrations near or above their MCLs (similar to the concentrations found in the groundwater on the Property), particularly in first-encountered, shallow groundwater zones. As discussed below, there are also known, significant releases of TPH and TBA at locations adjacent to the Property.

2.3 Local Hydrogeologic Setting and Groundwater Conditions

As described in Section 1, HPLC and RWQCB staff agreed to a "two track" process for environmental review of environmental conditions on the Property. The first track assumes continued commercial use of the Property as a horse racing facility and casino. The second, hypothetical track assumes redevelopment of the Property including commercial and residential redevelopment. The RWQCB comment letter dated 21 December 2007 (Appendix A) appears to be based on the assumption that the Property will be redeveloped for future residential land uses and raises questions about soil and groundwater data that would, in staff's opinion, be appropriate for such planned, future residential land uses. However, at this time, HPLC remains uncertain that redevelopment of the Property will occur. Thus, additional information and technical clarifications regarding groundwater conditions at the Property are provided below in response to the RWQCB comments with the understanding that, to a large extent, the requested and appropriate information can be best identified and obtained during such redevelopment, i.e., when future land plans are better defined and when site preparation activities such as demolition and grading can occur.

Regional hydrogeologic conditions in the Inglewood, California area are discussed in Section 2.1. To facilitate a better understanding of how the local geologic conditions at and near the Property compare to regional hydrogeologic observations, EKI conducted additional technical research and analysis, including obtaining available RWQCB or California Department of Toxic Substances Control ("DTSC") case files for sites located near the Property. EKI located groundwater elevation and water quality data for several nearby sites and used this additional information, in the context of the regional hydrogeologic conditions, to develop a better understanding of groundwater gradients and groundwater quality in the vicinity of the Property.

2.3.1 Local Geology and Faults Potentially Impacting Groundwater Flow

Locally, the hydrogeology at the Property is dominated by features associated with the NIU, specifically the Potrero fault and the Inglewood (Townsite) fault. The Potrero fault, which has been mapped consistently by different investigators, crosses the eastern portion of the Property, through the current location of the Training Track, and trends approximately 30 degrees west of north. Another fault has been mapped beneath the Property at various distances to the west of the Potrero fault. This fault is referred to variously as the Inglewood fault, the Townsite fault, or the "unnamed" fault. In some studies this fault has been mapped crossing the Main Track area (Group Delta, 2007; Jennings, 1962; DWR, 1991). This fault was determined to be seismically inactive by Geomatrix (Geomatrix, 2007). Some, but not all, sources show another fault trace approximately perpendicular to the Potrero and Inglewood (Townsite) faults (i.e., trending approximately 30 degrees north of east) located south of the Property. It is unknown where exactly this additional fault may be and how far it may extend to the west. Figure 2 shows the approximate locations of the Potrero fault, the Inglewood (Townsite) fault, and the off-site third perpendicular fault relative to the Property location.

These faults likely affect groundwater flow locally and below the Property. The Inglewood (Townsite) fault may cause a "back-up" of easterly flowing groundwater, perhaps leading to the relatively higher groundwater levels that were observed in borehole PS-GW-4 in 2005, which are consistent with groundwater elevations measured in groundwater monitoring wells at the United Oil #57 and Unocal #5050 service station sites located southwest of the Property (discussed in Section 2.3.2 below).

All geologic maps reviewed by EKI show the Charnock fault running roughly parallel to the Potrero fault about 3 miles west of the Property in the middle of the West Coast Basin. The USGS MODFLOW groundwater model for the West Coast and Central Basins (Reichard et al., 2003) uses hydraulic characteristics of $5x10^{-10}$ sec^{-1} for the Potrero and Inglewood (Townsite) faults and $1x10^{-7}$ sec^{-1} and $1x10^{-8}$ sec^{-1} for the Charnock fault.[7] This parameterization, which is based in part on model calibration, implies that the Charnock is less of a barrier to flow than the Potrero and Inglewood (Townsite) faults; however, the model parameterization also suggests that all of these faults have considerably lower hydraulic conductivity than the surrounding sediments, i.e., by several orders of magnitude. It should be noted that the USGS groundwater flow model does not explicitly depict a perpendicular fault trace to the south of the Property, although the 0.5-mile grid spacing of the model would make inclusion of such small-scale features difficult.

2.3.2 Local Groundwater Gradients and Flow Directions

EKI has reviewed available data from the Property and other nearby locations to evaluate approximate groundwater flow directions on and in the vicinity of the Property. Based on this review, it appears that groundwater in the eastern portion of the Property, i.e., east of the approximate Inglewood (Townsite) fault location shown on Figure 2, generally flows in a direction that may vary from the southwest to the southeast, but is believed to generally parallel the Potrero fault trace. This conclusion is based on water level data for the monitoring wells installed by Chevron on the northeastern portion of the Property for purposes of monitoring the Cypress Fee site groundwater plume (Arcadis BBL, 2007), and the regional information discussed in Section 2.1. The direction of groundwater flow and the magnitude of groundwater elevations within this eastern area of the Property (i.e., elevations of approximately -19 to -49 feet msl) are generally consistent with modeled gradients and regional water level elevations for the Lakewood aquifer system. Variations in groundwater flow directions and water level elevations in this eastern area have, however, been observed in the Cypress Fee monitoring wells during some time periods and may be related to transient regional pumping stresses and/or seasonal variations. For example, the hydraulic gradient for the eastern portion of the Property, based on groundwater elevations measured in the Cypress Fee site monitoring wells, was

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[7] The hydraulic characteristic in the MODFLOW model is a parameter equal to the hydraulic conductivity of the fault divided by the fault zone thickness and is therefore proportional to the flow rate through a given cross section of fault under a given hydraulic head difference. For example, the hydraulic characteristic of $5x10^{-10}$ sec^{-1} (the value used for the Potrero and Inglewood (Townsite) faults) could represent a 1,000 foot wide fault zone with a hydraulic conductivity of $5x10^{-7}$ feet per day (approximately $2x10^{-10}$ centimeters per second).

to the southwest during July 2005 (EKI, 2006b) and was almost easterly during December 2007 (Arcadis BBL, 2008).

Water level information for the western portion of the Property, i.e., west of the approximate Inglewood (Townsite) fault location shown on Figure 2, is more limited; however, the following observations can be made, within the context of the regional hydrogeologic conditions discussed in Section 2.1:

- Groundwater flow on the western side of the Property appears to be toward the east or southeast based on July 2005 water levels measured in boreholes PS-GW-4 and PS-GW-1, PS-GW-2, PS-GW-3, and PS-GW-6 (EKI, 2006b). Water levels observed in this area are approximately 20 to 60 feet higher in elevation than those observed in the eastern portion of the Property and are significantly higher than those regionally predicted for the Gage aquifer by the USGS MODFLOW model. These higher water levels may be the result of influences by the Inglewood (Townsite) fault and possibly the unnamed perpendicular fault (discussed above), either of which, due to their lower permeability, may cause groundwater to back up on their western and northern sides, respectively.

- Water levels measured west of the Property at the nearby United Oil #57 station, located about 0.7 miles to the west of borehole PS-GW-4, have ranged from approximately +31 to +42 feet msl, or about 20 to 25 feet higher in elevation than the +18.4 feet msl elevation measured at the PS-GW- 4 location (see Figure 2).[8] Groundwater below the United Oil #57 site was reported to be flowing to the east and northeast on 1 August 2007 (Frey, 2007), further suggesting an eastward groundwater flow direction in areas west of the Inglewood fault on the Property. Pertinent information excerpted from RWQCB files, Case No. R-13682, for the United Oil #57 site is included in Appendix D.

- Water levels measured immediately southwest of the Property at the former Unocal #5050 service station, located across the intersection of South Prairie Avenue and West Century Boulevard from the Property and approximately 250 feet southwest of borehole PS-GW-4,[9] have ranged from approximately +17 to +22 feet msl. The groundwater elevation of +18.4 feet msl measured at the PS-GW-4 location (see Figure 2) is well within this range. Reports prepared by Alton Geoscience (Alton, 1996) indicate that groundwater below the former Unocal #5050 site was flowing to the northeast on 8 July 1996, confirming a northeasterly groundwater flow direction west of the Inglewood (Townsite) fault on the Property, as shown on Figure 2. Pertinent information excerpted from RWQCB files, Case No. I-09966, for the former Unocal #5050 site is included in Appendix D. This case for the former Unocal #5050 site was closed by the RWQCB on 22 October 1996 (Appendix D).

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[8] The United Oil #57 station is located at 4520 West Century Boulevard, Inglewood, California 90304.

[9] The former Unocal #5050 service station is located at 4000 West Century Boulevard, Inglewood, California.

- In 2004, groundwater was encountered at 138.37 feet bgs, 162.25 feet bgs, and 137.11 feet bgs in monitoring wells MW-A, MW-B, and MW-C, respectively, located on the Great Western Forum property (Earth Tech, 2004).[10] The reference elevations for those wells are not known, and no groundwater elevations or groundwater flow directions were reported. EKI has estimated, based on historical grading plans, that ground surface elevations at the locations of monitoring wells MW-A, MW-B, and MW-C are roughly +137, +149, and +140 feet msl, so these groundwater levels would be approximately -1, -13, and +3 feet msl in elevation, respectively. If this were the case, it would indicate a northwesterly direction of flow, contrary to the apparent regional flow direction and, again, perhaps indicative of complexities caused by subsurface faulting and/or unknown local extraction wells operating at that time. Pertinent information excerpted from County of Los Angeles Department of Public Works ("LACDPW") files is included in Appendix D and indicates that this case was referred to the RWQCB on 1 February 2007.

2.4 Local Groundwater Quality

Regional water quality conditions observed based on data for the USGS/WRDSC multi-level monitoring wells are discussed in Section 2.2. Local water quality information was obtained for several locations near the Property, as summarized below (see locations on Figure 2). Pertinent, available information obtained from agency files for the sites listed below is provided in Appendix D.

2.4.1 Local TPH and TBA Impacts to Groundwater

There are several known TPH-impacted sites in the vicinity of the Property, as follows:

- Northwest of the Property, the Quik N' Split gasoline service station located on the west side of the street, at 601 South Prairie Avenue (see Figure 2), is known to have impacted the subsurface with releases of TPH; TBA concentrations were not reported. This site is located northwest of the Property, across South Prairie Avenue. No remediation or further investigation of soil or groundwater was reported, based on file reviews by Earth Tech (Earth Tech, 2004); therefore, it is unknown whether TPH and fuel-related contaminants were released to groundwater at this site, based on the available file information.

- North of the Property, a gasoline station was present between 1967 and 1981 on the southwestern corner of the Great Western Forum property (Earth Tech, 2004). Soil and groundwater sampling was conducted in this area in 1999 and 2000; soil samples reportedly contained concentrations of gasoline-range TPH ("TPH-g") up to 29,270 milligrams per kilogram ("mg/kg"). During April 2004, groundwater samples collected from monitoring well MW-A (located on the southwestern

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[10] The Great Western Forum property is located at 3900 West Manchester Boulevard, Inglewood, California.

corner of the Forum Property, as shown on Figure 2) contained TPH at a concentration of 75 µg/L, as well as detectable concentrations of other fuel-related compounds. Most soil samples were not analyzed for TBA, and groundwater did not contain detectable concentrations of TBA above 5 µg/L (Earth Tech, 2004). The groundwater flow direction at this location could not be confirmed from the files available to EKI, as discussed in Section 2.3.2. Based on the inferred regional groundwater flow direction toward the southeast, the flow direction from this location would be toward the Property, as discussed in Section 2.1.5.

- North of the Property, the former Texaco (now Chevron) Cypress Fee site, a 37.5-acre oil and gas production field with oil and gas wells, pipelines, support facilities, sumps, tank batteries, associated drainage ditches, trash and garbage areas, and a gas manufacturing plant was operated beginning in the 1920s, on a parcel adjacent to and north of the Property and adjacent to and west of Darby Park (Earth Tech, 1988).[11] In 1998, when the groundwater treatment system at the former Cypress Fee site discontinued operation due to an expired National Pollutant Discharge Elimination System ("NPDES") permit, RWQCB staff suggested that the former Cypress Fee site be evaluated for closure, and groundwater contamination below could be allowed to naturally attenuate (AET, 1999). On 14 September 1999, following initiation of the monitored natural attenuation approach, groundwater samples collected from the former Cypress Fee plume area contained concentrations of TPH-g (5,100 µg/L), benzene (2,180 µg/L), and other fuel-related compounds (AET, 2001).[12] Groundwater samples were first analyzed for TBA in December 2000, and have since been found to contain TBA at a maximum detected concentration of 570 µg/L, which is well above the California Department of Public Health ("CDPH") Drinking Water Notification Level for TBA of 12 µg/L. This maximum concentration of TBA of 570 µg/L was found in a groundwater sample collected from Chevron monitoring well MW-4, which was abandoned with RWQCB approval approximately one year later to facilitate the residential development of the former Cypress Fee site (Arcadis BBL, 2007). The locations of the abandoned monitoring wells on the former Cypress Fee site are also shown on Figure 2. The groundwater flow direction at this location is variable, ranging from flow toward the southwest to flow in an almost easterly direction as discussed in Section 2.3.2, but recent groundwater monitoring reports confirm that groundwater plumes from the former Cypress Fee site have migrated to the south and southeast, impacting groundwater below the Property (Arcadis BBL, 2007; Arcadis BBL, 2008). Groundwater monitoring wells on the former Cypress Fee site were all abandoned by Chevron, following approval by the RWQCB on

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[11] Prior to redevelopment for residential land uses, the former Cypress Fee site address was 3000 West 90th Street, Inglewood, California.

[12] On 14 September 1999, the groundwater sample collected from Chevron monitoring well MW-9 associated with the former Cypress Fee site (now abandoned; see Figure 2) contained concentrations of TPH-g at 5,100 µg/L and benzene at 2,180 µg/L (AET, 2001; Arcadis BBL, 2008). Monitoring well MW-9 was abandoned, with RWQCB approval, on 29 April 2004 to facilitate residential redevelopment of the former Cypress Fee site (BBL, 2005; Arcadis BBL, 2008).

23 April 2004, to facilitate redevelopment and construction of single- and multi-family homes on the former Cypress Fee site, and new monitoring wells were installed by Chevron on the HPLC Property, to monitor the Cypress Fee groundwater plumes that have migrated onto the Property (BBL, 2005). Groundwater elevations in Chevron's monitoring wells for the Cypress Fee site plume have historically ranged from approximately -19 to -49 feet msl (Arcadis BBL, 2008).

- Southeast of the Property, at the Tosco #76 station (see location on Figure 2),[13] TPH-g was detected in soil at levels up to 670 mg/kg, and TBA was detected at levels up to 190 micrograms per kilogram ("µg/kg") in soil samples. However, neither compound was found above detection levels of 100 µg/L and 5 µg/L, respectively, in grab groundwater samples (SECOR, 2007). The groundwater flow direction at this location is unknown, because groundwater monitoring wells were not installed on this site, but the regional groundwater at this location would be controlled by the Potrero fault, as discussed in Section 2.1.5. The groundwater elevation reported for this location is approximately 30 feet higher than that reported for the nearby former Holly Park Car Wash site located on the other side of the Potrero fault, as shown on Figure 2.

- Southeast of the Property, at the former Holly Park Car Wash site (see location on Figure 2),[14] TPH-g was detected at levels up to 2,100 µg/L in a groundwater sample collected from well MW-1 on 24 March 2006, and TBA was not detected in groundwater samples above 10 µg/L (Altec, 2007). The groundwater flow direction at this location is reportedly toward the southwest and south-southwest (Altec, 2007); however, groundwater in this location is likely controlled by the Potrero fault, the Inglewood (Townsite) fault, and the unnamed perpendicular fault, as discussed in Section 2.1.5. The groundwater elevation reported for this location is approximately 30 feet lower than that reported for the Tosco #76 site located on the other side of the Potrero fault to the east, as shown on Figure 2. Further, the groundwater gradient reported for this location is also approximately 39 to 78 feet higher than the groundwater elevations reported for the former Cypress Fee site to the north, as shown on Figure 2, perhaps reflecting the impact of the perpendicular fault.

- Immediately southwest of the Property, at the adjacent former Unocal #5050 retail gasoline service station,[9] releases of petroleum hydrocarbons occurred sometime prior to 1993. Soil and groundwater were confirmed to have been impacted by TPH and other fuel-related compounds (VET, 1993). In 1993, soil excavation was performed, and groundwater monitoring wells and vapor extraction wells were installed (VET, 1993). TPH-g was detected in a groundwater sample collected from well MW-1 on the former Unocal #5050 site (see Figure 2) on 21 April 1994, at a concentration of 770 µg/L. The last groundwater sample

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[13] The Tosco #76 station is located at 9830 South Crenshaw Boulevard, Inglewood, California.

[14] The former Holly Park Car Wash site is located at 3350 West Century Boulevard, Inglewood, California.

collected from monitoring well MW-4, which is located closest to the PS-GW-4 borehole on the Property, contained 440 µg/L on 8 July 1996; previous groundwater samples collected from this well did not contain detectable concentrations of TPH-g. Groundwater samples were not analyzed for TBA (Alton, 1996). The RWQCB closed the former Unocal #5050 case on 22 October 1996; however, at that time, several hundred µg/L of TPH remained in groundwater below this site. The groundwater flow direction measured for this site is toward the northeast, directly toward the PS-GW-4 borehole on the Property, as discussed in Section 2.3.2, which indicates this impacted groundwater is migrating below the Property, and likely has been migrating below the Property for more than 15 years, based on the information in Appendix D.

- West-southwest of the Property, at the United Oil #57 station (see Figure 2),[8] the recent August 2007 groundwater monitoring event found TPH-g concentrations up to 2,600 µg/L, and TPH-g concentrations in the past (1999) were as high as 171,000 µg/L. TBA was also detected in groundwater at concentrations up to 20,000 µg/L in 2002 (Frey, 2007). As discussed in Section 2.3.2, impacted groundwater from the United Oil #57 site is flowing toward the Property.

The additional information regarding local groundwater quality, obtained by EKI from RWQCB and LACDPW files, confirms that several sites surrounding the Property have confirmed releases of TPH and fuel-related compounds to soil and groundwater. This information confirms that TPH impacted groundwater from at least two, and possibly more, adjacent fuel release sites is migrating onto the Property. Elevated TPH concentrations at the southwestern corner of the Property were found to most likely be migrating onto the Property from a release at the former Unocal #5050 service station site and potentially from the United Oil #57 site. Relative to these off-site releases, concentrations of TPH detected in grab groundwater samples collected on the Property during 2005, now being commented on by the RWQCB staff, were very low, e.g., well below one part per million (EKI, 2006), and well below the TPH-g concentration of 5,100 µg/L in the plume from the former Cypress Fee site that was allowed by the RWQCB to naturally attenuate for the past several years while migrating onto the Property.

Further, the concentrations of fuel-related compounds detected in grab groundwater samples are consistent with those currently found within the plume of impacted groundwater migrating from the former Cypress Fee site onto the Property. TBA is known to be migrating in groundwater onto the Property from the Cypress Fee site, and high concentrations of TBA were also found in groundwater at the former United Oil #57 site located west-southwest of the Property in the hydraulically upgradient direction on the western side of the Property. The Cypress Fee Site plume is well known to the RWQCB as the source of TPH and TBA found in groundwater on the eastern portion of the Property.

2.4.2 Local PCE Impacts to Groundwater

As noted in Section 2.2, an upgradient source(s) and release(s) of PCE existed at one time, residuals of which may still be impacting groundwater quality at the Property, as follows:

- PCE has been detected in groundwater samples collected from the Gage aquifer interval in the upgradient Inglewood-1 monitoring well at concentrations up to 17 µg/L, i.e., more than 3 times the MCL, as measured during 2000 (WRDSC, 2001). This Inglewood-1 monitoring well is considered upgradient of the Property, based on information published by WRDSC and USGS, as discussed in Section 2.1.5, and indicates the presence of regional PCE impact to groundwater flowing toward the Property, as discussed in Section 2.2.

- PCE was detected in groundwater samples collected from two monitoring wells at the Great Western Forum property at concentrations of 2.7 µg/L (MW-A) and 3.1 µg/L (MW-C) on 29 and 30 April 2004, respectively (Earth Tech, 2004).[10] The Great Western Forum property is located north of the Property, as shown on Figure 2, in a direction believed to be hydraulically downgradient of the Inglewood-1 monitoring well and upgradient from the Property, based on regional groundwater gradient data, as discussed in Section 2.1.5.

- During 2005 investigations of the Property, PCE was detected in the grab groundwater sample collected from borehole PS-GW-1 (see Figure 2), which is located 30 feet north of the historical location of the dry cleaning machine within the Former Dry Cleaning Area at the Property. PCE was detected in this sample at a concentration of 5.8 µg/L, which is slightly above the MCL of 5 µg/L, and well within the range of PCE concentrations detected in upgradient groundwater monitoring wells. Soil samples collected in accessible areas of the Former Dry Cleaning Area confirmed a PCE release to soil had occurred at this location, and the concentrations detected in soil (maximum 8.8 mg/kg, measured in 1999) and soil gas (maximum 34 µg/L, measured in 2005) were in the apparent source area. This area is now being remediated by the SVE system recently installed by HPLC.

2.4.3 Local Nitrate Impacts to Groundwater

Regional sources of nitrate impacts to groundwater were identified in Section 2.2. The WRDSC identifies the likely source of nitrate in groundwater in the West Coast Basin, at concentrations consistent with those detected in groundwater samples collected from the western portion of the Property in 2005, as "local surface recharge from former agricultural activities prior to the extensive land development that began in the 1950s." Nitrate detected in groundwater below the western portion of the Property is likely migrating from upgradient source(s) located to the northwest or west, based on the evaluation of regional and local groundwater gradients presented in Sections 2.1.5 and 2.3.2. No specific local sources of nitrate were identified in the immediate vicinity of the

Property; however, a review of the historical topographic maps and aerial photographs in Appendix B confirms that the entire Property and surrounding area were historically used for agricultural purposes prior to widespread development in the mid-twentieth century.

2.4.4 Local Perchlorate Impacts to Groundwater

No sources of perchlorate have been identified on the Property.

Regionally, no specific perchlorate release sites have been identified; however, several general commercial operations and industries that are associated with potential perchlorate use do exist in the Inglewood area.[15] As discussed in Section 2.2, regional, somewhat random occurrences of perchlorate in groundwater have been reported.

2.5 Conclusions Regarding Evaluation of Regional and Local Groundwater Conditions

EKI's conclusions regarding regional and local hydrogeology and groundwater quality in the West Coast Basin and the Property location, based on evaluation of new information gathered by EKI in response to RWQCB's request, are summarized below.

2.5.1 Groundwater Flow Directions

The Property is located within, and near the eastern edge of, the West Coast Basin, which is within the larger Los Angeles Basin (DWR, 2003). The principle strata of hydrogeologic interest in the West Coast Basin, in the vicinity of the Property, include the Lakewood Formation and the Gardena and Gage aquifers, which are contemporaneous deposits of fluvial to shallow water origin that extend from the ground surface to depths of approximately 150 to 250 feet bgs, i.e., elevations of approximately -50 to -100 feet msl, at the Property location. A lower permeability aquiclude separates the Lakewood Formation from the deeper San Pedro Formation (Reichard et al., 2003). Strata and groundwater elevations encountered during EKI's 2005 investigations of the Property and reported by Chevron for installation of its monitoring wells associated with the Cypress Fee site plume are consistent with those of the Gardena and Gage aquifers.

The primary structural feature in the region is the NIU, a northwest-trending zone of folding and faulting extending from Beverly Hills in the north to Newport Beach in the south, which separates the West Coast Basin from the Central Basin to the east, and is considered to "exert considerable barrier influence upon the movement of subsurface

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[15] The DTSC has compiled a list of activities and industries which utilize perchlorate materials (DTSC, 2004). Following urbanization, the City of Inglewood was developed for many purposes, which include several of the land uses considered by the DTSC to include typical sources of perchlorate, such as hospitals, which may use pharmaceuticals associated with diagnosis and treatment; industrial coatings and electroplating; military and aerospace manufacturing, including rockets, which may include propellant; laundries, which use large quantities of laundry bleach; and city swimming pools, which use large quantities of pool sanitizer and pool shock chemicals, all identified to the west or northwest of the Property based on publicly-available business directories and listings.

water" (DWR, 1961). Locally, the NIU is expressed as the Potrero fault, which crosses the northeastern portion of the Property, and another parallel fault trace (referred to variously as the Townsite fault or the Inglewood fault) that may cross the southwestern portion of the Property. Geotechnical engineers have assessed the significance of the Potrero fault and the Inglewood (Townsite) fault in terms of seismic risk and concluded that only the Potrero fault is considered an active fault, based on seismic and geologic evaluations since 1976 (Geomatrix, 2005; Geomatrix 2007). Both faults likely restrict groundwater flow regionally and locally at the Property.

Based on a review of available data from the Property and other nearby locations to evaluate approximate groundwater flow directions on and in the vicinity of the Property, it appears that groundwater in the eastern portion of the Property, i.e., east of the approximate Inglewood (Townsite) fault location shown on Figure 2, groundwater generally flows to the south or southeast, paralleling the Potrero fault trace. However, variations in groundwater flow directions and water level elevations in this area have been observed and may be related to transient regional pumping stresses and/or seasonal variations. Based on groundwater elevations and gradients reported for former service station sites located west and southwest of the Property, groundwater below the western portion of the Property appears to be flowing to the east or northeast, toward the Inglewood (Townsite) fault location. Water levels observed on the central and western portions of the Property are approximately 20 to 60 feet higher in elevation than those observed in the eastern portion of the Property, which may be the result of influences by the Inglewood (Townsite) fault and possibly the unnamed perpendicular fault to the south of the Property (see Figure 2), either of which, due to their lower permeability, may cause groundwater to back up on their western and northern sides, respectively.

2.5.2 Groundwater Quality

Several COPCs detected at low concentrations in grab groundwater samples on the Property in 2005, i.e., nitrate, PCE, perchlorate, TPH, and TBA, have been detected in groundwater monitoring wells elsewhere in the West Coast Basin, in some cases at concentrations that exceed MCLs. Residuals of several of these releases may still be impacting groundwater quality below the Property, from off-site locations clearly unrelated to the Property. For example, regionally measurable concentrations of nitrates are reported, and the WRDSC states that "shallow zone occurrences of nitrate with deeper zones below detection limits may be attributable to local surface recharge from former agricultural activities prior to the extensive land development that began in the 1950s" (WRDSC, 2007). Further, PCE has been detected in samples from the Gage aquifer at Inglewood-1 and on the Great Western Forum property located north of the Property, in the apparent upgradient direction, based on regional groundwater flow patterns.

Additional information obtained by EKI from RWQCB and LACDPW files confirms that several sites surrounding the Property have documented releases of TPH and fuel-related compounds to soil and groundwater. TPH impacted groundwater from at least two, and possibly more, adjacent fuel release sites is migrating onto the Property. TPH concentrations in groundwater at the southwestern corner of the Property were found to most likely be migrating onto the Property from a release at the former Unocal #5050 service station site and potentially from the United Oil #57 site. Relative to these off-site TPH releases, concentrations of TPH detected in grab groundwater samples from the Property were low and well below the TPH concentrations in groundwater from the known release at the adjacent former Cypress Fee site, from which the plume has been allowed by the RWQCB to naturally attenuate for the past several years while migrating in groundwater onto the Property. Further, TPH concentrations detected in grab groundwater samples collected from other areas of the Property during 2005, now being commented on by the RWQCB staff, are consistent with or lower than the residual concentrations of TPH in the Cypress Fee plume that remain after approximately 15 years of natural attenuation. TBA is also known to be migrating in groundwater onto the Property from the Cypress Fee site, and high concentrations of TBA were also found in impacted groundwater at the former United Oil #57 site located west-southwest of the Property, in the hydraulically upgradient direction on the western side of the Property. The Cypress Fee Site plume is well known to the RWQCB as the source of TPH and TBA found in groundwater on the eastern portion of the Property.

Therefore, at the present time, there is no apparent need for further groundwater sampling on the Property for its continued use as a commercial horse racetrack and casino, except as already agreed HPLC will provide future evaluation of potential groundwater impacts possibly associated with the Former Dry Cleaning Area, following completion of the ongoing SVE operations at this location.

2.6 Work Plan for Installation of Groundwater Monitoring Wells

The additional information gathered by EKI and the evaluation summarized above demonstrate that groundwater conditions at the Property are fairly complex, due to the localized faulting, regional groundwater extraction and pumping, and nearby and regional sources of groundwater contamination that are resulting in migration of residual COPCs in groundwater from upgradient sources onto the Property. No areas with elevated concentrations of COPCs in groundwater have been identified that would prevent HPLC from continuing to utilize the Property for its current commercial uses as a horse racetrack and casino. Given the closure status granted to nearby release sites and the residual concentrations of fuel-related constituents that are being allowed to naturally attenuate in groundwater locally, at present, there is no apparent need for further groundwater sampling on the Property for its continued use as a commercial horse racetrack and casino. However, HPLC is proposing to install four groundwater monitoring wells on the western portion of the Property for purposes of further confirming groundwater elevations and approximate flow directions on the portion of the Property to the west of the Inglewood fault. There are currently seven groundwater monitoring wells on the Property to the east of this fault associated with the Cypress Fee plume monitoring program, which provide adequate information regarding groundwater elevations and gradients in that area. In EKI's opinion, the added general information on groundwater conditions on the western portion of the Property may be useful in the future, if redevelopment of the Property proceeds.

2.6.1 Locations of Proposed Groundwater Monitoring Wells

HPLC proposes to install four groundwater monitoring wells at the approximate locations shown on Figure 3:

- Well HPLCMW-1 will be located along the northern Property boundary, in a paved area northwest of the Grandstand Building. This monitoring well will provide a first, northern point for establishing the local hydraulic gradient and groundwater quality in this currently inferred upgradient location on the western portion of the Property, i.e., west of the Main Track at a location believed to be upgradient, based on the evaluation of regional and local groundwater flow conditions presented above.

- Well HPLCMW-2 will be located in a paved area south of the Main Track and will provide a second point for establishing the local hydraulic gradient and groundwater quality on the western portion of the Property. This monitoring well is anticipated to be west of the historically (approximately) mapped trace of the Inglewood (Townsite) fault, in a location intended to avoid drilling directly into the fault; however, the exact location of this fault is not known. This well location could provide useful information on the hydrogeologic impact of this fault trace, if it exists near this location on the Property.

- Well HPLCMW-3 will be located in a paved area southwest of the Grandstand Building and will provide a third point for establishing the local hydraulic gradient and groundwater quality on the western portion of the Property, west of the Main Track.

- Well HPLCMW-4 will be located in the northwestern portion of the Property and will provide a point for establishing the local hydraulic gradient and groundwater quality on the western-most portion of the Property. This location in the northwestern portion of the western parking lot is in the currently inferred upgradient direction on the western portion of the Property, based on the evaluation of regional and local groundwater flow conditions presented above.

2.6.2 Groundwater Monitoring Well Construction

Groundwater elevations measured in EKI's grab groundwater sampling boreholes in 2005 indicate that the groundwater table on the western portion of the Property ranges from approximately 70 feet bgs at the southwestern corner of the Property to 130 feet bgs in other areas of the western portion of Property (EKI, 2006b). Available groundwater level information from Cypress Fee plume monitoring wells located on the eastern portion of the Property indicates that groundwater occurs at approximately 165 to 175 feet bgs in these wells (EKI, 2006b), and groundwater levels have generally fluctuated by approximately 5 to 10 feet over the last 10 years on the eastern portion of the Property (Arcadis BBL, 2008). This range is consistent with water level fluctuations observed in regional monitoring well Inglewood-1 and in monitoring wells on other nearby sites

(United #57 service station and Former Unocal #5050 Service station, see Figure 2) where water levels have fluctuated less than 11 feet (Appendix D). Water level data reported for Cypress Fee plume wells indicate that in 1996 and 1997, water levels in selected wells were as much as 30 feet below current levels (Arcadis BBL, 2008). This reported drop in water levels may be the result of groundwater extraction that occurred between 1994 and 1998 as part of remedial efforts associated with the Cypress Fee plume (Hart Crowser, 2003b). Based on available information regarding local historical water level fluctuations, a screen length of 30 feet is proposed for the new wells on the western portion of the Property. Well screens for the proposed new monitoring wells will be set at approximately 10 feet above first encountered groundwater, which will provide 20 feet of well screen below current groundwater elevations to allow for reasonably anticipated water table fluctuations. Additional construction information for the four new wells is as follows:

- Boreholes for installation of groundwater monitoring wells will be drilled using a hollow-stem auger rig;

- Soil samples will be collected during drilling, as described in Section 2.6.3 below;

- Boreholes will be converted to groundwater monitoring wells upon completion of drilling;

- Wells will be constructed of 4-inch diameter schedule 40 polyvinyl chloride ("PVC") casing;

- Well screens will be 0.02-inch slotted PVC and 30 feet in length;

- Based on groundwater elevations measured in EKI's grab groundwater sampling boreholes in 2005 and a 20-foot saturated zone screen length, anticipated total depths of the proposed wells are as follows:

  - HPLCMW-1 – 140 feet bgs,

  - HPLCMW-2 – 140 feet bgs,

  - HPLCMW-3 – 90 to 130 feet bgs (approximated because groundwater elevations were not previously measured near this location), and

  - HPLCMW-4 – 140 feet bgs.

  These total well depths may vary, depending on the actual locations of the Inglewood (Townsite) fault and associated fault traces on the Property and will be adjusted based on field observations if first encountered water depths are significantly different at any location;

- Depending on encountered drilling conditions, e.g., if flowing sands are encountered, it may become necessary to utilize a sonic, air, or mud-rotary rig to reach desired depths, in which case drilling would be terminated until appropriate equipment could be mobilized. Soil samples may not be collected at well locations if alternative drilling methods need to be utilized;

- Each new monitoring well will be completed flush with the surrounding ground surface with a minimum 12-inch diameter traffic-rated well vault;
- Following construction, each monitoring well will be developed in accordance with procedures described in Appendix E; and
- Following well development, the four new groundwater monitoring wells will be sampled, as described in Section 2.6.4 below.

See Appendix E for more information regarding field methods and procedures for groundwater monitoring well installation.

2.6.3 Soil Sampling during Monitoring Well Installation

Soil samples will be collected during borehole drilling for installation of the four proposed groundwater monitoring wells, as follows:

- During drilling, soil samples will be collected from each borehole at a depth below any subbase material, i.e., at depths of 1, 5, 10, 20, 60, and 100 feet bgs, and at the total depth of the borehole, above the saturated zone, where groundwater occurs at 120 feet bgs or deeper.
- There are no known historical commercial or industrial uses at any of the proposed monitoring well locations, other than as vehicle parking lot areas. Because the likely COPCs associated with vehicle parking lots are related to minor fluid leakage to the surface from parked vehicles, shallow soil samples are most appropriate for screening these areas.
- Therefore, the soil samples collected from depths of one and five feet bgs from each of the monitoring well boreholes will be submitted to a California-certified laboratory and analyzed for TPH-g, diesel-range total petroleum hydrocarbons ("TPH-d"), and motor oil-range total petroleum hydrocarbons ("TPH-mo") using U.S. EPA Method 8015M, for VOCs using U.S. EPA Method 8260B, for polychlorinated biphenyls ("PCBs") using U.S. EPA Method 8082, and for California Title 22 metals using U.S. EPA Method 6020. Soil samples for TPH-g and VOC analyses will be collected in En Core® samplers, using U.S. EPA Method 5035 protocols.
- For each borehole, soil samples collected at 10 feet bgs and deeper will be held at the laboratory and will not be analyzed unless the 5 foot bgs sample contains the selected analytes at concentrations above the Property-Specific Criteria for residential land use provided in Table 1 of the SMP (EKI, 2007). If this occurs,

all of the deeper soil samples collected from this borehole will be analyzed for the same detected COPC to screen for its occurrence in deeper soil.

- Soil sample analytical results will be reported on a dry-weight basis and soil moisture content will be measured and reported.

Soil samples will be collected during hollow-stem auger drilling at each proposed monitoring well location, i.e., HPLCMW-1 through HPLCMW-4 (see Figure 3). Soil samples may not be collected at well locations if alternative drilling methods need to be utilized in response to drilling conditions, e.g., if flowing sands are encountered. Soil samples will be collected and analyzed according to the field methods and procedures provided in Appendix E.

2.6.4 Groundwater Sampling following Monitoring Well Installation

Following well development, groundwater elevations will be measured, and groundwater samples will be collected from each of the four new groundwater monitoring wells. During 2005 investigations, low concentrations of nitrate, perchlorate, PCE, and TPH were detected in groundwater on the western portion of the Property at concentrations that may indicate the presence of residuals from regional and upgradient local releases, as discussed in Section 2.4 and as shown on Figure 3. Groundwater samples will be analyzed for the following, for purposes of further confirming local groundwater conditions described in the sections above:

- VOCs and fuel oxygenates using U.S. EPA Method 8260B,
- TPH-g and TPH-d using U.S. EPA Method 8015M,
- Nitrate and nitrite as nitrogen using U.S. EPA Method 300.0, and
- Perchlorate using U.S. EPA Method 314.0.

Refer to the field methods and procedures provided in Appendix E for further discussion of groundwater sampling procedures.

2.6.5 Report of Monitoring Well Installation and Sampling

The monitoring well logs, soil sample analytical data, groundwater elevation data, and analytical data for groundwater samples will be reviewed and summarized in a report of monitoring well installation and sampling. This well completion report will be submitted to the RWQCB on behalf of HPLC within 45 days of receipt of the final analytical data from the laboratory for the selected environmental samples as noted above. This report will present findings regarding groundwater conditions on the western portion of the Property related to depths to groundwater, estimated groundwater gradients, and preliminary interpretation of water quality results.

3. EVALUATION OF NATURALLY-OCCURRING LOCAL BACKGROUND LEVELS OF ARSENIC IN SOIL

This section provides responses to RWQCB Comment No. 10 regarding detected concentrations of arsenic in soil samples collected from the Property, and provides further information regarding naturally-occurring background levels of arsenic in soil (see Appendix A for complete comment). This RWQCB staff request for more data appears related to a presumption of future residential use of the Property, i.e., Track 2.

Provided below is a discussion of procedures typically accepted by the California Environmental Protection Agency DTSC and Office of Environmental Health Hazard Assessment ("OEHHA") for calculation of background concentrations of metals in soil and an analysis of all available arsenic data for soil samples collected at the Property and identified nearby sites. As indicated by this analysis, lateral delineation of arsenic in soil at the Property at concentrations above the Cal-Modified Preliminary Remediation Goal ("PRG") published by United States Environmental Protection Agency ("U.S. EPA") Region IX is unnecessary and inappropriate. With the exception of the two sample arsenic concentrations previously identified as outliers (EKI, 2007), the arsenic concentrations identified in soil at the Property are a) demonstrably within local background concentrations and b) consistent with the concentrations of arsenic left in place in soil on the adjacent former Cypress Fee site prior to its closure by the RWQCB and subsequent redevelopment for residential land use and on another nearby site reviewed by DTSC, as discussed below. Further, the DTSC published a report on its website on 19 March 2008 that finds 12 mg/kg to be an appropriate screening number for evaluating arsenic as a COPC in soils in Southern California, based on statistical analysis of a large data set from school sites in Los Angeles County for purposes of determining a regional arsenic background level for the Los Angeles Unified School District ("LAUSD") (DTSC, 2008).

The two soil sample locations with arsenic detected at concentrations considered to be outliers, i.e., potentially above background, are adequately characterized for continued current use of the Property as a commercial horse racetrack and casino, i.e., Track 1. One of these soil samples was collected in the Print Room, which is covered by concrete pavement, and the other is located in a dirt area used as a driveway near the stables and is covered by 5 feet of soil, i.e., in the Former Oil Field Impoundment Area (EKI, 2006b). No further environmental sampling for arsenic in soil appears warranted at this time at the Property. Further, with only two occurrences of any arsenic measurements above the proposed screening criteria pertinent for future residential land uses out of 53 soil samples collected on the Property, the confirmation soil sampling protocols proposed in the SMP are believed to be adequate for implementation as part of future redevelopment, whenever it occurs, i.e., Track 2, and to be protective of future construction workers and occupants.

3.1 Typical Approach to the Calculation of Arsenic Background Concentrations

The hypothetical risk-based goals for arsenic, such as the Cal-Modified PRGs, bear no relationship to the concentrations of arsenic typically encountered in soils and, as acknowledged by DTSC and OEHHA, site-specific risk-based goals must be adjusted for background, naturally occurring concentrations of arsenic in California soils. Studies such as the *Background Concentrations of Trace and Major Elements in California Soils* (Bradford et al., 1996), the DTSC's regional studies *Background Levels of Trace Elements in Southern California Soils* (Marrett et al., 1991 and 1992), and the DTSC's *Final Report Background Metals at Los Angeles Unified School Sites – Arsenic* (DTSC, 2005b) show that actual background arsenic concentrations in California soils substantially exceed calculated risk-based screening thresholds. Therefore, the RWQCB staff request for "lateral delineation" of soils that "exceed the Cal-Modified PRGs for arsenic in soil" is inconsistent with these technical studies, as well as, with the California Human Health Screening Levels ("CHHSLs") guidance document, which clearly allows use of background concentrations in place of the Cal-Modified PRGs and states the following (CalEPA, 2005):

> *"Naturally occurring background concentrations of arsenic, beryllium, cadmium, chromium and other metals in soils may exceed their respective soil CHHSLs. CalEPA generally does not require cleanup of soil to below background levels. This issue is frequently encountered with arsenic. Natural background concentrations of arsenic in California are often well above the health-based, direct-exposure goals in soil of 0.07 mg/kg for residential land use and 0.24 mg/kg for commercial/industrial land use (e.g., Bradford et al., 1996; LBNL, 2002). Background concentration of arsenic or other metals of potential concern at a site should be determined from analysis of site-specific samples in uncontaminated areas using guidance published by CalEPA and/or reference to published data for nearby sites."*

The question of what is an appropriate background threshold concentration for arsenic in local soils, e.g., at the Property, can be approached using the generally accepted methodology outlined by DTSC in *Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities* (DTSC, 1997). In addition, the question of background arsenic can also be examined from the perspective of its relationship to other metals, an approach that is routinely used with DTSC oversight at other sites in EKI's experience (EKI, 2002). The application of both of these methodologies to soil data obtained from the Property is discussed in detail below, and resulting estimates of local background concentrations of arsenic at the Property are provided.

3.2 Defining the Arsenic Data Set

The process for determining background concentrations that is described in the DTSC's guidance is "a flexible process with which project teams can define ambient conditions of metals and selected metals as COPCs". A key element of this DTSC process is the use of site data and nearby data (DTSC, 1997). The DTSC states:

> *"The best description of ambient conditions will be obtained from the largest data set possible." "Data from investigations performed at the same site or nearby may be combined with the ambient data set if soil types and analytical methods are generally similar."*

Consistent with these DTSC recommendations, EKI compiled metals data for 101 soil samples collected from the Property (53 samples) and from two nearby properties (48 samples) shown on Figure 4. These soil samples were collected from depths ranging from ground surface to approximately 20 feet bgs. These data are shown in Table F-1 in Appendix F, and their associated sample locations shown approximately on Figure 4. As shown in Table F-1, out of 101 soil samples, 23 soil samples contained arsenic concentrations below the corresponding laboratory reporting limits. Metals in addition to arsenic are included in the data set, as explained below, to allow the arsenic background concentrations to be evaluated based on a broader, but localized geochemical context, consistent with the DTSC guidance. The relationships between different metals can provide a tool useful for determining samples in which the metals are naturally occurring and samples in which anthropogenic metals may have overprinted local background concentrations.

3.3 Arsenic Population Analysis

The DTSC approach uses cumulative probability plots and data distribution modeling to identify background metal populations and to select threshold concentrations to represent the upper ranges of site background metals distributions (DTSC, 1997). In this approach, sample data for a metal are considered to reflect a single statistical population if its cumulative frequency distribution reasonably approximates a straight line on probability plots. If the linear cumulative distribution pattern occurs when the concentration data are displayed on a linear scale, then the underlying population model is considered normal, i.e., Gaussian. If the linear cumulative distribution pattern occurs when the concentration data are displayed on a logarithmic scale, then the underlying population model is lognormal. For naturally occurring trace metals in soils and rocks, the cumulative frequency distributions are almost always lognormal. If the data fit a single population model, that population is assumed to represent background or ambient conditions, as recommended by the DTSC.

A cumulative probability plot of the 78 detected arsenic concentrations for the Property and the selected nearby sites, as listed in Table F-1 and presented on Figure F-1 in Appendix F, shows that this data set is approximately lognormally distributed and that two sample arsenic concentrations, i.e., the arsenic concentrations of 18.7 and 21.6 mg/kg previously identified by EKI as "outliers" (EKI, 2006b), fall outside the best-fit lognormal model.[16] These two samples containing outlier concentrations of arsenic are discussed in the Data Summary Report and SMP (EKI, 2006b; EKI, 2007).

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[16] The data plotted on Figures F-1 and F-2 in Appendix F do not include the 23 samples listed in Table F-1 with the "non-detected" arsenic concentrations.

Figure F-2 in Appendix F shows the same data plot of detected arsenic concentrations with the two outlier concentrations removed.[16] To create a lognormal model of the arsenic population that included the 23 non-detected concentrations, the data (minus the two outliers) were imported into the U.S. EPA statistical software ProUCL (version 4.02), and a regression on ordered statistics ("ROS") routine was used to estimate a lognormal data distribution for this combined dataset (U.S. EPA, 2007). Concentrations for soil samples with non-detectable arsenic were estimated by ROS for the lognormal distribution using ProUCL. The resulting population model is shown on Figure F-3 in Appendix F.

The ultimate objective of constructing a statistical model of background concentrations for a naturally-occurring metal is the estimation of a threshold screening level, i.e., a concentration or range of concentrations, above which particular data can considered unusual, outliers or anomalous and, therefore, potentially indicative of anthropogenic contribution or release. For the purpose of distinguishing local background metals concentrations from anomalous metals concentrations, only the "upper ends" of the model data distributions are of interest. Essentially, we are attempting to estimate, statistically, the maximum (background or ambient) metal concentration that we would expect to encounter if we were to collect a very large number of samples, which is typically prohibitively difficult to achieve.

The final step in this evaluation was to use the arsenic population model shown on Figure F-3 within EPA's ProUCL program to calculate a statistical estimate of the upper end of the background arsenic population (a background threshold or screening level), specifically an "upper tolerance limit" ("UTL"). The UTL approach is used in many regulatory compliance settings (U.S. EPA, 2006). In particular, it is impossible to know the true maximum concentration that a specific, naturally occurring metal could attain in a specific lithologic/soil unit; it can only be estimated. Whatever estimate of the maximum background metal concentration is derived, e.g., the 95th percentile of the data distribution, it is based on the data that are available. Were it possible to collect and analyze other, entirely independent sets of samples, the resulting estimates of the 95th percentile would likely be somewhat different. Hence, there is some fundamental uncertainty associated with any such estimate. As recommended by DTSC, this fundamental uncertainty is addressed by associating a statistical tolerance limit with the distributional threshold selected to represent the upper end of the background concentration.

For a northern California project with a similar amount of soil data, DTSC has indicated that for establishing a background arsenic threshold, use of the 95th percentile modified by the 95% tolerance interval is the favored approach (Dr. John Christopher, personal communication, 2007). This means that we will be 95% confident that the arsenic concentration interval below the UTL would contain at least 95% of the future measurements that we could make if we were attempting to determine the 95th percentile from many additional independent investigations.

For the arsenic dataset presented in Table F-1, a two-tiered set of threshold screening levels was adopted, utilizing the 95$^{\%}$ and the 99$^{\%}$ UTLs of the arsenic population model. The ProUCL outputs for these two calculations are included in Appendix F. Addition of the 99$^{\%}$ UTL as a second threshold screening level provides perspective about how anomalous a given sample concentration may be. On average, the 99$^{\%}$ UTL should produce false anomalies only one percent of the time or less. In summary, the 95$^{\%}$ UTL calculated using ProUCL software, for the Table F-1 dataset, is 6.7 mg/kg, and the calculated 99$^{\%}$ UTL is 7.4 mg/kg.

3.4 Graphical Analysis

Another way to evaluate background metals concentrations is to consider the relationships between different naturally occurring metals, particularly the relationships between trace metals and major elements such as iron and aluminum. Trace elements in soil tend to be strongly associated with clay minerals, iron oxides, and manganese oxides. Hence, as the abundance of these mineral phases increases, so too does the abundance of these naturally occurring trace metals. This simple graphical tool makes dependence relationships (correlation) visible, allowing natural trends in the data to be observed. Scatterplots are also an effective tool for discriminating background metals populations from metals with an anthropogenic source. Metals with an anthropogenic source are not likely to have the same metal-to-metal relationships as the naturally occurring background metals. This approach to identifying anthropogenic metal inputs / releases has been successfully used with sediments in Florida (Schropp and Windom, 1988) and the Gulf Coast (Trefry and Presley, 1976) and has been used at other sites in California, with oversight and approval by the DTSC, for identifying anthropogenic metals in soil (EKI, 2002).

In soils that have not been impacted by anthropogenic metals, the concentrations of trace metals, like arsenic, are directly correlated with the amount of clays and iron oxides present, i.e., the mineral phases with highest surface areas and abilities to adsorb trace metals. Hence, aluminum and iron concentrations provide estimates of clay and iron oxides present in the soil. Aluminum and iron concentration data were only available for soil samples collected on the Property for use in investigating these relationships between metals; soil samples collected on nearby properties had no such data available.

As a result, an alternative approach was used to provide a "surrogate" indicator of the clay and iron oxide content in soil samples collected on nearby properties wherein the strong relationship between the sum of aluminum and iron and the sum of chromium, cobalt, nickel, and vanadium is utilized. Chromium, cobalt, nickel, and vanadium were selected by the San Francisco Estuary Institute as a group of metals that are strongly associated with clay minerals (SFEI, 1994). Figure F-4 in Appendix F shows the strongly linear nature of this relationship in all soil samples collected from the Property. The linear relationship shown on Figure F-4 means that the sum of chromium, cobalt, nickel, and vanadium, i.e., "Cr+Co+Ni+V," can be used as a "surrogate" indicator of the aluminum and iron content, and, therefore, also as a "surrogate" indicator of clay and iron oxide content of samples in the background soil data set.

Arsenic sample concentrations for the Property and nearby sites are plotted versus the sum of chromium, cobalt, nickel, and vanadium concentrations on Figure F-5 in Appendix F, showing this correlation of naturally occurring arsenic concentrations with concentrations indicative of clay and iron oxide content. The resulting distribution of points clearly shows that the two previously identified "outlier" arsenic concentrations on the Property, i.e., 18.7 and 21.6 mg/kg, do not fit into the visual pattern, or correlation, formed by the remainder of the local soil samples.

On Figure F-5, with the exception of the two outliers, these data form an elongated cluster of data points with a slightly positive slope (which is labeled as the "background data cluster". As can be seen on Figure F-5, the highest detected arsenic concentrations that fall within the background data cluster include the 8.3 and 7.9 mg/kg concentrations detected in samples TSS-2 and TSS-1 on the former Cypress Fee site, respectively (see Table F-1). One higher arsenic detection of 8.92 mg/kg found on the former Inglewood Manufactured Gas Site (sample B-7) is also plotted on Figure F-5 in the center for illustration purposes, because chromium, cobalt, nickel, and vanadium concentrations were not available for that particular sample (see Table F-1). Thus, a local "visual background arsenic threshold" can be drawn at an arsenic value of approximately 9 mg/kg, based on the data cluster shown on Figure F-5.

Therefore, other than the arsenic concentrations of 18.7 and 21.6 mg/kg identified as outliers on Figure F-1, the next highest detected concentration of arsenic in soil on the Property is 7.12 mg/kg, which is below the 9 mg/kg visual background arsenic threshold and is within the range of arsenic concentrations left in the ground on the former Cypress Fee site (8.3 mg/kg; Hart Crowser, 2003a) and Inglewood Manufactured Gas Site (8.92 mg/kg; HydroSolutions, 1992) previously overseen by RWQCB and DTSC, respectively.

For comparison, the arsenic UTLs of 7.4 and 6.7 mg/kg calculated with the ProUCL program as discussed in Section 3.3 above are also plotted on Figure F-5, which again shows that the arsenic UTLs closely bound the upper edge of the visual background data cluster. Therefore, as seen on Figure F-5, these two methods of analyzing the data produce consistent results regarding local background level of arsenic in soil.

3.5 Conclusions Regarding Arsenic Background Concentrations at the Property

Available analytical data for approximately 100 soil samples collected from the Property and from two nearby properties under RWQCB or DTSC oversight were used to model the distribution of local background arsenic concentrations using DTSC-approved methodology and software published by U.S. EPA. Upper tolerance limits, or UTLs, were calculated using a lognormal model of the arsenic population that included the 78 detected arsenic concentrations, and the 23 non-detected concentrations, minus the two outlier concentrations of 18.7 and 21.6 mg/kg. The calculated $95^{\%}$ UTL and $99^{\%}$ UTL for arsenic are 6.7 and 7.4 mg/kg, respectively.

The same arsenic dataset, when expressed graphically on a scatterplot relative to metals typically associated with clays and iron oxides, i.e., Figure F-5, shows only same two arsenic concentrations that plot outside the main visual cluster of data points, thereby indicating them as outliers. A visual background arsenic threshold of approximately 9 mg/kg can be drawn, based on the scatterplot shown on Figure F-5. A concentration of 8.3 mg/kg is also shown, which corresponds to the concentration of arsenic that remained in-place at sample location TSS-2 on the former Cypress Fee site. This "visual arsenic background threshold" closely coincides with the statistical UTL estimates, indicating that the results of these two evaluations are consistent and that local background arsenic concentrations are well above the Cal-Modified PRG.

Therefore, these two approaches indicate that measured arsenic concentrations below approximately 9 mg/kg should be considered typical of local naturally-occurring background concentrations of arsenic in soil at the Property and would be consistent with concentrations remaining in-place on the adjacent former Cypress Fee site, which has been closed by the RWQCB and redeveloped with residential home sites. Consistent with the CHHSL guidance document from CalEPA and normal practice at other California sites regulated by DTSC in EKI's experience, it is unnecessary and inappropriate to attempt to delineate arsenic concentrations below this background concentration in soil on the Property. Thus, there is no apparent need for further testing for arsenic at this time for continued use of the Property as a commercial horse racetrack and casino, i.e., for Track 1.

On the basis of the further evaluation of available data as summarized above, it is EKI's opinion that the Property-Specific Criterion for arsenic in soil at the Property, as described in the SMP (EKI, 2007), should be revised to be representative of the local naturally-occurring background arsenic concentration of approximately 9 mg/kg. Therefore, EKI proposes that the Property-Specific Criterion for arsenic in soil at the Property be established at 9 mg/kg, which would be applied during implementation of the SMP. If future soil sampling activities on the Property occur during redevelopment, this dataset and procedure for evaluating local background concentrations of arsenic may be updated and revised as appropriate to establish a revised threshold value with concurrence of the RWQCB.

On 19 March 2008, DTSC published a report on its website that finds 12 mg/kg to be an appropriate screening number for evaluating arsenic as a COPC in soils in Southern California (DTSC, 2008). DTSC's finding is based on statistical analysis of a large data set, i.e., 1097 data points collected from 19 school sites in Los Angeles County, evaluated for purposes of determining a regional arsenic background level for the LAUSD. The local arsenic background concentration of 9 mg/kg as determined above for the Property is lower than the screening level of 12 mg/kg calculated by DTSC for school sites in Southern California and is, therefore, believed by EKI to be an appropriate Property-Specific Criterion for any future potential uses of the Property that may be considered during redevelopment, i.e., Track 2.

4. EVALUATION OF FILL SOIL ON THE PROPERTY

This section provides responses to RWQCB Comment Nos. 1 and 9 regarding the historical presence of fill soil in certain areas of the Property and suggested need for environmental investigations of a portion of the Property that has been consistently used as a parking area since original development of the Property in the 1930s (see Appendix A for complete comment). Again, the RWQCB staff request for more data appears related to a presumption of future residential use in each of these areas. Provided below is a summary of additional information gathered regarding the fill soils identified on the Property, including likely on-site sources of the "fill" soil. Because the fill soils are primarily associated with cut and fill grading of the Property when it was originally developed prior to 1938, no further characterization of fill soil on the Property appears to be warranted at this time. However, a work plan for collection of additional shallow soil samples on the Property is presented in Section 4.5 to facilitate RWQCB staff's future evaluations under Track 2.

4.1 Property Topography in 1930 Prior to Original Development

Prior to original development of the Property as a horse racing track in the 1930s, the Property was undeveloped agricultural land, as described in Section 1.2 and shown on the historical aerial photographs and topographic maps provided in Appendix B. Prior to the original development of the Property, between 1930 and 1938, the ground surface elevations of the Property varied by several feet, as follows:

- The western portion of the Property, in the area now used as the Western Parking Lot, sloped from the north to the south, with a total approximate elevation change of 34 feet. The surface elevation ranged from approximately +120 feet msl at what is now the northwestern corner of the Property to an elevation of approximately +86 feet msl at what is now the southwestern corner of the Property. The 1930s ground surface elevation contours are shown on Figure 5.

- A depressed, natural drainage area crossed the Property from north to south, in the portion of the property now occupied by the Grandstand Building and portions of the Main Track, with a total approximate elevation change of 22 feet. The bottom elevations of this drainage area ranged from roughly + 90 to +112 feet msl, with flow toward the south.

- From the location of the creek, the ground sloped somewhat steeply uphill toward the east, with an elevation change of approximately 13 to 35 feet, to an elevation of approximately +125 feet msl at the approximate center of what is now the Main Track.

- East of what is now the approximate center of the Main Track, the ground sloped more gradually uphill to the east, with an elevation change of approximately 25 feet, to approximately +150 feet msl at what became the northeastern corner of the Property in 1938 (see the 1938 Property boundary on Figure 5), and later became the north edge of the current-day Training Track.

- East of what became the eastern boundary of the Property in 1938, and later became the eastern portion of the current-day Training Track, the ground sloped steeply uphill to the northeast, with an elevation change of approximately 50 feet, to approximately +202 feet msl elevation at what later became the northeastern corner of the current Property boundary (see the 2008 Property boundary on Figure 5).

- Southeast of the current-day Main Track, in an area that was developed as the original Stable Area in 1938, but is no longer part of the Property, the ground sloped up gently to the east, with an elevation change of approximately 17 feet. This area extended from approximately +125 feet msl southeast of what is now the Main Track to approximately +142 feet msl at what became the eastern Property boundary in 1938.

Thus, in 1930, prior to original development, the Property area sloped uphill from the west to the east, divided into approximately three "steps" or main areas with different elevations, and with an overall elevation difference of approximately 100 feet. As shown on Figure 5, the western portion of the Property was approximately 5 to 35 feet lower in elevation than the central portion of the Property, was approximately 50 to 75 feet lower in elevation than the eastern portion of the Property.

4.2 Estimated Cut and Fill Volumes based on Property Topography Changes

Between 1930 and 1938, the Property was graded, cut, and filled, as shown on the historical aerial photographs and topographic maps provided in Appendix B. The entire Property was not graded to one level; instead, cut and fill was conducted on-site to make the three "steps," i.e., the three large areas of the Property, more level. For example, the elevation of the location of the Main Track really did not change much, but soil was moved from one side to the other to make it a more level area. Therefore, the Property is not entirely covered by 15 feet of fill material as stated in the 21 December 2007 RWQCB letter (see Appendix A). Based on a comparison of the 1930 ground surface elevations with the current ground surface elevations, the approximate areas and volumes of cut and fill associated with the original development of the Property are believed to have been relatively balanced. These findings, as illustrated on Figure 5, are based on information provided by HPLC's geotechnical engineer, a review of the historical aerial photographs and topographic maps provided in Appendix B, and the estimated volumes of approximate cut and fill areas, as summarized below.

By comparing the 1930 ground surface elevations (shown on Figure 5 and on historical topographic maps in Appendix B) with ground surface elevations obtained during land surveys of the Property during 2005 and 2007,[17] EKI identified approximate areas of historical cut and fill on the Property that were associated with the original development of the Property and subsequent significant changes to the Property topography. Using these approximate areas shown on Figure 5 and calculated differences in cut and fill depths, EKI estimated the volumes of soil historically moved for development of each of these areas. The estimated cut and fill volumes total to an approximate balance for the Property, indicating that no significant amounts of fill soil were likely imported to the Property for original development and construction of the Main Track, Grandstand Building, Stable Area, and other features of the horse racing track prior to 1938, as follows:

Area	Approximate Construction Date	Estimated Cut or Fill Volume (cubic yards)	
		Fill	Cut
Grandstand Building Area	1938	80,000	--
Main Track (to +125 feet msl; southwest portion)	1938	410,000	--
Main Track (to +125 feet msl; northeast portion)	1938	--	311,000
Infield Ponds (from +125 feet msl)	1938 and later	--	47,000
Infield (from +125 feet msl)	1938 and later	--	206,000
Original Stable Area and Vicinity	1938	--	54,000
Stable Area	1938	56,000	--
Western Parking Lot	1938	232,000	--
Stable Area	Approx. 1940	--	55,000
Training Track and Eastern Boundary	1938, approx. 1950, and 1984	--	244,000
Casino Building	1984	27,000	--
Main Track Extension	1984	102,000	--
Total Estimated Cut and Fill Volumes (cubic yards):		907,000	917,000

Totaling the estimated soil volumes of cut and fill that occurred in 1950 and before, in the areas shown on Figure 5, using the estimated volumes listed in the table above, indicates that there would have been more than enough cut soil available, i.e., approximately 920,000 cubic yards to supply the volume of fill needed, i.e., 780,000 cubic yards. Thus, there was no apparent need for large-scale importing of soil from unknown off-site locations when the Property was originally graded in the 1930s, or during later

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[17] Current topographic elevation data obtained from land surveys of the Property in 2005 and 2007 are too detailed to show on Figure 4. EKI reviewed data available electronically for the analysis described above.

reconfigurations of the Training Track. The southern end of the Main Track was extended and the Casino Building was constructed in approximately 1984, which required an additional volume of fill, estimated to be approximately 130,000 cubic yards as shown on Figure 5. Although this extension of the Main Track occurred later, Hollywood Park personnel have reported that excess soil from the Property is commonly, and has historically been, stored in the infield and along the eastern boundary of the Training Track. Further, Hollywood Park personnel did not identify any records that document importation of soil onto the Property for purposes of filling this southern area of the Main Track. The construction plans prepared by HNTB for extension of the Main Track in 1984 state that the estimated earthworks quantities for the project are approximately 162,000 cubic yards of cut soil and zero cubic yards of fill soil. Aerial photographs taken in 1984 and 1985 show disturbance of the soils in the vicinity of the Training Track and eastern Property boundary. The available information discussed above suggests that the fill soil used during 1984 construction events was moved from other locations on the Property.

The overall estimated cut / fill balance above shows that more than enough excess or "cut" soil was available on the Property to fill each of the identified areas, and this general balance shows a closure within approximately +/- 10 percent for soil volumes. Thus, it appears that during original grading activities in the 1930s and later, native soil was generally cut from the higher eastern areas of the property and graded onto the lower western areas of the property, including the current western parking area. Excess soil may have been stored, at times, in the infield of the Training Track or at other temporary locations on the Property, later being used to fill the Main Track extension area. This would be a typical and cost-effective approach to site preparation and leveling for such a large-scale construction project.

Soil types identified on EKI's borehole logs for the Property, included in the Data Summary Report, also confirm that soil types and characteristics described for soils identified as "fill" on these logs are consistent with those observed for deeper, native soils not identified as "fill". In this context, the term "fill" is used simply to differentiate between soil that appears to have been graded or moved into topographically lower areas that would have been associated with leveling for construction and drainage purposes.

HPLC's geotechnical engineer, Group Delta, reviewed soils at the Property for purposes of planning geotechnical work needed, should potential future redevelopment of the Property proceed. As part of its evaluation, Group Delta reviewed historical records at the City of Inglewood Building Department (Group Delta, 2007, 2008). During this review, Group Delta identified historical references to "fill" soil in building plans for the Property, which confirm that identified fills were present in the 1930s and 1940s, as summarized in the memorandum provided in Appendix G. Group Delta identified "fill" on its borehole logs during drilling activities on the Property (Group Delta, 2007), as did EKI during 2005 drilling activities (EKI, 2006b), which is a typical practice for geologic evaluations. However, Group Delta and EKI staff confirmed that fill soils observed during drilling are consistent with the cut and fill patterns likely associated with leveling the Property during its original redevelopment. EKI's observations of cut and fill areas and depths, based on the review of historical changes in topography at the Property discussed above, are consistent with Group Delta's observations of the presence of "fill" soil at the Property. These observations are discussed further in Appendix H.

Thus, there is no indication that the "fill" soils on the Property were imported or otherwise taken from contaminated sources.

4.3 Available Analytical Data for Fill Soil at the Property

During the screening-level subsurface investigations of the Property in 2005, 14 soil samples[18] were collected within fill soil intervals identified on borehole logs prepared by EKI and HPLC's geotechnical engineer for the Property. As described above, these fill soils are all believed to be associated with grading of the Property during the original development between 1930 and 1938. Therefore, these fill soils would not be expected to have different chemical quality because the entire Property areas that were cut during grading, i.e., the areas from which on-site fill soils were obtained, were used as agricultural or possibly residential lands prior to this time. Therefore, the shallow fill soils identified on the Property have already been characterized, and no additional sampling is warranted at this time. Analytical data for these 14 samples collected within fill soil layers were submitted to the RWQCB in the Data Summary Report (EKI, 2006b).

No COPCs were detected in these fourteen fill soil samples at any concentrations above the Property-Specific Criteria for residential land use proposed in the SMP, with the exception of the single soil sample identified as containing an outlier arsenic concentration of 18.7 mg/kg that was collected in the Former Oil Well Impoundment Area. This soil area was proposed in the SMP to be excavated and removed from the Property during implementation of the SMP as part of the redevelopment process (EKI, 2007). The historical former oil field use at this location is the likely source of arsenic in this sample; therefore, arsenic should not be considered a COPC associated with other native fill soils at the Property, as discussed in Section 3 above.

4.4 Conclusions Regarding Fill Soil at the Property

Prior to original development of the Property prior to 1938, use of the Property consisted of a few residences, a limited number of unpaved roadways, agricultural land covered with vegetation, and oil production in the Former Oil Field Impoundment Area, which occurred in a very limited area that is now located northwest of the current-day Training Track.

Based on the additional information and evaluation presented above, original grading and leveling of the Property for its original development occurred between 1930 and 1938. The Former Oil Field Impoundment Area appears to have been filled during relocation of

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[18] During the 2005 investigations, soil samples were collected from the following boreholes on the Property, within intervals identified as "fill soil": PS-GW-1 (2 samples), PS-GW-2 (1 sample), PS-SB-4 (1 sample), PS-SB-6 (1 sample), PS-SB-8 (2 samples), PS-SB-9 (3 samples), PS-SB-14 (2 samples), PS-SB-15 (1 sample), and PS-SB-16 (1 sample) (EKI, 2006b).

the Training Track prior to 1947, as discussed above. There is no indication that the fill soils identified in borehole logs for the Property were imported from other properties; rather, these "fill" soils are simply soils moved around on the Property during grading and leveling for original development of the Property in the 1930s. This is true for the entire Property, including the parking lot areas on the western portion of the Property.

The 14 soil samples collected during 2005 from fill soil intervals and previously submitted to the RWQCB in the Data Summary Report (EKI, 2006b) show that no chemicals of potential concern were detected in fill soil samples, other than the single soil sample containing an outlier concentration of arsenic, which was collected within the Former Oil Field Impoundment Area. Additional sampling of fill soil on the Property is not warranted, particularly for ongoing commercial use of the Property for horse racing and casino operations.

4.5 Work Plan for Proposed Soil Sampling in Western and Southern Parking Lot Areas

Although the available information as summarized above shows that the western and southern parking lot areas at the Property were leveled using soil moved from another location on the Property during original development before 1938, these areas have been used for vehicle parking for the past 70 years. These areas have been paved for the majority of that time, and they are sloped to drain into large storm drains on the Property, so it is unlikely the soil below the pavement would be significantly impacted by minor fluid leakage from parked vehicles. However, in its 21 December 2007 letter, RWQCB requested sampling of this soil to screen for COPCs that could be associated with the historical use of these parking lot areas.

HPLC does not consider soil sampling of these areas to be warranted for the ongoing commercial use of these areas for vehicle parking associated with the horse racetrack and casino, i.e., for Track 1 described in Section 1.3. However, to support potential future redevelopment of the Property, i.e., Track 2, HPLC proposes to collect soil samples below pavement in the western and southern parking lot areas for screening purposes, as follows:

- Two discrete grab soil samples will be collected from each of four shallow boreholes advanced in the western and southern parking lot areas, at the locations shown on Figure 3, in addition to collection of two discrete grab samples of shallow soil from each of the four proposed monitoring well locations shown on Figure 3. The soil samples to be collected from the monitoring well locations are discussed in Section 2.6.3. Thus, a total of 16 shallow soil samples will be collected of fill soil within the parking lot areas. The planned laboratory analyses for the soil samples collected from shallow boreholes are described below.
- Because the likely COPCs associated with vehicle parking lots are related to minor fluid leakage to the surface from parked vehicles, shallow soil samples are most appropriate for screening these areas. Thus, soil samples will be collected

from each borehole at a depth of one foot bgs, i.e., in soil below any subbase material, and at a second depth of five feet bgs.

- The one foot bgs samples will be analyzed for TPH-g, TPH-d, and TPH-mo using U.S. EPA Method 8015M, PCBs by EPA Method 8082, and California Title 22 Metals using U.S. EPA Method 6020. Soil samples for TPH-g analyses will be collected in En Core® samplers using U.S. EPA Method 5035 protocols.
- The five foot bgs samples will be held at the laboratory and will not be analyzed unless the one foot bgs soil samples contain the selected analytes at concentrations above the Property-Specific Criteria for residential land use provided in Table 1 of the SMP (EKI, 2007). If this occurs, the five foot bgs sample will be analyzed for the same detected COPC to screen for its occurrence at the five-foot depth.

Soil samples will be collected and analyzed as described in Appendix E. The results of these soil sample analyses will be included in the report of monitoring well installation and sampling to be submitted to RWQCB, as described in Section 2.6.5.

5. CHARACTERIZATION OF ENVIRONMENTAL CONDITIONS AT SPECIFIC AREAS

This section provides responses to RWQCB Comment Nos. 4, 5, and 6 regarding the adequacy of subsurface environmental data at certain areas on the Property (see Appendix A for complete comment). Again, the RWQCB staff request for more data appears related to a presumption of future residential use in each of these areas. Provided below is a discussion of all available environmental data at each of these areas on the Property. As indicated by the already completed, rather extensive environmental sampling, each of these areas is considered adequately characterized for current commercial land uses. Further, with few occurrences of any measurements above screening criteria pertinent for future residential land uses, the proposed SMP confirmation sampling protocols are believed to be adequate, with slight modification discussed below, for implementation as part of future redevelopment whenever it occurs. No further environmental sampling appears warranted at this time in these areas. If and when Property redevelopment for residential land use under Track 2 occurs, the existing buildings will be demolished prior to redevelopment, and additional investigation will be conducted as proposed in the SMP, as summarized below.

5.1 Current Vehicle Maintenance Area

The Current Vehicle Maintenance Area, located southeast of the Main Track, has been in use by Hollywood Park since approximately 1984.

All locations of shallow soil and soil gas samples collected by Dames & Moore in 1999 and by EKI in 2005 in the service bays, near the hazardous waste storage area, and adjacent to current underground storage tanks ("USTs") and associated fuel dispenser at the Current Vehicle Maintenance Area are shown approximately on Figure 6 (D&M, 1999; EKI, 2006b). A total of 41 soil and 8 soil gas samples, from 21 locations, with depths ranging from 1 foot bgs to 20.5 feet bgs, have been collected in the Current Vehicle Maintenance Area. None of these soil samples contained concentrations of COPCs above the screening criteria for commercial land use (EKI, 2006b), or above the more restrictive Property-Specific Criteria proposed in the SMP for hypothetical future residential land use (EKI, 2007).

Only two of the soil gas samples contained detectable benzene concentrations above published CHHSLs for commercial land use. Only one of eight soil gas samples contained PCE above published CHHSLs for commercial/industrial land use. These soil gas data for benzene and PCE are shown on Figures 6 and 7, respectively, and are compared with the Property-Specific Criteria listed in Table 1 of the SMP. One soil sample contained detectable MTBE below screening levels for commercial use, and below the RWQCB screening levels for protection of groundwater, which were used as the more restrictive Property-Specific Criterion proposed in the SMP for hypothetical future residential land use (EKI, 2006b; EKI, 2007). These data for benzene, PCE and MTBE in this area are discussed below. The other 45 environmental samples collected in the Current Vehicle Maintenance Area did not indicate any significant occurrences of

COPCs, even relative to the Property-Specific Criteria for residential land use found in Table 1 of the SMP; thus, there are no indications of widespread impacts in the Current Vehicle Maintenance Area.

5.1.1 Benzene

Benzene was detected in soil gas at the PS-SG-12 location at a concentration of 1.92 µg/L and in soil gas at the PS-SG-13 location at a concentration of 1.0 µg/L, as shown on Figure 6, which are above published CHHSLs for commercial land use. However, results of the discrete soil samples collected at depths of 5, 10, 15, and 20 feet bgs at the PS-SB-14 location, which is within five feet of the PS-SG-12 location, showed no detectable concentrations of benzene in soil, nor any other COPC. Laboratory results from the soil sample collected at approximately 5 feet bgs at the PS-SG-13 location also showed no detectable concentration of benzene. While these two detections of benzene in soil gas are above published CHHSLs for benzene for commercial land use, taken together all of these available results shown on Figure 6 do not indicate a significant benzene source in this area. These data suggest that the presence of residual benzene in soil gas in the area is limited to two localized areas at low concentrations that are not of concern for the current commercial use of the Property and ongoing vehicle maintenance and repair activities at this location.

5.1.2 PCE

PCE was detected in one soil gas sample at the PS-SG-29 location at a concentration of 2.1 µg/L, which is above published CHHSLs for commercial land use. As shown on Figure 7, results of the soil samples collected at Dames & Moore's adjacent borehole locations B-13, at 1 and 10 feet bgs, and B-9 at 1 and 5 feet bgs, and EKI's soil gas samples collected at nearby locations PS-SG-10 and PS-SG-11 show no detectable concentrations of PCE. While this sole detection of PCE was above published CHHSLs for PCE for commercial land use, taken together all of these sampling results shown on Figure 7 do not indicate a significant PCE source in this area. These data suggest that the presence of residual PCE in the area is limited to location PS-SG-29 and is not of concern for the current commercial use of the Property at this location and ongoing vehicle maintenance and repair activities at this location.

5.1.3 MTBE

MTBE was detected at a concentration of 0.310 mg/kg in one soil sample collected at 5 feet bgs at location B-12 by Dames and Moore in its 1999 subsurface environmental assessment (D&M, 1999). EKI collected a soil gas sample at location PS-SG-10, adjacent to the prior D&M soil sample at location B-12 to confirm the presence of MTBE; however, MTBE was not detected above laboratory reporting limits in this more recent soil gas sample in 2005. Soil samples collected from depths up to 20 feet bgs from two boreholes (PS-SB-6 and PS-SB-7) and a soil gas sample collected from a temporary probe (PS-SG-8) advanced near the existing gasoline and diesel fuel USTs in 2005 also did not contain TPH, MTBE, or TPH-related volatile organic compounds above their respective Property-Specific soil Criteria for residential land use listed in Table 1 of the

SMP. Thus, of the 51 discrete environmental samples taken in this area, MTBE was present above detection limits in only one soil sample, and this result is two orders of magnitude lower than the U.S. EPA Region IX PRG for MTBE for residential land use, and it is below the RWQCB screening level for protection of groundwater, for the depth at which this sample was collected (EKI, 2006b), which was used as the more restrictive Property-Specific Criterion proposed in the SMP for hypothetical future residential land use (EKI, 2007). Taken together, all of these data indicate that there is not a significant MTBE source in this area and that MTBE is not of concern for the current commercial use of the Property or for hypothetical future redevelopment with residential land use at this location.

5.1.4 Future Activities in the Current Vehicle Maintenance Area

If and when Property redevelopment for residential land use occurs, the SMP protocols will be implemented (EKI, 2007) and additional environmental monitoring and observation will be performed in the Current Vehicle Maintenance Area as part of the redevelopment activities. For example, additional soil sampling will be performed during the UST removal activities beneath the current USTs and associated dispenser area and piping as proposed in the SMP. Further, according to the current preliminary grading plan (see Figure 12 of the SMP), following structure demolition, soil in the Current Vehicle Maintenance Area will be overexcavated to approximate depths between one and five feet bgs. Following overexcavation, soil will be placed and appropriately compacted to raise the grade to approximately three to five feet above the current grade. Impacted soils observed or encountered during the overexcavation will be characterized and remediated, if needed, in accordance with the provisions of the SMP.

Following completion of overexcavation in the Current Vehicle Maintenance Area but prior to backfilling and compaction, samples of soil gas will be collected to confirm that residual concentrations of COPCs in soil gas detected previously in this area are below the Property-Specific Criteria for soil gas for residential land use as listed in Table 1 of the SMP. The prior sample locations where VOCs were detected in soil gas above their respective Property-Specific Criteria (PS-SG-12, PS-SG-13, and PS-SG-29) will be relocated and marked by a licensed land surveyor so these same locations can be resampled following overexcavation activities.

As described in the SMP (EKI, 2007), if COPCs are detected in samples of soil gas above the Property-Specific Criteria for residential land use in Table 1 of the SMP, the Property Owner's representatives will confer with RWQCB staff to discuss the appropriate response actions, which may include (1) additional testing or monitoring, (2) evaluation of refined risk-based Property-Specific Criteria for soil gas in that area, (3) implementation of remedial actions, (4) implementation of vapor mitigation systems below planned structures, or (5) a change in land use of the affected area. If COPCs are not detected in soil gas samples above the Property-Specific Criteria appropriate for the planned future land use in this area, the Property Owner will request site-specific closure for this area from the RWQCB.

5.2 Former Track Maintenance Area

According to available historical Property use information reviewed by EKI, a track maintenance area previously existed at a location that is currently within the southern portion of the infield of the Main Track (see Figure 8). The Former Track Maintenance Area reportedly was used for equipment and vehicle maintenance and repair until 1981. At least one fuel UST appears to have formerly existed in this area, based on available historical drawings, i.e., Sanborn fire insurance maps (EKI, 2006b). There is no record of the existence or closure of this UST in regulatory agency files reviewed by EKI; thus, the status of this reported fuel UST is unknown.

As shown on Figure 8, a total of 18 discrete soil and 8 soil gas samples, from 12 locations with sample depths ranging from 1.5 feet bgs and 20.5 feet bgs have been collected in the Former Track Maintenance Area (EKI, 2006b). Results of analyses of soil samples and soil gas samples collected in 2005 showed non-detectable to low, but detectable concentrations of TPH and certain VOCs (e.g., benzene and PCE), as discussed in the Data Summary Report (EKI, 2006b). Only PCE was detected in soil gas at concentrations above the more restrictive Property-Specific Criterion proposed in the SMP for hypothetical future residential land use (EKI, 2007).

5.2.1 PCE

All available PCE data collected in the Former Track Maintenance Area are shown on Figure 8. PCE was detected in soil gas at the PS-SG-21 and PS-SG-23 locations at concentrations of 2.33 µg/L and 1.5 µg/L, respectively, which are above published CHHSLs for commercial land use. Soil gas samples from nearby locations PS-SG-18, PS-SG-19, PS-SG-20, and PS-SG-22 did not contain detectable concentrations of PCE. This area is currently used as a dirt roadway and grassy area of the Main Track infield; therefore, there are no occupied structures in this area at this time and there is no concern for vapor intrusion at this location. Taken together, all of these results shown on Figure 8 do not indicate a significant PCE source in this area. These data indicate that the presence of residual PCE in the area is limited to two localized areas near the PS-SG-21 and PS-SG-23 locations and that this is not of concern for the current commercial use of the Property at this location.

5.2.2 Future Activities in the Former Track Maintenance Area

As described in the SMP (EKI, 2007), if and when Property redevelopment for residential land use occurs, additional environmental monitoring will be performed in the Former Track Maintenance Area as part of the redevelopment activities. According to the current preliminary grading plan (see Figure 13 of the SMP), soil in the Former Track Maintenance Area will be overexcavated to approximate depths between 6 and 18 feet bgs. Following overexcavation, soil will be placed and appropriately compacted to raise the grade to approximately 3 to 5 feet above the current grade. Impacted soils observed or encountered during the overexcavation will be characterized and remediated, if needed, in accordance with the provisions of the SMP.

Following completion of overexcavation in the Former Track Maintenance Area but prior to backfilling and compaction, samples of soil gas will be collected to confirm that residual concentrations of COPCs in soil gas detected previously in this area are below the Property-Specific Criteria for residential land use as listed in Table 1 of the SMP. The prior sample locations where VOCs were detected in soil gas above their respective Property-Specific Criteria (PS-SG-21 and PS-SG-23) will be relocated and marked by a licensed land surveyor so these same locations can be resampled following overexcavation activities.

As described in the SMP (EKI, 2007), if COPCs are detected in samples of soil gas above the Property-Specific Criteria for residential land use in Table 1 of the SMP, the Property Owner's representatives will confer with RWQCB staff to discuss the appropriate response actions, which may include (1) additional testing or monitoring, (2) evaluation of refined risk-based Property-Specific Criteria for soil gas in that area, (3) implementation of remedial actions, (4) implementation of vapor mitigation systems below planned structures, or (5) a change in land use of the affected area. If COPCs are not detected in soil gas samples above the Property-Specific Criteria appropriate for the planned future land use in this area, the Property Owner will request closure for this area from the RWQCB.

5.3 Former Oil Field Impoundment Area

On the basis of review of available historical Property use information, an apparent Former Oil Field Impoundment Area (potentially used for the collection of oil, wastewater, and/or drilling fluids during former oil field operations) existed near the northwestern entrance to the Training Track in 1928 and 1938, as shown on Figures 9 and 10. Two former oil and gas wells, i.e., Hardy Community 2 and Hardy Community 3, were present on the northern portion of this Former Oil Field Impoundment Area, and a third former oil well, i.e., Pacific Southwest 1, was located east of the former impoundment, within the current-day Training Track (see Figure 4 of the Data Summary Report; EKI, 2006b). These three former oil wells were abandoned in January 1973, January 1973, and September 1935, respectively (EKI, 2006b).

As part of subsurface investigations conducted in 2005, EKI and ENVIRON performed extensive subsurface assessments in the Former Oil Field Impoundment Area that included collecting a total of 79 discrete soil samples and 2 soil gas samples from 21 locations with depths ranging from 1.5 feet bgs to 23.5 feet bgs, and one grab groundwater sample from a borehole drilled in the center of the former oil field impoundment (EKI, 2006b; ENVIRON, 2005b; ENVIRON, 2005c). All sampling locations in this area are shown on Figures 9 and 10. This area is located in the general vicinity of the Cypress Fee plume migrating onto the Property (EKI, 2006b).

Laboratory analysis of all of the soil samples collected from the Former Oil Field Impoundment Area show non-detectable levels of benzene, and only one soil gas sample (PS-SGM-48) contained benzene at a concentration of 0.537 µg/L, which is above published CHHSLs for commercial land use (EKI, 2006b). All benzene analytical results for soil and soil gas samples collected in this area are shown on Figure 9. However, this location is in an open dirt driveway area, so there is no concern for vapor intrusion for the current commercial use of the Property. If redevelopment occurs in the future, additional sampling will be conducted at this location, as described in Section 5.3.2 below.

One of eleven soil samples contained an arsenic concentration above naturally-occurring background levels, as described in the SMP and in Section 3 above.

As discussed in more detail below, low, residual concentrations of TPH related to the former oil production activities were detected in 46 of 79 soil samples collected from this area, as discussed in the Data Summary Report (EKI, 2006b). TPH concentrations were well below RWQCB screening levels for protection of groundwater (RWQCB, 1996; EKI, 2006b), as discussed further below.

Thus, no further assessment of the soil used to fill the historical impoundment appears to be warranted at this time for the current commercial land use. SMP protocols are believed adequate to assure proper management of this soil during future redevelopment if and when it occurs.

5.3.1 Petroleum Hydrocarbons

Residual concentrations of mid-range to heavy-range petroleum hydrocarbons were detected in some of the 79 soil samples collected from the Former Oil Field Impoundment Area. The 11 samples collected from this area and analyzed for TPH by EKI in 2005 did not contain total TPH concentrations higher than 500 mg/kg and are, therefore, of no concern for the current commercial land use of the Property or for future redevelopment, as discussed in the Data Summary Report and SMP (EKI, 2006b; EKI, 2007). The analytical results for these samples are shown on Figure 10.

During 2005, ENVIRON collected an additional 68 soil samples from the Former Oil Field Impoundment Area and analyzed all of these samples for TPH (EKI, 2006b). Two of ENVIRON's 68 soil samples contained trace levels of TPH-g, at a maximum concentration of 2.1 mg/kg (SB-3), which is three orders of magnitude below the RWQCB screening level of 1,000 mg/kg that would be applicable for groundwater deeper than 120 feet bgs (RWQCB, 1996). Of ENVIRON's 68 soil samples, 27 samples contained low levels of TPH-d, at a maximum concentration of 700 mg/kg (SB-9), which is two orders of magnitude below the RWQCB screening level of 10,000 mg/kg that would be applicable for groundwater deeper than 120 feet bgs (RWQCB, 1996). The analytical results for these samples are shown on Figure 10.

The majority of the TPH detected in samples collected by ENVIRON and EKI was in the motor oil or heavy carbon chain range, i.e., C23 or larger (EKI, 2006b). ENVIRON reported TPH-mo in 35 of its 68 soil samples collected in this area at a maximum concentration of 1,200 mg/kg (SB-10), which is well below the RWQCB screening level of 50,000 mg/kg that would be applicable for groundwater deeper than 120 feet bgs (RWQCB, 1996). A copy of ENVIRON's TPH data summary table is provided in Appendix I.

In Comment No 6 of the 21 December 2007 letter (Appendix A), RWQCB noted a TPH concentration of 1,700 mg/kg detected by ENVIRON. As can be seen on ENVIRON's data table in Appendix I, this total TPH concentration of 1,700 mg/kg corresponds to the sample collected at 20 feet bgs from borehole SB-10. However, it should be noted that this "total" concentration of 1,700 mg/kg consists of approximately 500 mg/kg TPH-d and 1,200 mg/kg TPH-mo, both of which are well below the applicable RWQCB screening criteria for these TPH ranges, as discussed above. This sample did not contain any detectable TPH-g. Further, as shown in the table, this sample is surrounded by other analyses indicating lower or non-detectable TPH concentrations at this same depth. Based on these soil sampling results, it is clear that there is no significant lateral area of these low concentrations of TPH, which pose no concern for the current commercial land use of the Property, and, because they are much lower than the applicable RWQCB screening criteria for groundwater protection, they also do not pose a threat to groundwater, which is approximately 150 feet bgs at this location and impacted by the Cypress Fee site plume in the vicinity.

Additionally, in 2005, EKI drilled a 180-foot deep borehole to groundwater at the PS-GW-5 location, in the center of the former impoundment area. As shown on the borehole log in Appendix G of the Data Summary Report, no odors were observed in this borehole, and no elevated organic vapor meter ("OVM") readings were recorded. The total TPH concentration detected in the grab groundwater sample collected at the PS-GW-5 location in 2005 was 67 µg/L (Figure 3), which is very low and is consistent with the residual TPH concentrations in the former Cypress Fee site plume, located in this vicinity. All of this taken together, there is no indication that the low concentrations of TPH at 20 feet deep at the SB-10 location would have reached or significantly impacted groundwater, which is over 170 feet deep at this location.

The SB-10 sample location is located adjacent to the former Hardy Community 3 oil wells, as shown on Figure 6 in the Data Summary Report (EKI, 2006b). As described in the SMP (EKI, 2007), if redevelopment of the Property proceeds, the former oil wells will be located and excavated, and soil containing COPCs at concentrations above the Property-Specific Criteria will be managed in accordance with SMP protocols.

Thus, all detected TPH concentrations in 79 soil samples collected in this former impoundment area are well below the screening criteria published by the RWQCB. Therefore, these low levels of TPH detected in soil in the Former Oil Well Impoundment Area pose no concern for the current commercial land use of the Property or for future redevelopment, as discussed in the Data Summary Report and SMP (EKI, 2006b; EKI, 2007).

5.3.2 Future Activities in the Former Oil Wells and Impoundment Area

As described in the SMP (EKI, 2007), if and when Property redevelopment for residential land use occurs, additional environmental monitoring will be performed in the Former Oil Field Impoundment Area as part of the redevelopment activities. For example, prior to soil overexcavation and grading activities, HPLC will remediate soil containing arsenic above the naturally-occurring background concentration, likely by excavation and off-site disposal of affected soil. In addition, the former Hardy Community 2 and Hardy Community 3 oil and gas wells will be located, assessed, and reabandoned, if necessary, in accordance with DOGGR and City of Inglewood requirements.

According to the current preliminary grading plan (see Figure 17 of the SMP), soil in the Former Oil Wells and Impoundment Area will be overexcavated to approximate depths between 10 and 15 feet bgs. Following overexcavation, soil will be placed and appropriately compacted to raise the grade to approximately 3 to 6 feet above the current grade. Impacted soils observed or encountered during the overexcavation will be characterized and remediated, if needed, in accordance with the provisions of the SMP.

Following completion of overexcavation in the Former Oil Wells and Impoundment Area but prior to backfilling and compaction, samples of soil gas will be collected to confirm that residual concentrations of COPCs in soil gas detected previously in this area are below the Property-Specific Criteria for residential land use listed in Table 1 of the SMP. The prior sample locations where benzene was detected in soil gas above its Property-Specific Criterion (PS-SGM-28) will be relocated and marked by a licensed land surveyor so these same locations can be resampled following overexcavation activities.

As described in the SMP (EKI, 2007), if COPCs are detected in samples of soil gas above the Property-Specific Criteria for residential land use in Table 1 of the SMP, the Property Owner's representatives will confer with RWQCB staff to discuss the appropriate response actions, which may include (1) additional testing or monitoring, (2) evaluation of refined risk-based Property-Specific Criteria for soil gas for that area, (3) implementation of remedial actions, (4) implementation of vapor mitigation systems below planned structures, or (5) a change in land use of the affected area. If COPCs are not detected in soil gas samples above the Property-Specific Criterion for soil gas appropriate for the planned future land use in this area, the Property Owner will request closure for this area from the RWQCB.

5.4 Clarification to Soil Gas Sample Collection Procedures Proposed in SMP

As stated in Section 5.1 of the SMP, during future redevelopment of the Property, when it occurs, confirmation soil gas samples will be collected in specific, currently identified areas, as detailed above, where prior detections in soil and soil gas samples were found to contain COPCs above their respective Property-Specific Criteria as listed in Table 1 of the SMP. As indicated in the previous subsections, the Property Owner intends to perform the confirmation soil gas sampling following overexcavation but prior to placement and compaction of fill soil. The soil gas sampling will be performed, at the locations where residual concentrations of COPCs in soil gas were detected previously, to confirm that concentrations of COPCs do not exceed Property-Specific Criteria at the time of redevelopment for the intended future land use in each area. If COPCs are not detected in samples of soil gas above the Property-Specific Criteria, fill soil will be placed and appropriately compacted.

6. COMPOSITE SOIL SAMPLING DURING SCREENING-LEVEL SUBSURFACE INVESTIGATIONS

This section provides responses to RWQCB Comment No. 7 regarding the composite soil sampling as utilized during the 2005 due diligence and environmental site assessment at certain areas on the Property (see Appendix A for complete comment). Again, the RWQCB staff request for more data appears related to a presumption of future residential use in each of these areas of composite sampling. Provided below is a discussion of all available environmental data at each of the pertinent areas on the Property. As indicated by the results of already completed environmental sampling discussed below, each of these areas is considered adequately characterized for current commercial land uses. Further, with few occurrences of any measurements above screening criteria pertinent for future residential land uses, the proposed SMP confirmation sampling protocols are believed to be adequate, with slight modification discussed below, for implementation as part of future redevelopment whenever it occurs. No further environmental sampling appears warranted at this time to supplement prior composite soil sampling in these areas.

6.1 Published Guidance Regarding Composite Sampling in Environmental Site Assessments

During the 2005 environmental investigations conducted at the Property by EKI, certain soil samples collected from the Main Track and Training Track surfaces and certain shallow soil samples collected in the Stable Area were composited by the analytical laboratory prior to analysis of non-volatile analytes. Each composite sample consisted of equal-volume aliquots of soil taken from four discrete samples and composited into a single sample for laboratory analysis (EKI, 2006b). The RWQCB staff has commented on the use of composite soil samples for evaluation of these track materials and selected shallow soils on the Property. However, according to the American Society for Testing and Materials ("ASTM") guidance for Phase II ESAs, ASTM E1903 (ASTM, 2002), and ASTM site characterization and sampling guidance documents D6051 (ASTM, 1995) and D4687 (ASTM, 2006), composite soil sampling can reduce inter-sample variance and analytical costs, while efficiently determining occurrence of contamination when the probability of hitting a contaminant "hot spot" is low. Further discussion of composite sampling protocols is provided below.

Compositing is a widely-accepted industry practice for environmental sample collection, as supported by the cited ASTM guidance documents, especially during Phase II ESAs and on large land areas. Additionally, in the *Interim Guidance for Sampling Agricultural Fields for School Sites, Second Revision,* as published by the DTSC on 26 August 2002, section 4.5 states, "*... compositing of discrete samples may be considered when the area to be sampled is greater than four acres.*" The surface areas of the Main Track, Training Track, and Stable Area sampled by EKI during 2005 are approximately 15, 6, and 19 acres in size, respectively; all larger than four acres.

According to ASTM D6051,

> *"Samples are always taken to make inferences to a larger volume of material, and a set of composite samples from a heterogeneous population provides a more precise estimate of the mean than a comparable number of discrete samples. This occurs because compositing is a 'physical process of averaging.' Averages of samples have greater precision than the individual samples."*

Decisions based on a set of composite samples will, for practical purposes like screening larger areas for the presence of contamination as part of Phase II ESAs, provide greater statistical confidence than a comparable set of individual discrete samples from a large area. Thus, ASTM D6051 provides a basis for the use of composite soil samples taken from a large property to evaluate, i.e., screen for, the presence of contaminants above screening levels. For example, assume equal amounts of material are taken from four discrete samples to prepare a composite sample, as was done in 2005 for preparation of the composite samples collected for specific areas of the Property. Then, the concentration in each discrete sample can be no more than four times the concentration reported in the analysis of the composite sample.

For example, 4,4'-dichlorodiphenyldichloroethene ("DDD") and 4,4'-dichlorodiphenyltrichloroethene ("DDT") were detected in one of the composite soil samples collected from the Stable Area at concentrations of 0.0079 and 0.093 mg/kg, respectively (EKI, 2006b).[19] Using the ATSM rationale described above, none of the discrete samples could have contained more than 0.0316 mg/kg DDD or 0.372 mg/kg DDT, and even these hypothetical maximum concentrations are one to two orders of magnitude lower than the published CHHSL for commercial land use, and are below the more restrictive Property-Specific Criteria listed in Table 1 of the SMP, which would be applicable if the Property is redeveloped. Therefore, using these composite sampling methods consistent with ASTM D6051, it can be shown that these concentrations pose no concern for the current commercial use of the Property or for hypothetical future redevelopment with residential land uses, and no further sampling for these compounds is warranted.

Based on the referenced ASTM and DTSC guidance documents, composite samples are an appropriate tool for detecting contamination above soil screening criteria during a screening-level environmental site investigation.

6.2 Additional Information Gathered Regarding Daily Maintenance and Renovation of Materials Sampled

Several of the 2005 composite samples were taken from the track surface materials. Routine maintenance and renovation activities performed on the Main Track and Training Track surfaces by HPLC further validate the use of, and conclusions drawn

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[19] DDD and DDT were detected in composite sample COMP (PS-SGM-22,21,19,49) prepared by the laboratory from discrete grab samples collected at the PS-SGM-22, PS-SGM-21, PS-SGM-19, and PS-SGM-49 locations in the Stable Area (EKI, 2006b).

from, the analysis of composite samples. California Horse Racing Board ("CHRB") Rule Nos. 1473 and 1474 require regular breaks in racing and training for track maintenance, including but not limited to watering, harrowing, and/or floating the racetrack surface. These activities, which are performed in accordance with Hollywood Park's written policy regarding their track safety maintenance program, are carried out on a schedule that has been approved by the CHRB. These required maintenance activities result in a racing surface with an intentionally well-mixed composition.

The maintenance and renovation procedures reported by the Track Supervisor for 2005 operations on the Property are summarized as follows:

Main Track Maintenance and Renovation

- Between 8 and 15 times per day, i.e., during each morning break and prior to each race, the Main Track surface was renovated by cutting the surface with a blade, harrowing the surface, and mixing in water on an as-needed basis.
- Once per week, deep renovation of the Main Track surface was performed, in addition to daily renovation, by cutting the upper 6 inches of the surface with a blade and tilling the soil.

According to the Track Supervisor, since installation of the new racing surface soil on the Main Track between 17 July 2006 and 13 September 2006, maintenance and renovation for the Main Track surface are performed less frequently than listed above due to the new material being used. The new soil placed on the Main Track is a commercial soil mixture referred to as Cushion Track™, manufactured by Equestrian Surfaces International, Ltd., of the United Kingdom. The material safety data sheet ("MSDS") for this new soil, provided in Appendix J, states that the track material is a non-toxic, composite mixture of sand, strands of polypropylene and polyester, granulated rubber, and petroleum based wax. HPLC does not intend for this new Main Track soil to remain on the Property if redevelopment proceeds.

Training Track Maintenance and Renovation

- Approximately 6 times per day, 7 days a week, the Training Track surface is renovated by cutting the surface with a blade, harrowing the surface, and mixing in water on an as-needed basis.
- Once per week, deep renovation is performed in addition to daily renovation by cutting the upper 6 inches of the surface with a blade and tilling the soil.

According to the Track Supervisor, the current maintenance and renovation procedures for the Training Track surface are consistent with the procedures listed above for operations during 2005. Additionally, the Track Supervisor indicated that, as needed to maintain track elevations, grade, and consistency, specialty sand is obtained from P.W. Gillibrand Co., Inc. ("Gillibrand") and mixed into the surface of the Main Track or Training Track. The MSDS for the specialty sand product typically provided by Gillibrand to the Property is provided in Appendix K.

6.3 Analytical Results for Composite Samples Collected during 2005

Based on the historical uses of the Main Track, Training Track, and Stable Areas, dating to the initial grading and construction of the Hollywood Park Race Track in the 1930s, these materials are mixed multiple times per day, in a continuous "compositing" process inherent to their uses at the Property as described above.

Information provided by Hollywood Park personnel regarding the Main Track and Training Track soil materials (EKI, 2006b) indicates that contaminants are not expected to be present in soil or soil gas in these materials. During the 2005 investigations by EKI, soil samples from the Main Track surface, Training Track surface, and Stable Area were collected and composited in a manner consistent with ASTM guidance and general ESA practices, as discussed in Section 6.1. This sampling resulted in eight composite soil samples: two composite samples for the Main Track surface, two composite samples for the Training Track surface, and four composite samples for shallow soil in the Stable Area. The 2005 analytical results from these eight composite samples showed no detections of COPCs at the laboratory reported detection limits, except for the pesticides DDD and DDT, which were shown to be acceptable, based on ASTM guidance, as discussed in Section 6.1 above.

6.4 Discrete Samples Collected in Stable Area

During the same sampling event in 2005, discrete soil samples were also collected in the Stable Area and analyzed by the same laboratory as the composite samples for selected analytes, at locations shown on Figure 11. The results for these discrete soil samples were consistent with the results for the composite samples, indicating that the composite and discrete samples are both representative of the soil conditions in the Stable Area (EKI, 2006b).

During Chevron's installation of Cypress Fee site monitoring well MW-10 on the Property in May 1994, soil samples were collected at depths of 160 and 170 feet bgs and analyzed for TPH-g and benzene, toluene, ethylbenzene, and xylenes; none of these compounds were detected in either of these deep soil samples. These results are shown on Figure 11.

Other discrete samples were collected in the Stable Area on the Property when Chevron moved its groundwater monitoring wells from the former Cypress Fee site onto the Property. During installation of monitoring wells MW-13, MW-14, and MW-15, soil samples were collected at depths of 20, 60, 100, 140, and 180 feet bgs and analyzed for TPH and VOCs, none of which were detected, as shown on Figure 11.

6.5 Results of Confirmatory Grab Soil Samples Collected during February 2008

The soil surface of the Main Track was sampled by EKI in 2005 (EKI, 2006b), but this track soil was then completely removed and replaced by HPLC in 2006. The soil removed from the Main Track was placed in a soil stockpile that is now located on the

Property near the southeastern corner of the Training Track. Adjacent to this stockpile of former Main Track soil, Hollywood Park personnel has stockpiled other soil removed from the Stable Area during regular maintenance activities.

On 8 February 2008, EKI collected discrete soil samples from these two soil stockpiles located on the Property. EKI collected one discrete grab sample from each stockpile; therefore, a total of two discrete soil stockpile samples were collected and analyzed during February 2008. Soil samples to be analyzed for gasoline-range TPH and VOCs were collected in disposable En Core® samplers consistent with U.S. EPA Method 5035. Soil samples to be analyzed by other methods were then collected in pre-cleaned glass containers supplied by the laboratory.

Both soil samples were submitted to Calscience Environmental Laboratories, Inc. ("Calscience"), a California-certified laboratory, for the following analyses:

- VOCs using U.S. EPA Method 8260B, with U.S. EPA Method 5035 preparation;
- Gasoline-range TPH using U.S. EPA Method 8015M, with U.S. EPA Method 5035 preparation;
- Diesel and motor oil-range TPH using U.S. EPA Method 8015M;
- Polycyclic aromatic hydrocarbons ("PAHs") using U.S. EPA Method 8310;
- California Title 22 metals and mercury using U.S. EPA Method 6020;
- Hexavalent chromium using U.S. EPA Method 7199 with U.S. EPA Method 3060A preparation;
- PCBs using U.S. EPA Method 8082;
- Perchlorate using U.S. EPA Method 314.0M;
- Nitrate and nitrite using U.S. EPA Method 300.0; and
- pH using U.S. EPA Method 9045D.

A copy of the laboratory analytical reports for these two samples provided by Calscience can be found in Appendix L.

Neither soil stockpile sample contained COPCs at concentrations above published CHHSLs for commercial land use or above the more restrictive Property-Specific Criteria for residential land use listed in Table 1 in the SMP (EKI, 2007). The results of these analyses of the two discrete soil samples are consistent with the results reported previously for the composite soil samples collected during 2005 (EKI, 2006b). These new data confirm that the composite soil sample data previously submitted to the RWQCB are representative for these soils. Further, these new discrete soil sampling results confirm that these soils do not contain COPCs above CHHSLs for commercial land use or Property-Specific Criteria for residential land use proposed in the SMP. Thus, no further sampling of these Track and Stable Area soils is warranted at this time for current commercial use of the Property as a horse racing track and casino, nor for hypothetical future redevelopment of the Property with residential land uses except as specified in the SMP protocols.

7. CONCLUSIONS AND RECOMMENDATIONS

In response to RWQCB's comment letter, dated 21 December 2007 (Appendix A), EKI conducted additional technical research and analysis, performed additional evaluation of regional and local geology and hydrogeology, and has presented written responses to each RWQCB staff comment in this report. Additional figures have been prepared to illustrate the extensive nature of the prior environmental sampling at the identified areas of concern and to illustrate the very limited extents of detected COPCs on the Property. The attached Appendices contain the references and sources of the pertinent, new technical information used in the preparation of this report. Complete references are listed in Section 8.

On the basis of this further evaluation of site-specific data and publicly available literature, EKI has drawn the following conclusions pertaining to RWQCB comments dated 21 December 2007 (Appendix A):

- Review of regional and local geology and hydrogeology reference materials has helped with understanding of the complex groundwater flow directions on and near the Property and the influence of local faulting. This review suggests historical, off-site regional source(s) of generally low, but measurable concentrations of nitrate, perchlorate, PCE, TPH, and TBA at levels comparable to those detected in grab groundwater samples on the Property.

- Measurable TPH concentrations in the groundwater at the southwestern corner of the Property were found to most likely be migrating onto the Property from a former off-site UST release at a gasoline station site located to the immediate southwest of the Property. Based on documents obtained from RWQCB files, groundwater flow from this off-site UST location is to the northeast, directly towards the Property, and historical groundwater samples collected from this UST release site contained levels of TPH comparable to those detected in the grab groundwater sample collected from borehole PS-GW-4 in the southwestern corner of the Property. Other concentrations of TPH detected in groundwater samples from other locations on the Property were very low, well below one part per million, and of the same order of magnitude as the concentrations of TPH constituents currently present in the plumes of impacted groundwater migrating from the former Cypress Fee Site onto the Property, which RWQCB has allowed to naturally attenuate for the past several years. At the time that the RWQCB allowed natural attenuation of the Cypress Fee site plumes to begin, groundwater samples contained concentrations of TPH at 5,100 μg/L and benzene at a concentration of 2,180 μg/L, which is well above the MCL. The Cypress Fee plume was later found to contain TBA at concentrations up to 570 μg/L. Thus, the Cypress Fee Site plume is well known to the RWQCB as the source of TPH, benzene, and TBA found in groundwater migrating below the eastern portion of the Property and at concentrations higher than those detected in grab groundwater samples elsewhere on the Property.

- The significant amount of new information regarding regional and nearby, off-site releases of COPCs to groundwater demonstrates that groundwater quality below the Property is likely influenced by, and consistent with, regional and local groundwater conditions. With the exception of the Former Dry Cleaning Area, information and analytical data previously submitted to RWQCB and further supplemented and clarified herein supports the conclusion that there are no known historical industrial uses of the Property, and there are no identified areas of significant releases of COPCs to soil at concentrations expected to migrate to groundwater, which is approximately 72 to 176 feet below the Property. Therefore, at the present time, under Track 1, there is no apparent need for further groundwater sampling on the Property for its continued use as a commercial horse racetrack and casino, except as already agreed that HPLC will provide future evaluation of potential groundwater impacts possibly associated with the Former Dry Cleaning Area, following completion of the ongoing SVE operations at this location.

- Nevertheless, in order to begin an early, further evaluation of groundwater in anticipation of redevelopment, i.e., for Track 2, HPLC proposes to install four groundwater monitoring wells on the western portion of the Property to confirm the regional and local groundwater elevations and flow directions identified based on the additional information gathered and reviewed by EKI. Soil samples will also be collected during installation of monitoring wells, groundwater elevations will be measured, and groundwater samples will be collected and analyzed. HPLC proposes to submit a report of monitoring well installation and sampling to RWQCB within 45 days following receipt of all of the final analytical results.

- As summarized in this report, the local background concentration of arsenic was evaluated in accordance with DTSC guidance documents and using software published by U.S. EPA, and a threshold background concentration of approximately 9 mg/kg was found to be appropriate for naturally-occurring arsenic concentrations in soils on the Property. Detected concentrations of arsenic in soil on the Property were found to be within the statistically calculated distribution of background concentrations in local soils, and below the screening level of 12 mg/kg published by DTSC for Southern California soils (DTSC, 2008), with the exception of the two previously identified outlier sample concentrations on the Property, which would be addressed during redevelopment as discussed in the SMP (EKI, 2007). Other than the two outlier concentrations, the highest arsenic concentration included in the background data cluster for the evaluation presented herein was 8.92 mg/kg arsenic in soil remaining on the Inglewood Manufactured Gas Site and 8.3 mg/kg arsenic that remained in soil on the former Cypress Fee site when it was closed by RWQCB and redeveloped with residential home sites. The soil sample locations on the Property that produced the two outlier arsenic concentrations were associated with historical operations in the Print Room and Former Oil Field Impoundment Area and will be addressed in accordance with the SMP protocols, during redevelopment activities, if and when redevelopment occurs under Track 2, prior to residential use of the Property. Arsenic concentrations in soil on the Property below the local background threshold level of 9 mg/kg proposed herein are most likely resulting from naturally occurring arsenic and do not indicate a need for delineation, as confirmed by the recent DTSC study. There is no apparent need for further testing for arsenic at this time for continued use of the Property as a commercial horse racetrack and casino, i.e., for Track 1.

- Fill soils encountered on the Property during subsurface environmental investigations vary in depth in certain areas of the Property and most likely originated on the Property given the estimated cut and fill soil volumes calculated from historical topographic maps and aerial photographs. As shown on Figure 5, large areas of the Property were "cut" and have no fill material. There is no indication of use of imported soil or use of potentially contaminated import soil as fill on the Property. Other than the identified limited commercial and former oil field uses on certain areas of the Property, there are no indications of historical industrial uses of the Property. Therefore, there is no indication that the western or southern parking lot areas contain imported fill soil, because these areas appear to have been leveled during grading as part of the original development of the Property in 1938. These areas were used for vehicle parking for the past 70 years. Although soil sampling of these areas is not warranted for ongoing commercial use of the Property, i.e., for Track 1, HPLC proposes to collect shallow soil samples from eight locations in these parking areas to screen for selected, potential COPCs associated with parking vehicles.

- Residual concentrations of COPCs found in soil or soil gas during subsurface environmental investigations are known to be localized and limited in occurrence, in certain areas of the Property, i.e., in the Current Vehicle Maintenance Area, the Former Track Maintenance Area, and the Former Oil Field Impoundment Area. The localized and limited occurrences of COPCs in these specific areas of the Property are not believed to represent significant risk to workers and visitors under the current commercial land use. These selected areas can be adequately inspected and sampled during redevelopment of the Property, if and when such redevelopment occurs, in accordance with the SMP protocols.

- Composite samples of soil from the Main Track, Training Track, and Stable Areas were previously collected and analyzed in a manner consistent with established environmental site assessment procedures and available guidance. Further, particularly given the ongoing and continuous mixing of these materials that occurs during daily racetrack maintenance and operations as clarified herein, the composite sampling and resultant laboratory detection limits obtained did not result in significant risk of false negative results for these materials. It should be noted that discrete soil samples were also collected in the Stable Area during 2005, and the results for these discrete soil samples were consistent with the results for the composite samples, indicating that both the composite and discrete samples are representative of the soil conditions in the Stable Area. This was further confirmed by the soil stockpile sampling recently conducted by HPLC. There is no apparent need for further sampling and analyses of these materials, particularly for continued use of the Property as a commercial horse racetrack and casino.

In July 2006, HPLC and RWQCB staff agreed to implement a voluntary "two track" process for the Property, Track 1 one for the current commercial operations and Track 2 for potential, future redevelopment. Many of the RWQCB comments discussed in this report appear to be related to a presumption of future redevelopment and residential use of the Property. As discussed during the 2006 meeting and later meetings with RWQCB staff, and as further described in this report, HPLC is uncertain that redevelopment of the Property for residential or other land use will proceed.

Presently, no areas with elevated concentrations of COPCs have been identified that would prevent HPLC from continuing to utilize the Property for its current commercial uses as a horse racetrack and casino. There is no evidence of historical releases or sources on the Property of significance, with the exception of the localized, historical release of PCE in the Former Dry Cleaning Area that is already being addressed by an operating SVE system installed in accordance with a RWQCB-approved work plan. Those areas of the Property where COPCs have been detected at measurable, but low concentrations have been found by EKI and others to be confined to localized areas and are believed not pose a significant threat to human health or the environment at this time. It is EKI's opinion that no additional subsurface investigations are currently needed given our current knowledge of the Property and its current land uses under Track 1. HPLC is operating and monitoring the SVE system in the Former Dry Cleaning Area, and HPLC plans to submit progress reports for this remediation work to RWQCB during 2008, as described in the *Startup Report* (EKI, 2008).

HPLC requests your approval of this Technical Report and Work Plan by 1 June 2008, so that timely implementation of the proposed additional environmental sampling can proceed.

HPLC also requests the opportunity to meet with RWQCB staff, in the future, to discuss any further actions or reports by HPLC that may be appropriate under Track 2, when the draft EIR is finalized and ready for circulation and HPLC has proceeded with the formal entitlement approval process, thereby confirming that redevelopment of the Property for mixed and residential land use will likely proceed.

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APPENDIX A

RWQCB Letter dated 21 December 2007

California Regional Water Quality Control Board

Los Angeles Region

Linda S. Adams
Agency Secretary

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Arnold Schwarzenegger
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

December 21, 2007

Mr. Doug Moreland
Hollywood Park Land Company, LLC
100 Wilshire Boulevard, Suite 940
Santa Monica, CA 90401

COMMENTS ON PROPERTY-WIDE SUBSURFACE INVESTIGATION REPORT AND SOIL VAPOR EXTRACTION WORK PLAN FOR FORMER DRY CLEANING AREA AND REQUIRMENT FOR A TECHNICAL REPORT (WORK PLAN) PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 – HOLLYWOOD PARK RACETRACK AND CASINO, 1050 SOUTH PRAIRIE AVENUE, INGLEWOOD, CALIFORNIA (SITE ID NO. 2040271, SLIC NO. 1207)

Dear Mr. Moreland:

The Los Angeles Regional Water Quality Control Board (Regional Board) staff received and reviewed, *Property-Wide Subsurface Investigation Report and Soil Vapor Extraction Work Plan for Former Dry Cleaning Area* (Report), dated October 30, 2006, prepared by Erler & Kalinowski, Inc. (EKI) on behalf of Hollywood Park Land Company, LLC (HPLC) for the above-referenced site (Property). This Report contains results of environmental site assessment and associated screening-level subsurface investigations. This Report also contains a Soil Vapor Extraction (SVE) Work Plan for installation of extraction wells and operation of the SVE system in the Former Dry Cleaning Area.

Upon your request, on May 8, 2007, this Regional Board reviewed and conditionally approved the SVE Work Plan first for installation of extraction wells and operation of the SVE system at the Former Dry Cleaning Area. As indicated in the May 8, 2007, approval letter (copy enclosed), the subsurface soil and groundwater investigations on the remainder of the Property other than the Former Dry Cleaning Area would be reviewed in a later time. Therefore, please note that this comment letter only addresses the subsurface soil and groundwater investigations on the remainder of the Property.

The Property is approximately 238 acres and includes a main horse racetrack, Grandstand building and clubhouse, the Pavilion/Casino building, horse training or practice track, horse stable area, equine hospital, track and vehicle maintenance facilities, and associated paved parking and landscaped areas. Prior to a horse racetrack facility in 1938, the Property was used in part for agricultural use in the western portion of the site and part oil field use including oil wells and oil field-related facilities in the eastern portion of the site (See attached site map). The Property was purchased by HPLC, a subsidiary of Stockbridge Capital Partners, LLC, from Churchill Downs (the Seller) in September 2005.

EKI's screening-level subsurface environmental investigations were performed in June and July 2005, as part of pre-purchase environmental due diligence on behalf of Stockbridge. EKI's scope of investigations was based in part on the results of a Phase I Environmental Site Assessment, dated April 11, 2005, prepared by ENVIRON on behalf of the Seller. EKI screened selected areas of the Property for the presence of chemicals of concern in soil, soil vapor, and groundwater. Regional Board staff did not review the workplan for conducting the screening-level subsurface environmental investigation and were not involved with field work.

Based on the Phase I assessment report, EKI identified the following areas of potential environmental concern on the Property:

- Former Dry Cleaning Area located in northern end of the Grandstand Buildings,
- Chemical plumes in groundwater migrating onto the Property from the former Cypress Fee site,
- Potential for methane in soil in former Oil Field areas,
- Current Vehicle Maintenance Area,
- Former Track Maintenance Area located at the south end of the current Main Track in field,
- Former Oil Field activities in northern and eastern portions of Property, including the Former Oil Wells and Impoundment Area,
- Print Room in Grandstand Building,
- Existing Underground Fuel Storage Tanks,
- Former Triangle Waste Storage Area,
- Stable Area west of the Training Track,
- Main Track and Training Track soil,
- Storm Water Sediment Area at the northeast corner of Training Track, and
- Potential concerns from off-site reported dry cleaners, gas stations, or other sources.

However, based on the subsequent subsurface investigations, the Report indicated that the areas potentially requiring additional assessment, monitoring, or remediation only included the Former Dry Cleaning Area, the former Cypress Fee site groundwater plumes, and elevated methane in soil vapor at two locations on the Property and the remainder of the Property does not need additional assessment at this time.

The Regional Board requires all the dischargers under the Site Cleanup Cost Recovery Program to perform adequate and complete identification, assessment, and characterization to include vertical- and lateral-extent delineation of impacted areas prior to performing remediation at the site to levels that will be protective of both the public health and groundwater resource. Based on the information submitted in the Report, Regional Board staff have the following comments:

1. The Report indicated that the observations made by EKI during the field activities include fill material up to 15 feet thick underlain by sand, silty sand, sandy silt, and clayey sand that were generally encountered to depths of 70 to 90 feet below ground surface (bgs). Please clarify that 15 feet of fill material applies to the Property side-wide.

   Also, please provide the sources of all fill materials that were deposited at the Property together with any analytical testing data that may have been done to screen the quality of the imported fill material for potential contaminants of concerns (COCs) (e.g., petroleum hydrocarbons, metals, volatile organic compounds and polychlorinated biphenyls, etc.)

2. The Report identified two fault zones cross the Property – the Potrero Fault crosses the northeastern portion of the Property, and an unnamed fault zone crosses the southwest portion of the Property. The presence of these two fault zones results in various groundwater depth and gradient conditions across the Property. EKI collected six groundwater grab samples on the

Property to evaluate chemical impact beneath the Property. Total petroleum hydrocarbons (TPH) were detected at 290 micrograms per liter (µg/l) in grab sample PS-GW-6, located near Grandstand Building; 980 µg/l of TPH in PS-GW-4, located at the southwest corner of the Property on a parking lot; 230 µg/l of TPH in PS-GW-2, located on Former Track Maintenance Area; 5.8 µg/l of tetrachloroethene (PCE) in PS-GW-1; and 11 µg/l of perchlorate in PS-GW-6, both are located near Former Dry Cleaning Area.

These data are considered to be screening level data and are not adequate to characterize groundwater quality over the entire 238 acres Property. Therefore, additional groundwater samples are required to define extent of the TPH, PCE, and perchlorate impacted area, and to determine the groundwater gradient in the western part of the Property.

3. As indicated in our May 8, 2007 conditional approval letter for the SVE Work Plan, the extent of the volatile organic compounds (VOCs) impacted soil and groundwater at the Former Dry Cleaning Area are not fully delineated both vertically and laterally. The extent of the VOC impacted groundwater plume (including tributyl alcohol) and groundwater gradient must be defined with the installation of groundwater monitoring wells after existing buildings are demolished and before the new proposed construction begins at the Former Dry Cleaning Area.

4. In the Current Vehicle Maintenance Area and Existing Underground Storage Tanks Area, soil vapor samples were collected at a depth of 7 feet bgs. Soil vapor concentrations of 1.92 µg/l of benzene, 2.1 µg/l of PCE exceeded California Human Health Screening Levels (CHHSL). Since soil samples were collected in a limited area and no groundwater samples were collected, additional soil and soil gas samples are necessary vertically including groundwater sample(s) in the area where VOCs in soil vapor samples were detected above CHHSLs. Samples were collected in a limited area only based on the previous ENVIRON Phase I Assessment. Please note that a site specific Human Health Risk Assessment (HHRA) or an evaluation and mitigation of subsurface vapor intrusion to indoor air are required when soil vapor data exceeds CHHSL values.

   In addition, ENVIRON Phase I Assessment data indicated that methyl tertiary-butyl ether (MTBE) was detected at concentrations up to 310 ug/kg at 15 ft. bgs, and no soil sample deeper than 15 ft. bgs was collected. Therefore, additional soil samples are required to define the vertical- and lateral-extent of the MTBE and/or other oxygenates (tertiary butyl alcohol, tertiary amyl methyl ether, ethyl tertiary butyl ether, tertiary amyl alcohol, di-isopropyl ether, and ethylene dibromide) impacted soil in the area.

5. In the Former Track Maintenance Area, PCE concentrations of 1.5 µg/l and 2.33 µg/l were detected in soil vapor above CHHSLs and no soil matrix samples were collected in these locations. One soil sample detected PCE concentration of 0.0011 milligrams per kilogram (mg/kg) at 20 feet bgs. Since the concentrations of the soil vapor samples exceeded CHHSLs, additional soil and soil vapor samples below 20 feet bgs and groundwater sample(s) shall be collected.

6. In the Former Oil Wells and Impoundment Area, TPH concentrations up to 1,700 mg/kg at 20 feet bgs were reported from ENVIRON data. Therefore, vertical and lateral extent of the TPH impacted soil area shall be adequately defined.

7. This Regional Board does not accept the results from composite soil samples collected from the Stable Area and Main Track and Training Track Areas. To adequately assess subsurface contamination conditions, discrete and individual soil samples must be collected in these areas and at multiple depths bgs. These soil samples and groundwater samples in these areas shall also include analysis for nitrogen compounds.

8. A TPH concentration of 980 µg/l was reported in the groundwater grab sample PS-GW-4, located in the southwest corner of the Property. Additional samples are necessary to determine the extent of the TPH impacted groundwater plume beneath the Property.

9. No soil or soil gas samples were collected on the western portion of the Property where the main parking area is located. In many cases, long-time heavily-used parking areas have been found to be impacted by COCs; therefore, soil samples (using a multi-depth grid sampling protocol), at a minimum, shall be collected to confirm that the parking lot is not an area of concern as implied in the Report.

10. The Report indicated that the detected concentrations of arsenic in soil were considered a naturally-occurring background levels in soil at the Property. Arsenic was detected on the Property above California Modified Preliminary Remediation Goals (Cal-Modified PRG) and its lateral delineation is not complete.

Without the additional soil, soil gas and groundwater testing required for the Property prior to implementing the Soil Management Plan, the Regional Board is very concerned the workers implementing the Soil Management Plan at the Property will potentially be exposed to contaminants that may affect human health as well as the public.

HPLC is directed to submit a technical report (work plan to complete soil, soil gas, and groundwater assessment) by **March 15, 2008.** Pursuant to section 13268 of the California Water Code, failure to submit the required technical report or documents identified in the items 1 through 10 above, acceptable to the Executive Officer, by the due date specified may result in civil liability administratively imposed by the Regional Board in an amount up to one thousand dollars ($1,000) for each day, the report or document is not received. These civil liabilities can be issued by the Regional Board at any time after the above due date, and without further warning.

Should you have any questions, please contact Ms. Thizar Tintut-Williams at (213) 576-6723 or Ms. Su Han at (213) 576-6735.

Sincerely,

Tracy J. Egoscue
Executive Officer

Enclosures: Regional Board's May 8, 2007, conditional approval letter for the SVE Work Plan at the Former Dry Cleaning Area
Hollywood Park Racetrack and Casino Map

cc: Mr. Jose Albarez, Community Development Department, City of Inglewood
Mr. Joe Baiocco, County of Los Angeles Department of Public Works
Ms. Jami A. Striegel Orloff, Erler & Kalinowski, Inc.

/ttw

California Regional Water Quality Control Board
Los Angeles Region
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May 8, 2007

Mr. Doug Moreland
Hollywood Park Land Company, LLC
100 Wilshire Boulevard, Suite 940
Santa Monica, CA 90401

CONDITIONAL APPOVAL OF SOIL VAPOR EXTRACTION WORK PLAN - FORMER DRY CLEANING AREA IN HOLLYWOOD PARK RACETRACK AND CASINO, 1050 SOUTH PRAIRIE AVENUE, INGLEWOOD, CALIFORNIA (SITE ID NO. 2040271, SLIC NO. 1207)

Dear Mr. Moreland:

The Los Angeles Regional Water Quality Control Board (Regional Board) staff received and reviewed, *Property-Wide Subsurface Investigation Report and Soil Vapor Extraction Work Plan for Former Dry Cleaning Area* (Report), dated October 30, 2006, prepared by Erler & Kalinowski, Inc. (EKI) for the above-referenced site. This Report summarized the data collected for Phase II environmental site assessment and associated screening-level subsurface investigation for several selected areas of potential environmental concern at the site. This Report also contains a Soil Vapor Extraction (SVE) Work Plan for installation of extraction wells and operation of the SVE system in the Former Dry Cleaning Area.

Please note that in this letter, the Regional Board is only addressing the SVE Work Plan for installation of extraction wells and operation of the SVE system at the Former Dry Cleaning Area. The Regional Board will be responding to the other subsurface and groundwater investigations on a reminder of the project site in a separate letter(s) upon completion of the review.

Hollywood Park Racetrack and Casino (Property) is approximately 238 acres and includes a main horse racetrack, Grandstand building and clubhouse, the Pavilion/Casino building, horse training or practice track, horse stable area, equine hospital, track and vehicle maintenance facilities, and associated paved parking and landscaped areas. The Property is currently owned by Hollywood Park Land Company, LLC. Prior to a horse racetrack facility in 1938, the Property was part agricultural use in western portion and part oil field use including oil wells and oil field-related facilities in eastern portion.

The Former Dry Cleaning Area is located in northern end of the Grandstand Building (northwest area of the Property). The operations in the Former Dry Cleaning occurred for several decades and were discontinued in 1999. Subsequently in 1999, a limited soil investigation was conducted and found tetrachloroethene (PCE) concentrations up to 8,800 micrograms per kilograms (µg/kg) in soil.

In 2005, additional soil, soil gas, and groundwater samples were collected in and around the Former Dry Cleaning Area: total of 25 soil samples from 4 boreholes (PS-SB-15 through PS-SB-18) in the interior of the Former Dry Cleaning Area up to 10 to 15 feet below ground surface (ft. bgs); eight soil vapor samples (five were within the Former Dry Cleaning Area, one along the sanitary sewer line, and two were outdoors north of the Grandstand Building, depths of 2.5 and 5.0 ft. bgs.); and two grab groundwater samples, PS-GW-1 and PS-GW-6 (groundwater encountered at 120.5 ft. bgs with total depth of 135 ft. bgs, soil samples were collected to 50 ft. bgs).

Results of the additional soil, soil gas, and groundwater sampling were summarized in the 2005 report. PCE concentration was detected in soil samples from PS-GW-1 up to 20 µg/kg at 50 ft. bgs; no additional soil samples were collected below 50 ft. bgs. PCE concentrations in soil samples were detected at a maximum of 2,100 µg/kg (at 10 ft. bgs) in PS-SB-18, which was collected in 2005, and 8,800 µg/kg (at 1 ft. bgs) in B-2R, which was collected in 1999; no additional soil samples were collected below 15 ft bgs due to difficult drilling conditions and limitations of the limited access. PCE concentration in groundwater sample collected from PS-GW-1 was detected at 5.8 micrograms per liter (µg/L). In addition, tributyl alcohol (TBA) was detected in groundwater sample collected from PS-GW-6; however, TBA was also detected at 18 µg/L in field blank, a quality assurance and quality control sample. Therefore, present of TBA found in the PS-GW-6 is in question.

Based on the subsurface investigation data collected to date, the Work Plan proposes to install a SVE system to reduce residual concentrations of PCE in the subsurface in the Former Dry Cleaning Area. The proposed SVE system includes the installation of four shallow SVE wells (screened 5 to 16 ft. bgs), one deeper SVE well (screened 15 to 50 ft. bgs), and five SVE vapor monitoring probes (VMP) (at 5 ft. bgs). The deeper SVE well will be installed north of the Boiler Room at no greater than 35 degrees of slant from vertical extending to a depth of approximately 45 feet below the floor surface of the Grandstand building. The proposed SVE system is designed using estimated radius of SVE influence of 100 ft. The SVE system is proposed to operate until the average PCE concentration in soil vapor to less than the commercial/industrial CHHSL at the vapor porbes and SVE wells, or to a point where soil vapor data indicate mass removal rates for PCE have reached low, asymptotic levels in extracted soil vapor followed by a rebound test.

On April 4, 2007, the Regional Board staff met with you and your consultant from EKI to discuss our following concerns and comments for the SVE Work Plan:

A. Extents of the volatile organic compounds (VOCs) impacted soil and groundwater at the Former Dry Cleaning Area are not fully delineated both vertically and laterally.

B. The SVE system is proposed without conducting a SVE pilot test which provides data necessary to design the full scale SVE system effectively and adequately. The proposed SVE is considered interim remedial measure.

C. Groundwater gradient is not fully defined at the property, including the Former Dry Cleaning Area.

D. In addition to soil vapor samples form the SVE wells and monitoring probes, soil samples at 5 ft. intervals must be collected to verify and confirm that the remediation is complete.

E. "No further Action" from the Regional Board for the impacted soil area at the Former Dry Cleaning Area will not be issued until the data indicates the remediation is effective and complete.

In the meeting, you (and the EKI consultant) indicated that you were aware of our concerns and requirements and that you would provide necessary and complete data to show that the SVE system is designed effectively and adequately for the remediation.

Based on the review of the information provided and our discussions during the April 4, 2007, meeting, you are authorized to implement the SVE Work Plan in the Former Dry Cleaning Area provided the following conditions are met:

1. **Soil samples shall be collected at five-foot intervals for VOC analysis from the proposed deep/slant SVE well during installation. Indicate in the report if any difficulties that may be encountered during drilling for sample collection.**

Initial SVE System Start Up (Prior to Table 17 of SVE Work Plan)

2. You are required to collect and provide the following information prior to SVE system start up from the proposed four shallow and one deep SVE wells and five VMPs:

   a. Base line vacuum/pressure readings from each SVE well and VMP,

   b. Using minimum of two different vacuum rates to extract each SVE well until equilibrium is reached, i.e., vacuum responses at SVE wells and VMPs stabilize, collect

      - vacuum responses from all non-extracting SVE wells and VMPs,
      - vapor flow rate (Q) from each extraction SVE well head, and
      - vapor concentration (C) from each extraction SVE well head at beginning and end of each extraction period.

   (Note: Allow minimum one to two hours rest between each extraction of SVE test.)

3. You are required to submit a report of this initial SVE system start up **four weeks after the initial SVE system start up is complete**. This report shall contain the data aforementioned as above including, but not limited to, (a) radius of influence at each applied vacuum, (b) applied vacuum vs. vacuum response at different monitoring points, (c) concentration vs. time, and (d) vapor flow rate vs. applied vacuum at each extraction well.

SVE System Start Up (Table 17 of SVE Work Plan)

4. Measurement of VOC concentrations must be conducted using Photo Ionization Detector (PID) on each SVE well weekly for first four weeks, and monthly thereafter for each SVE shallow well, at a minimum.

5. Vapor samples must be collected for TO-15 analysis using Summa® Canister from each SVE (both shallow and deep) well monthly, at a minimum.

6. Following SVE wells construction and system development, you are required to perform system monitoring at a frequency that is indicated in Table 17 of the SVE Work Plan with a

modification indicated above. The quarterly SVE monitoring report must be submitted by the fifteenth day following the end of each quarter, as shown in the following schedule:

Report Period	Report Due Date
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

The first SVE monitoring report for this SVE Work Plan is due on **October 15, 2007.**

7. Prior to the commencement of any field work, a Site-specific Health and Safety Plan (H&SP) shall be developed to include the field activities in accordance with Section 5192 of the California Code of Regulations (CCR), Title 8. The jurisdictional agency, California Occupational Safety and Health Administration (Cal-OSHA), may inspect the field investigation and remediation activities and find non-complaint issues, if the H&SP is not prepared and implemented in accordance with the referenced regulation. A copy of approved and signed H&SP shall be submitted to the Regional Board by **June 30, 2007.**

8. As required for all technical work performed at the site, all work must be performed by or under the direction of a California registered professional geologist, registered certified specialty geologist, or registered civil engineer, per California Business and Professions Code Sections 6735, 7835, and 7835.1. All technical submittals must contain a wet ink signature and seal by one of the registered professionals.

9. Prior to start of work, all necessary permits shall be obtained from appropriate agencies. Copies of the agency-approved permits must be included in the final report submitted to the Regional Board.

10. Contaminated soil and water generated, if any, during drilling and soil sampling shall be managed in accordance with appropriate regulations.

11. Properly manifest and dispose of all wastes generated during field activities in conformation with the State and Federal regulations.

12. All samples must be collected and analyzed with quality assurance and quality control samples and comply in accordance with the SW-846 Methods and Toxic Organics Method TO-15 for VOCs.

13. Please notify Regional Board staff at least one week before you start the proposed fieldwork.

14. A work plan for rebound testing and confirmation soil matrix sampling shall be submitted when asymptotic level is reached. The Regional Board will consider for a determination of a SVE system decommission when the analytical results demonstrate that the VOCs concentrations in the vapor stream from each well have been reduced to asymptotic levels after the rebound test is performed. Further soil remediation by other alternative technologies/methods will be required

until VOC concentrations in shallow and deep soil in the Former Dry Cleaning Area do not exceed the required Soil Screening Levels (SSLs) for protection of both the public health and groundwater resource.

In addition, as we discussed in the April 4, 2007, meeting, the extent of the VOC impacted groundwater plume (including TBA) and groundwater gradient must be defined with the installation of groundwater monitoring wells after existing buildings are demolished and before the new proposed construction begins at the Former Dry Cleaning Area. Hollywood Park Land Company, LLC shall comply with the Regional Board requirements for additional groundwater assessment, monitoring, and cleanup deemed necessary for the groundwater plume originating from the Former Dry Cleaning Area in the future.

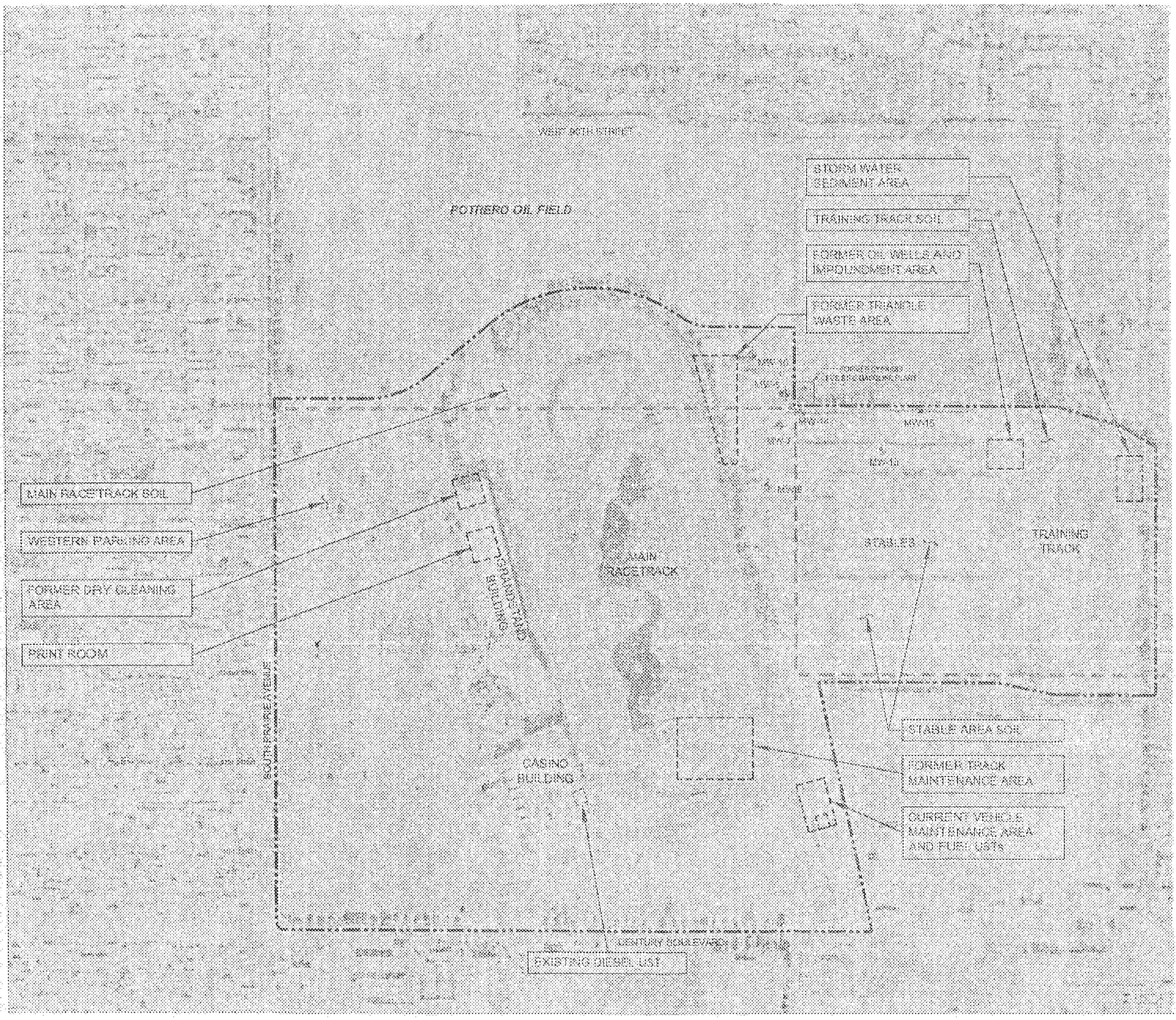
Should you have any questions, please contact Thizar Tintut-Williams at (213) 576-6723 or me at (213) 576-6735.

Sincerely,

Su Han, PG, CHG
Senior Engineering Geologist
Site Cleanup I Unit Chief

cc: Ms. Jami A. Striegel Orloff, Erler & Kalinowski, Inc.

/ttw



N

0 500 1000

(Approximate Scale in Feet)

Legend:

—·—·—	Approximate Property Boundary
▬ ▬ ▬	Potrero Oil Field Boundary
- - - - - -	Subsurface Investigation Area
✱	Existing Chevron Monitoring Well

Abbreviation:

UST = underground storage tank

Notes:

1. All locations are approximate.
2. Basemap source: ALTA/ACSM Land Title Survey for Hollywood Park, Inc. prepared by PSOMAS, West Los Angeles, California, updated 20 July 2005.
3. Potrero Oil Field boundary from State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, dated 14 November 2003.
4. Urban area photo dated 29 March 2004 from http://www.terraserver.microsoft.com/

Erler & Kalinowski, Inc.

Subsurface Investigation Areas

Hollywood Park
Inglewood, CA
October 2006
EKI A50015.01

Figure 2

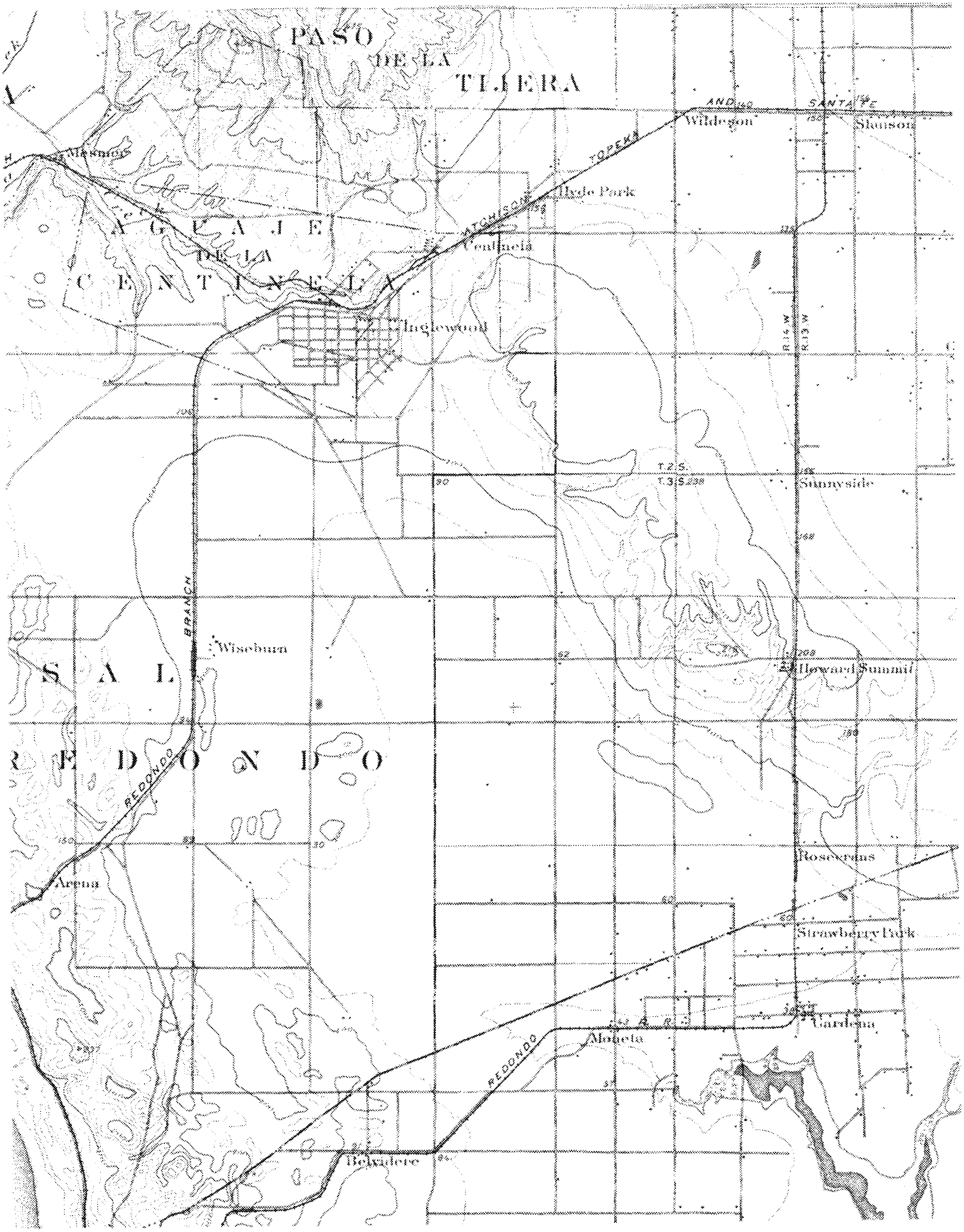
APPENDIX B

Historical Aerial Photographs and Topographic Maps

APPENDIX B

Index

Hollywood Park Racetrack and Casino
1050 South Prairie Avenue, Inglewood, California



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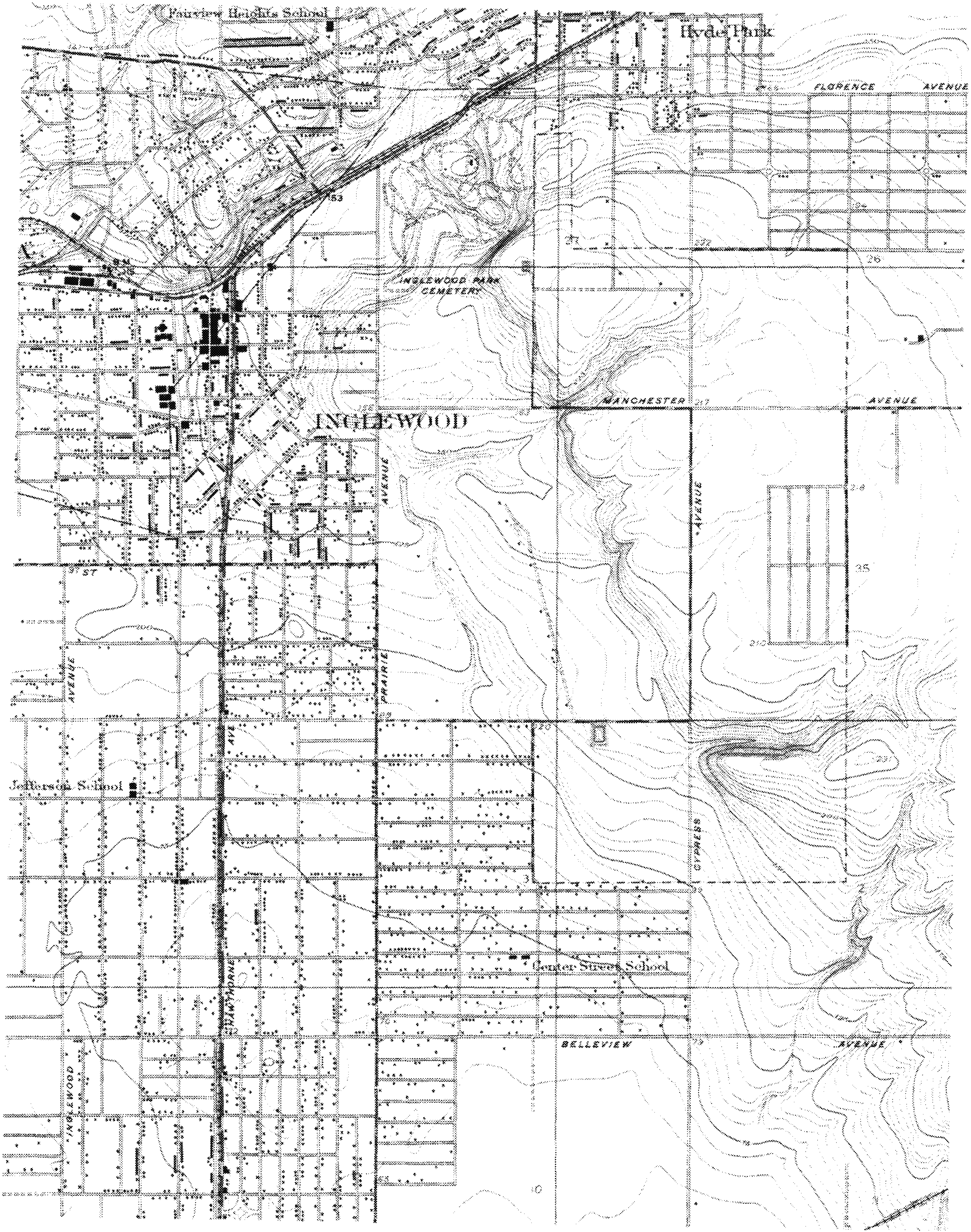

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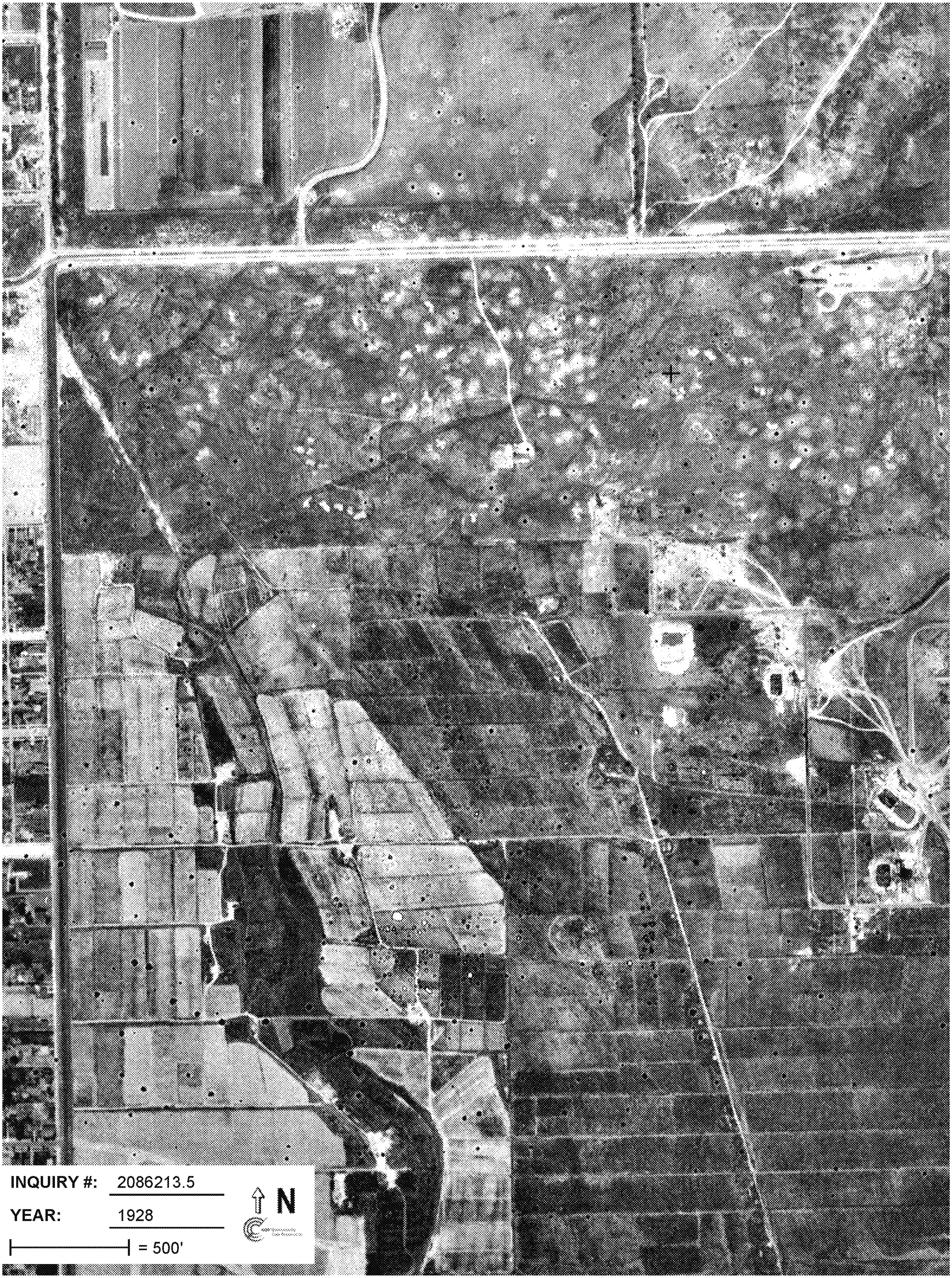

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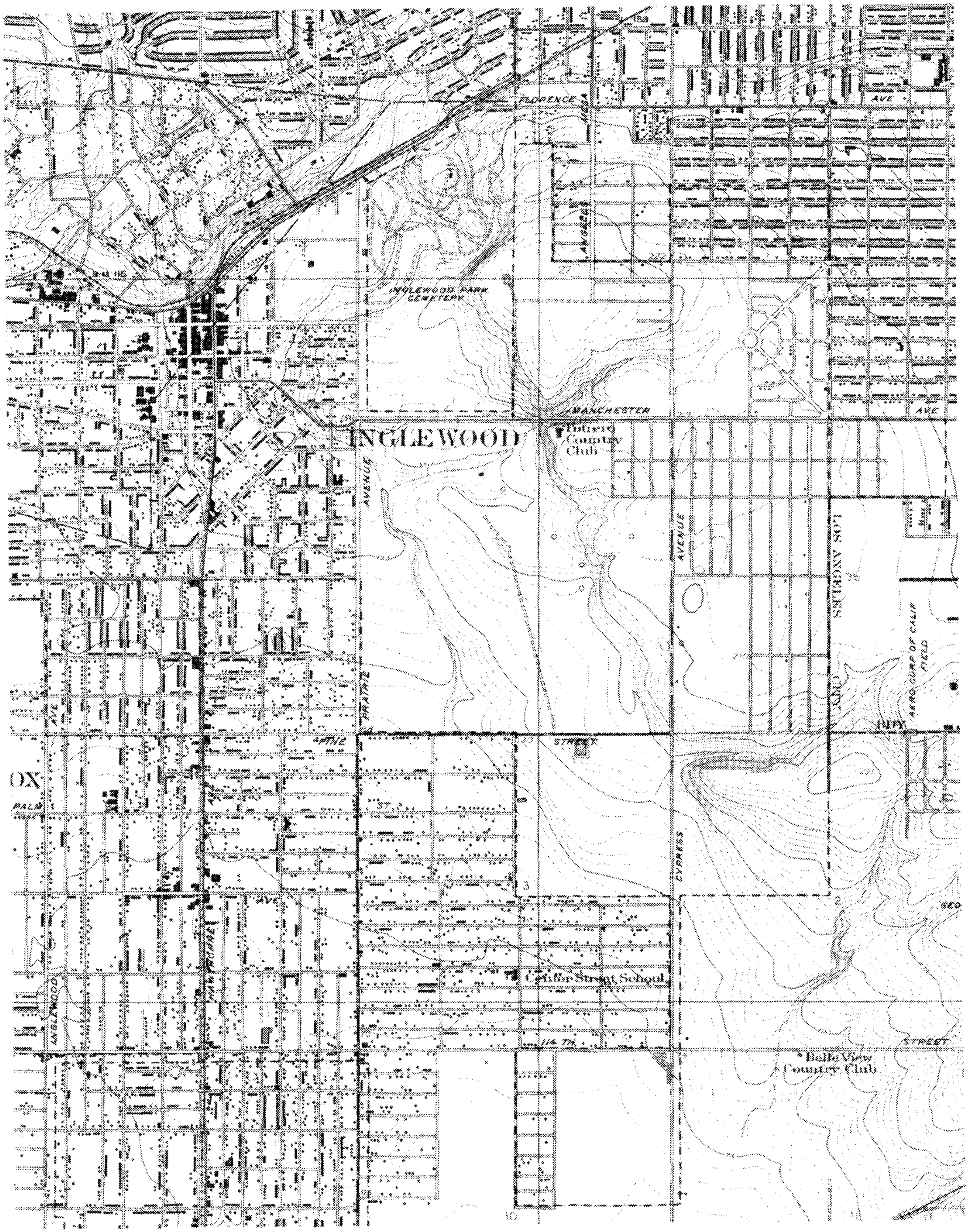
YEAR: 1928

= 500'



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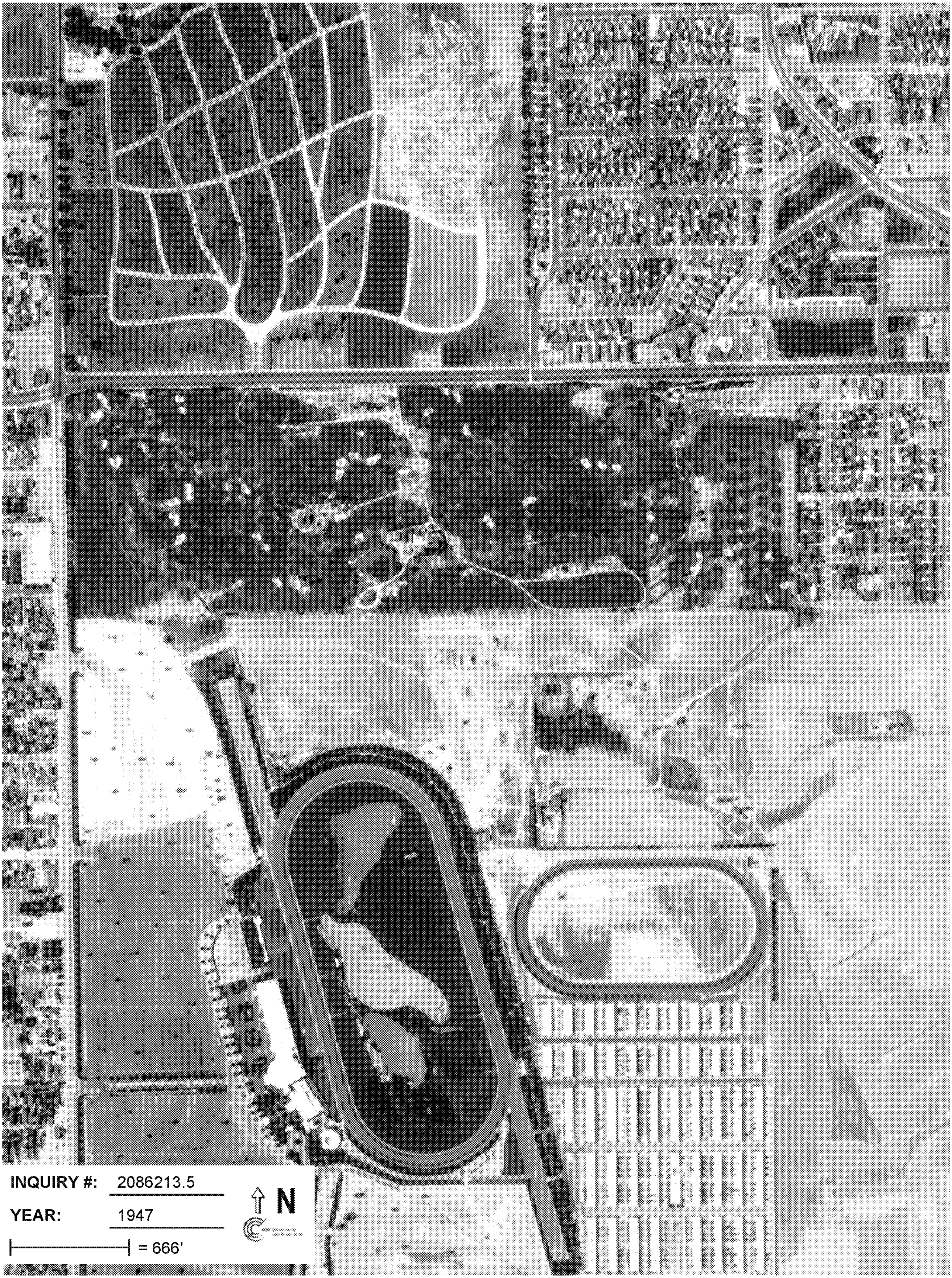
INQUIRY #: 2086213.5

YEAR: 1938

= 555'



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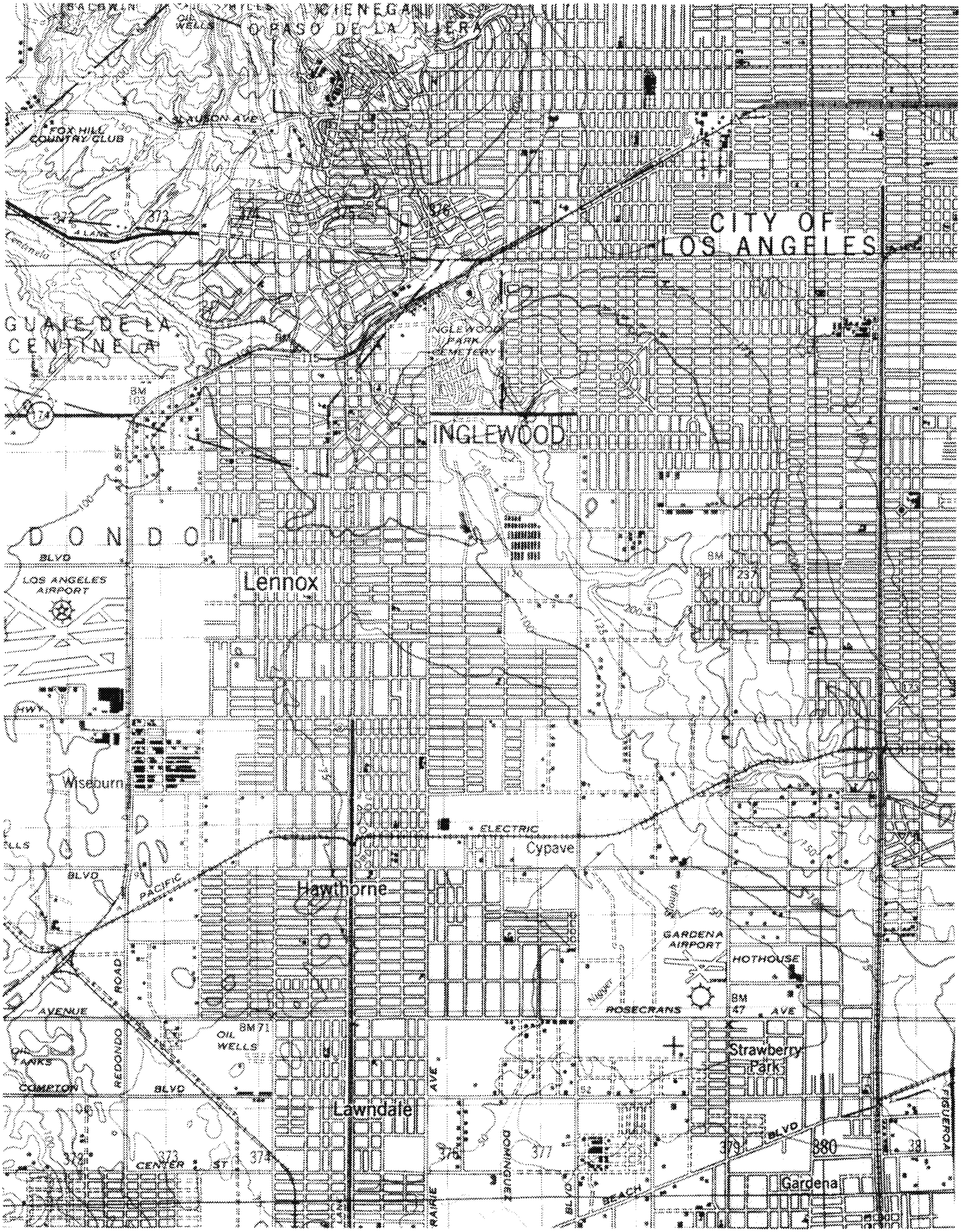
YEAR: 1947

= 666'



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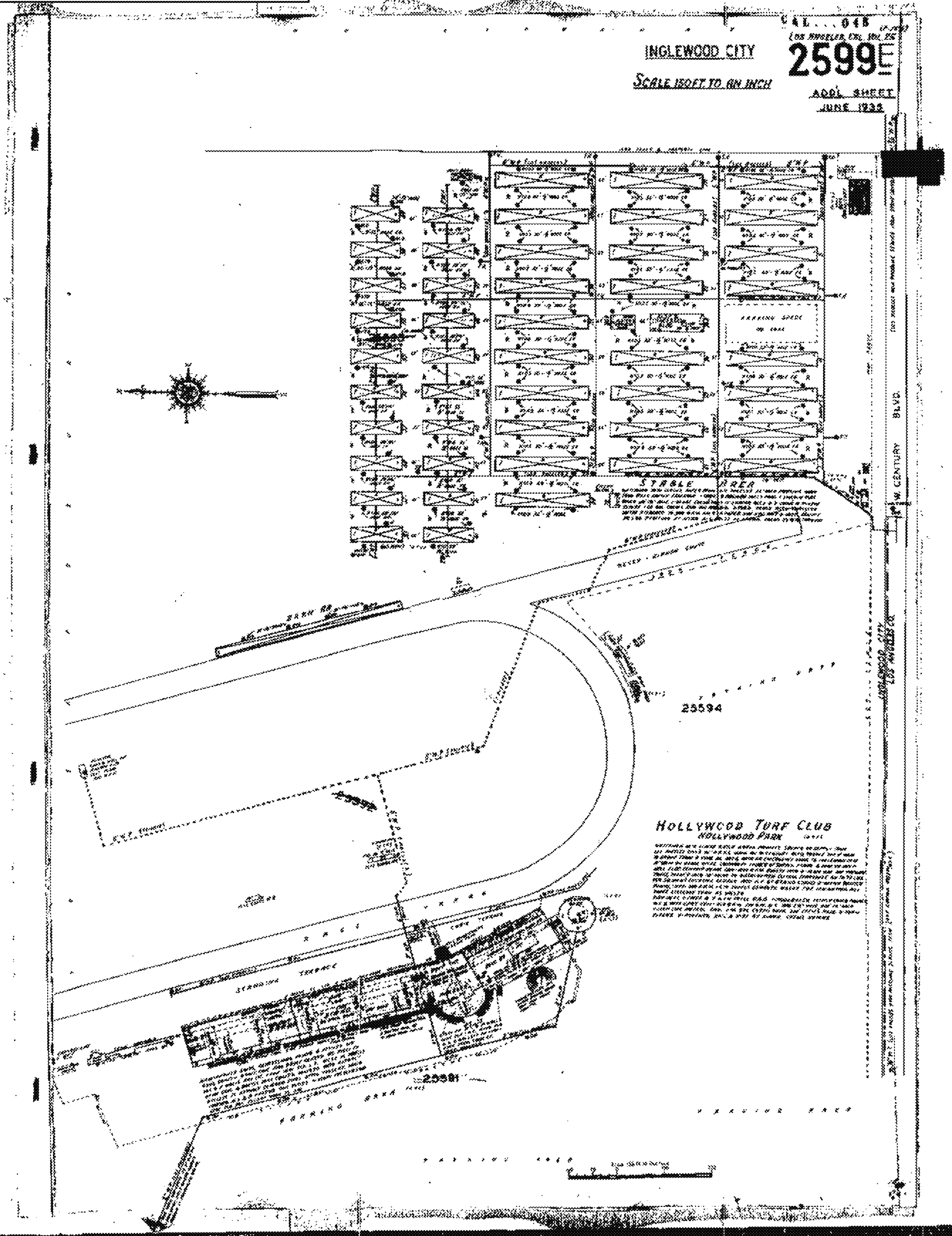
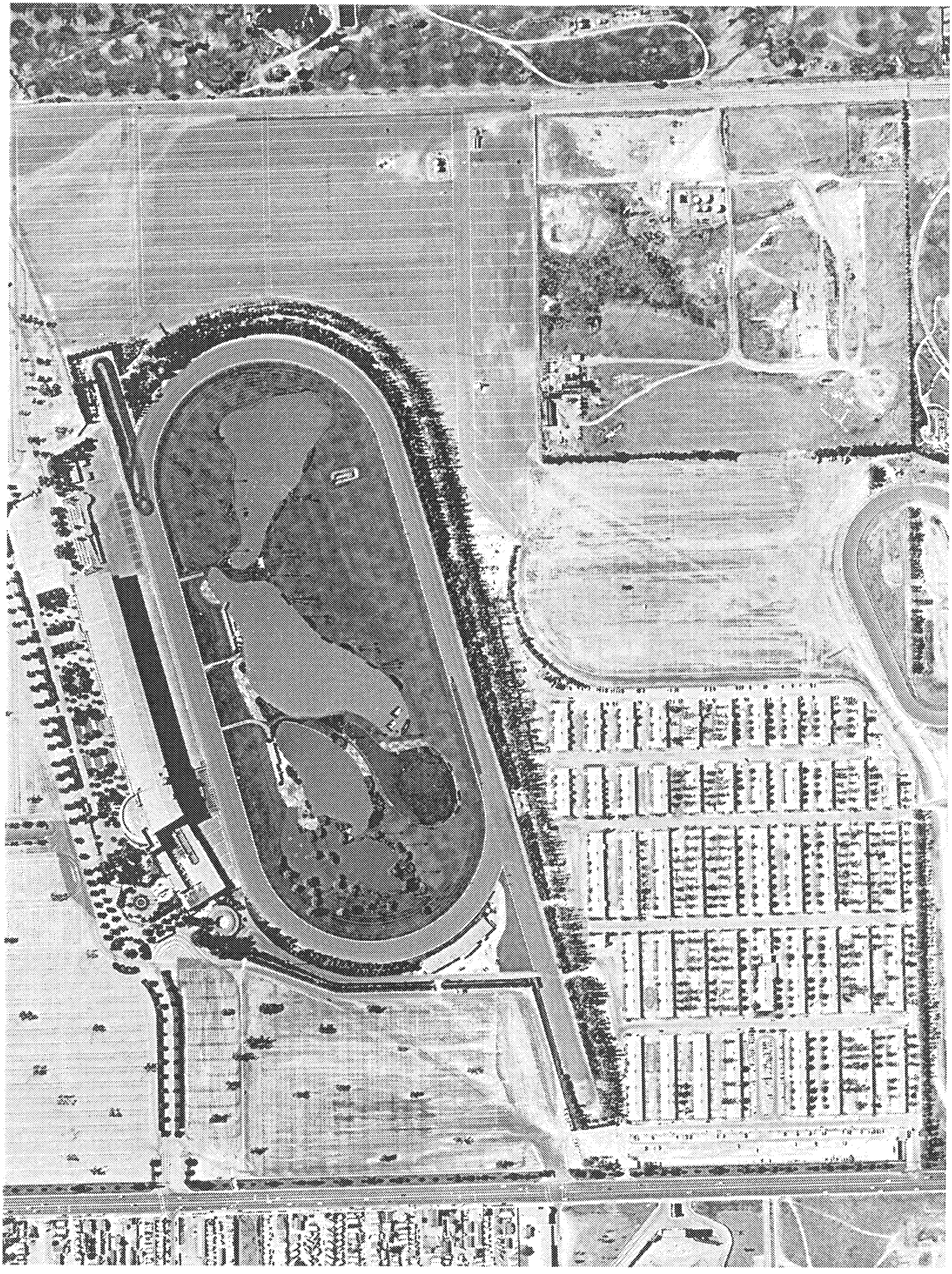
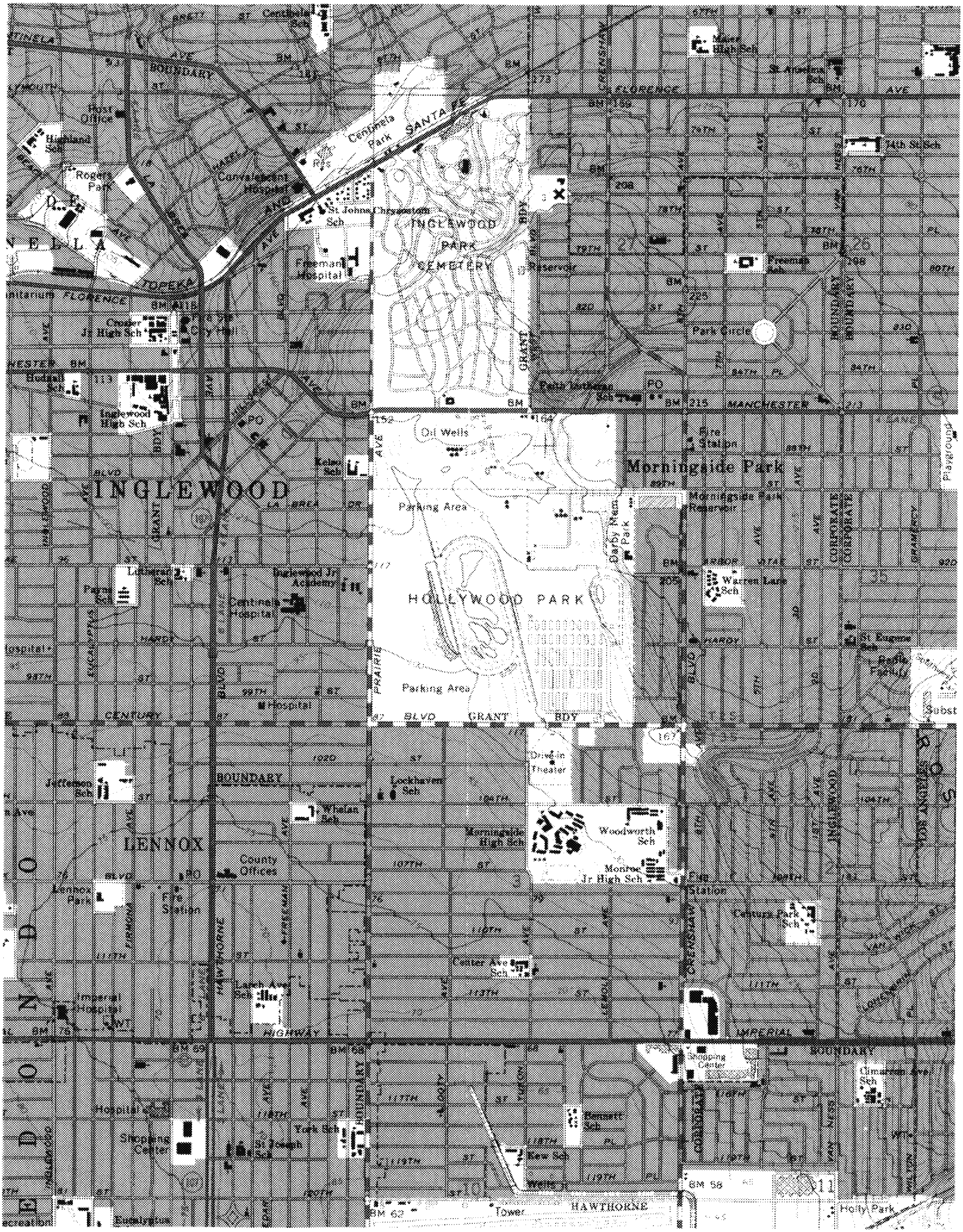

CAL...045
LOS ANGELES CAL. VOL. 25
INGLEWOOD CITY
2599E
SCALE 150FT TO AN INCH
ADD'L SHEET
JUNE 1938
STABLE AREA
PARKING SPACE
W. CENTURY BLVD.
INGLEWOOD CITY
LOS ANGELES CO.
25594
HOLLYWOOD TURF CLUB
HOLLYWOOD PARK
STANDING TERRACE
25591
PARKING AREA

INQUIRY #: 2086213.5

YEAR: 1956

= 400'





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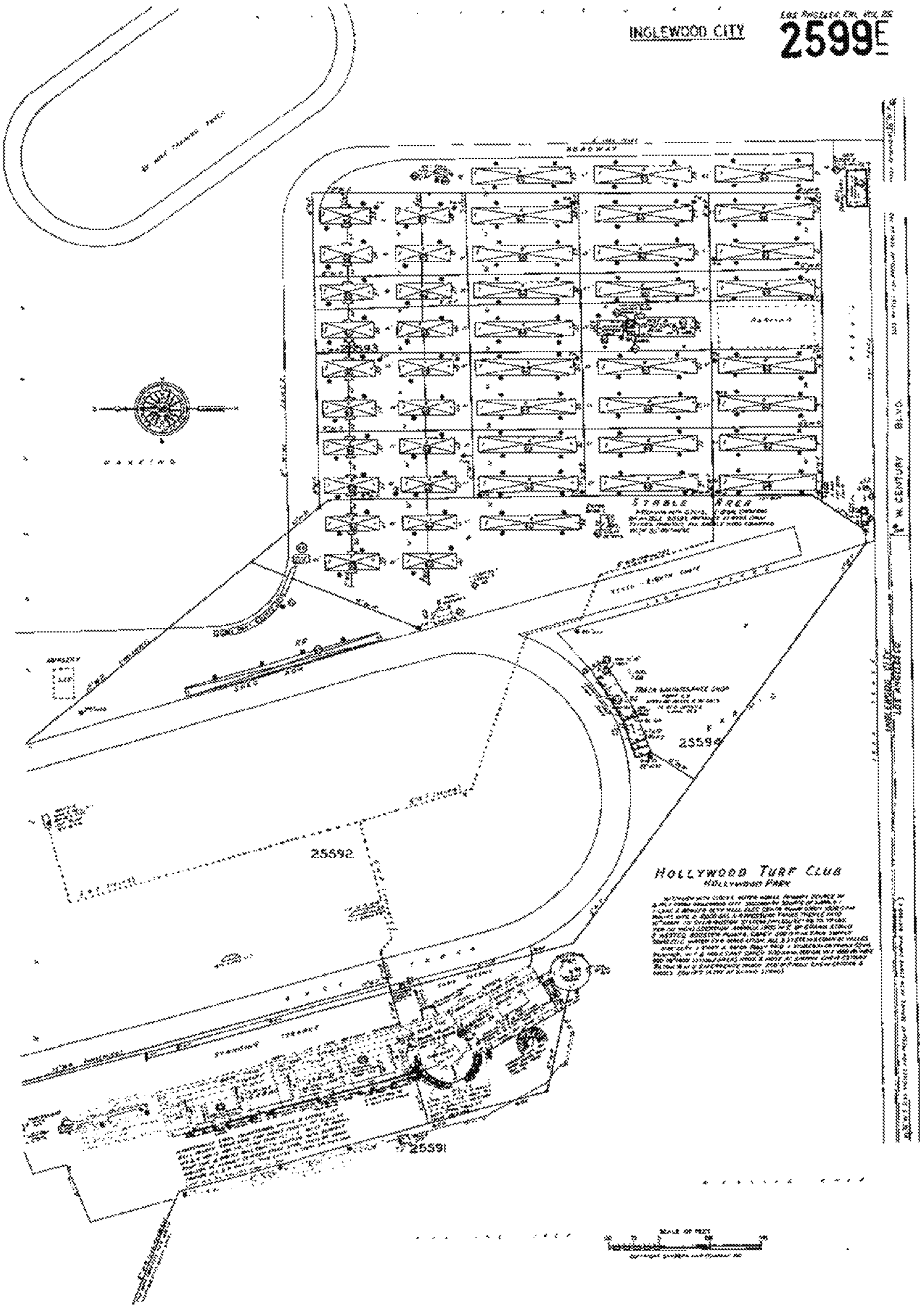
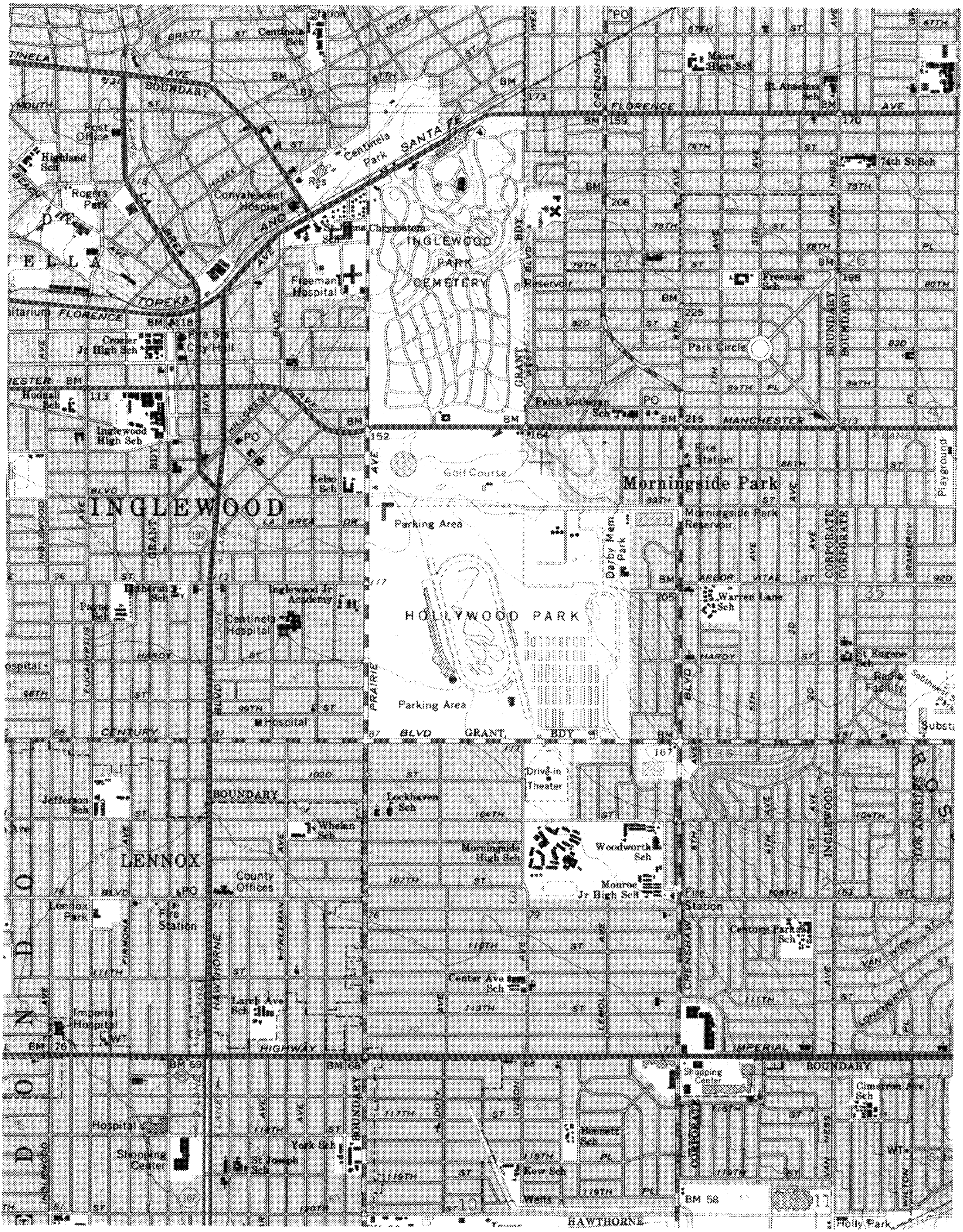
INQUIRY #: 2086213.5

YEAR: 1965

= 666'



The Sanborn Library, LLC



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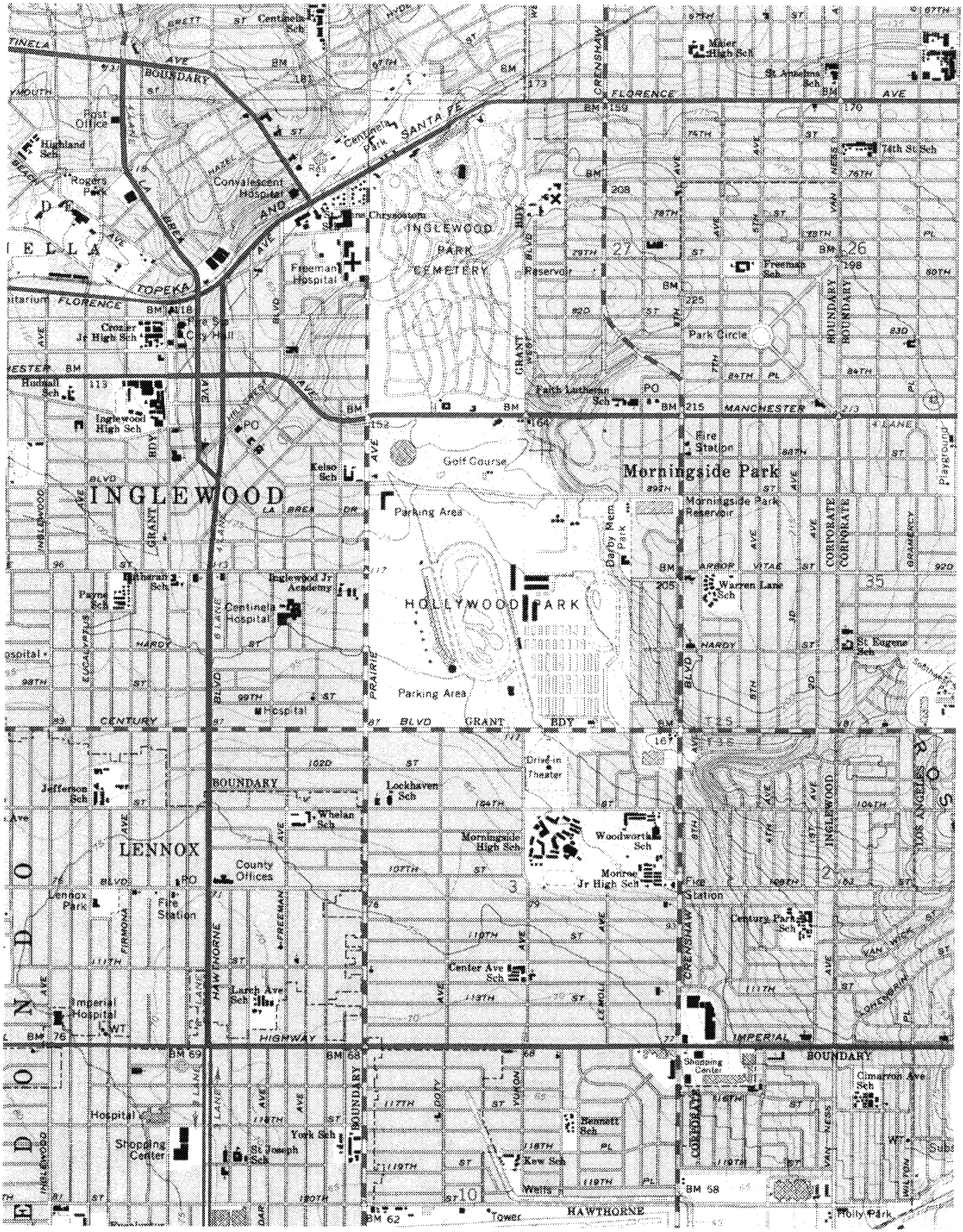
YEAR: 1976
= 666'
N



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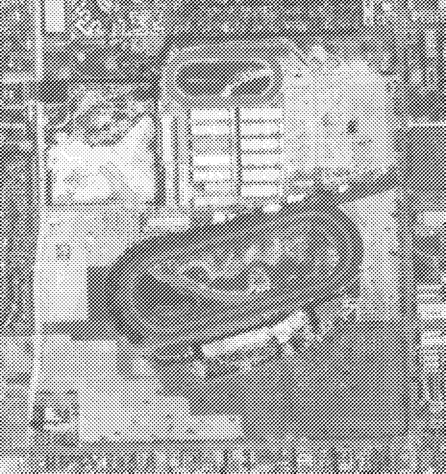
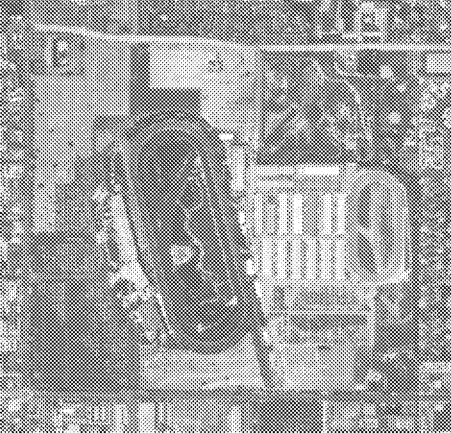
INQUIRY #: 2086213.5

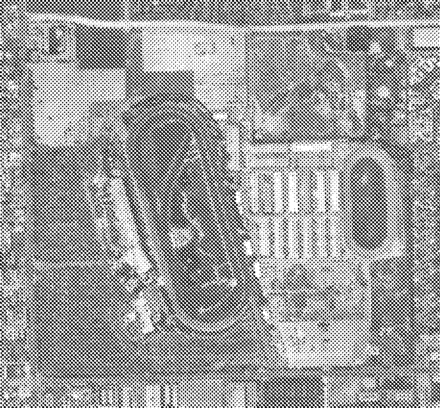
YEAR: 1989

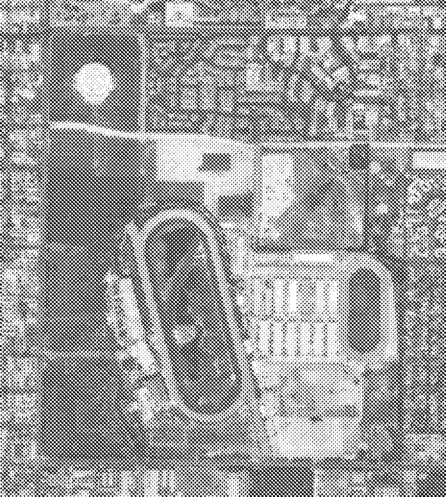
= 666'






INQUIRY #: 2086213.5
YEAR: 1994
= 666'
N






INQUIRY #: 2086213.5
YEAR: 2002
= 666'
N

APPENDIX C

Regional Hydrogeology References

Figure C-1:
West Coast Basin

Source:
Figure 1.1
WRDSC, 2007, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 2005-2006, Water Replenishment District of Southern California, April 2007, 172 p.

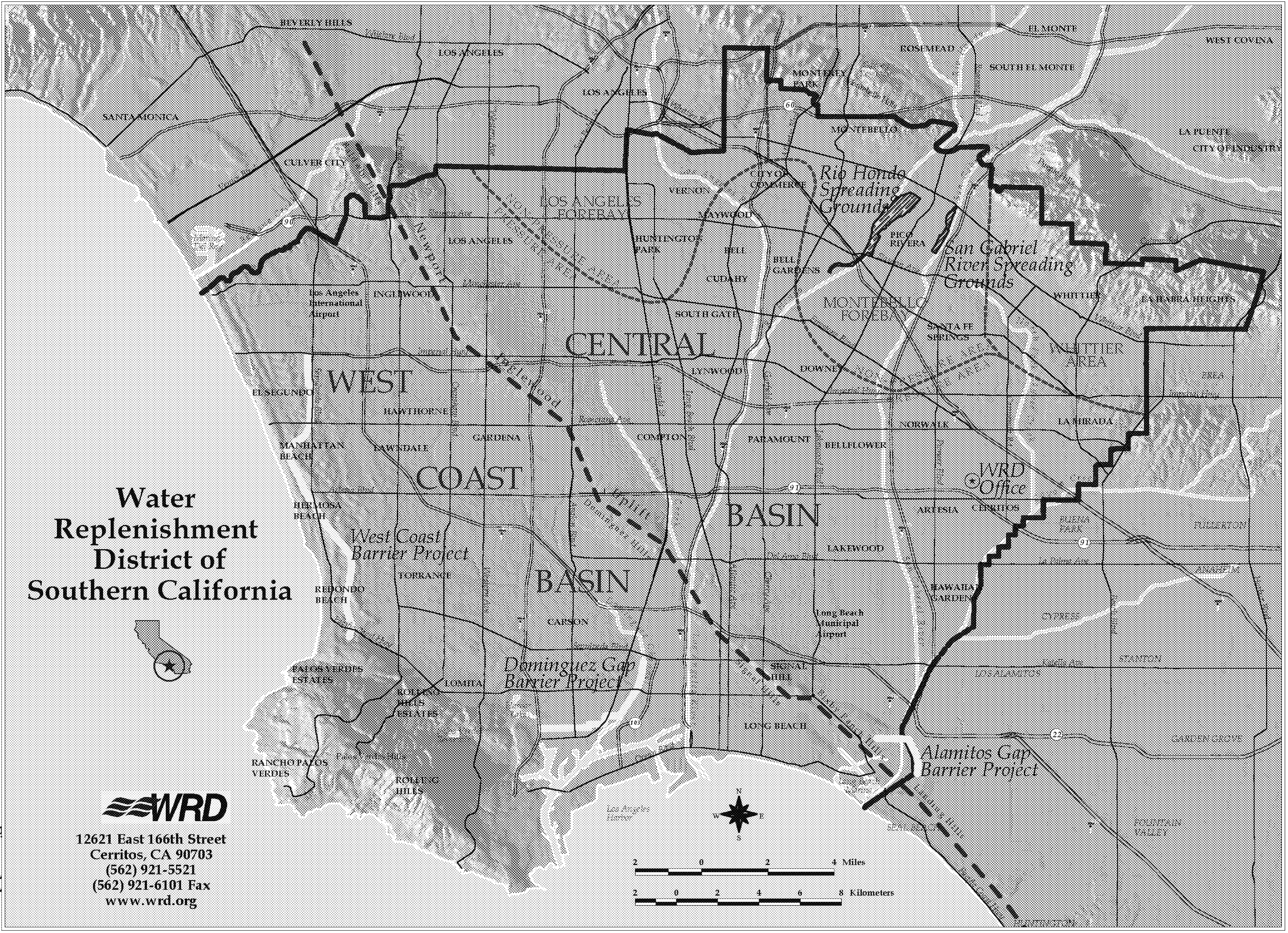
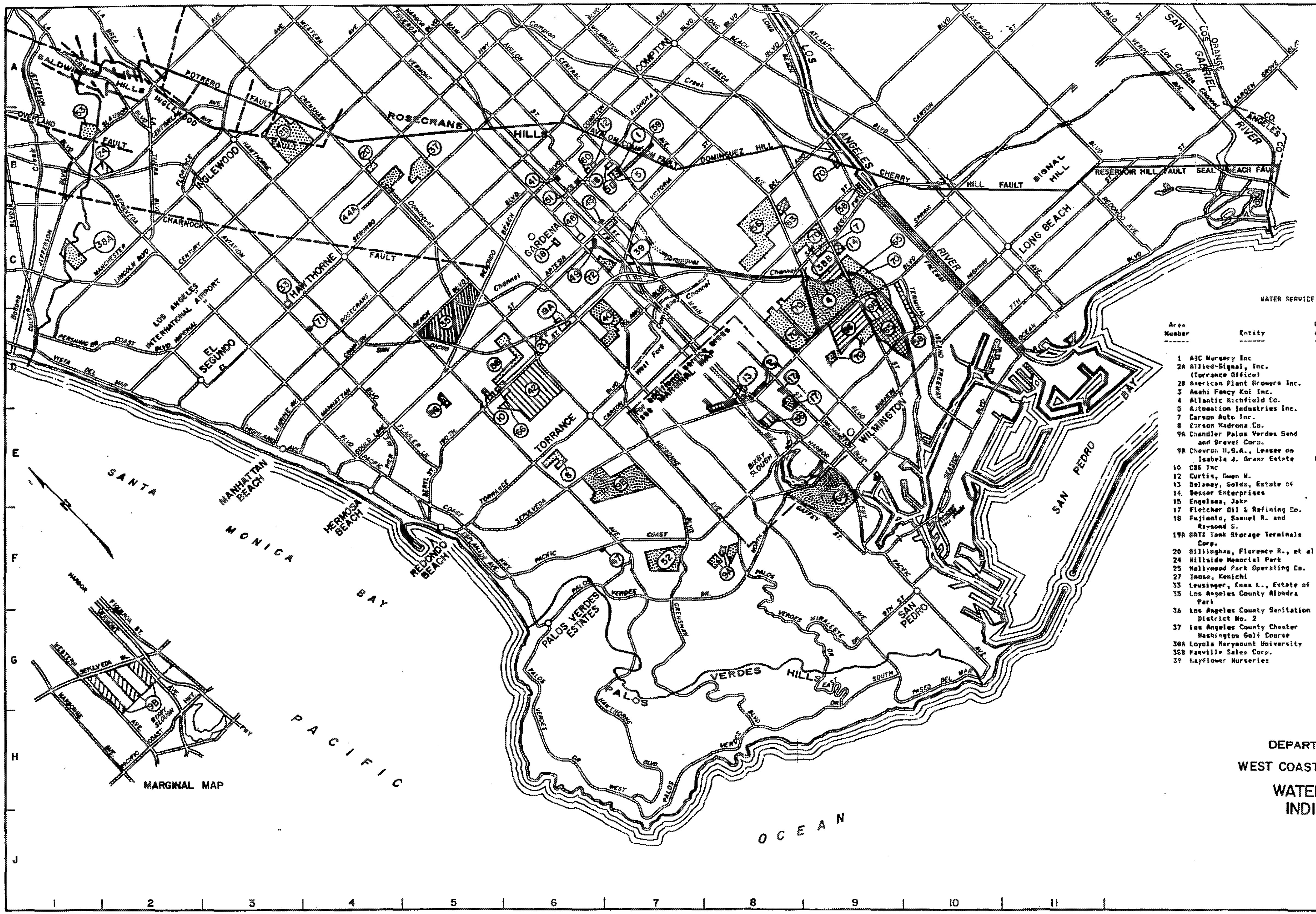

Water Replenishment District of Southern California
WRD
12621 East 166th Street
Cerritos, CA 90703
(562) 921-5521
(562) 921-6101 Fax
www.wrd.org
CENTRAL
BASIN
WEST
COAST
BASIN
LOS ANGELES FOREBAY
MONTEBELLO FOREBAY
WHITTIER AREA
PRESSURE AREA
Rio Hondo Spreading Grounds
San Gabriel River Spreading Grounds
West Coast Barrier Project
Dominguez Gap Barrier Project
Alamitos Gap Barrier Project
WRD Office
Newport Inglewood
BEVERLY HILLS
LOS ANGELES
SANTA MONICA
CULVER CITY
EL MONTE
WEST COVINA
ROSEMEAD
SOUTH EL MONTE
MONTEREY PARK
MONTEBELLO
LA PUENTE
CITY OF INDUSTRY
CITY OF COMMERCE
VERNON
MAYWOOD
HUNTINGTON PARK
BELL
BELL GARDENS
CUDAHY
PICO RIVERA
WHITTIER
LA HABRA HEIGHTS
SOUTH GATE
SANTA FE SPRINGS
Los Angeles International Airport
INGLEWOOD
LYNWOOD
DOWNEY
EL SEGUNDO
HAWTHORNE
NORWALK
LA MIRADA
MANHATTAN BEACH
LAWNDALE
GARDENA
COMPTON
PARAMOUNT
BELLFLOWER
HERMOSA BEACH
ARTESIA
CERRITOS
BUENA PARK
FULLERTON
LAKEWOOD
ANAHEIM
REDONDO BEACH
TORRANCE
HAWAIIAN GARDENS
CARSON
Long Beach Municipal Airport
CYPRESS
STANTON
LOS ALAMITOS
PALOS VERDES ESTATES
LOMITA
ROLLING HILLS ESTATES
SIGNAL HILL
LONG BEACH
GARDEN GROVE
RANCHO PALOS VERDES
ROLLING HILLS
Los Angeles Harbor
SEAL BEACH
FOUNTAIN VALLEY
HUNTINGTON
N
W
E
S
2 0 2 4 Miles
2 0 2 4 6 8 Kilometers

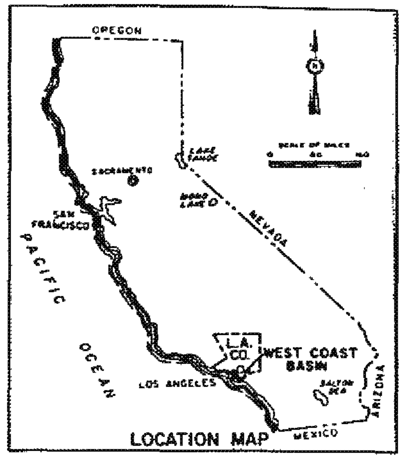
Figure 1.1

Figure C-2:
Faults in the Vicinity of the Property

<u>Source:</u>
Plate 2
DWR, 1991, Water Master Service in the West Coast Basin, Los Angeles County July 1, 1990 – June 30, 1991, Department of Water Resources, September 1991, 82 p.

PLATE 2





INDEX
WATER SERVICE AREAS OF INDIVIDUAL PRODUCERS

Area Number	Entity	Location on Plate
1	ABC Nursery Inc	B-7
2A	Allied-Signal, Inc. (Torrance Office)	D-6
2B	American Plant Growers Inc.	D-8
3	Asahi Fancy Koi Inc.	*
4	Atlantic Richfield Co.	C-9
5	Automation Industries Inc.	B-7
7	Carson Auto Inc.	C-9
8	Carson Madrona Co.	E-6
9A	Chandler Palos Verdes Sand and Gravel Corp.	F-8
9B	Chevron U.S.A., Lessee on Isabela J. Granz Estate	E-7,G-2
10	CBS Inc	D-5
12	Curtis, Gwen W.	B-6
13	Delaney, Golda, Estate of	D-8
14	Desser Enterprises	C-9
15	Engelsma, Jake	*
17	Fletcher Oil & Refining Co.	D-8
18	Fujimoto, Samuel R. and Raymond S.	A-6
19A	GATX Tank Storage Terminals Corp.	D-9
20	Billingham, Florence R., et al	B-6
24	Hillside Memorial Park	A-2
25	Hollywood Park Operating Co.	B-3
27	Inose, Kenichi	B-7
33	Leusinger, Emma L., Estate of	C-3
35	Los Angeles County Alondra Park	D-5
36	Los Angeles County Sanitation District No. 2	E-8
37	Los Angeles County Chester Washington Golf Course	A-5
38A	Loyola Marymount University	C-1
38B	Manville Sales Corp.	C-9
39	Mayflower Nurseries	C-6
40	McDonnell Douglas Corp.	D-6
41	McFadden, John K. (nonparty)	A-6
42	Mobil Oil Corp.	B-6
43	Mori, Roy M. and Kenji	C-6
44A	Northrop Corp.	C-4
44B	Nozaki, Sumikichi (see So. Calif. Edison Co.)	*
46	Pacific Crest Cemetery Co.	B-5
47	Palos Verdes Begonia Farm	F-6
48	Pacific Telephone (nonparty)	C-6
49	Pioneer Paper Stock (nonparty)	C-6
50	Pothos Corporation	A-7
51	Rehor, Josephine P.	B-6
52	Rolling Hills Vista	F-7
53	Roman Catholic Archbishop of Los Angeles	B-1
56	Shell Oil Co.	C-8,D-9
58	Southern California Edison Co.	A-9,D-5,D-10
59	Southern California Edison Co. (Sumikichi Nozaki, Tenant)	A-7
60	Sparkletts Drinking Water Corp.	A-6
63	Stauffer Chemical Co.	C-8
65	Texaco Inc.	C-9,D-9
66	Three Star Nursery Inc. (nonparty)	D-5
68	Union Oil Co. of California	E-9
70	Watson Land Co.	B-9,C-9,D-9
71	Wiseburn School District	D-4
72	Ziegler, Maxwell T.	C-5

* No service area ownership.

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF INDIVIDUAL PRODUCERS

JUNE 1991

SCALE
1/2 0 1/2 1
MILES

Figure C-3:
Locations and 2005/2006 Extraction Rates of West Coast Basin Extraction Wells

<u>Source:</u>
Figure 3.1
WRDSC, 2007, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 2005-2006, Water Replenishment District of Southern California, April 2007, 172 p.

FIGURE 3.1

GROUNDWATER PRODUCTION
WATER YEAR
2005 - 2006

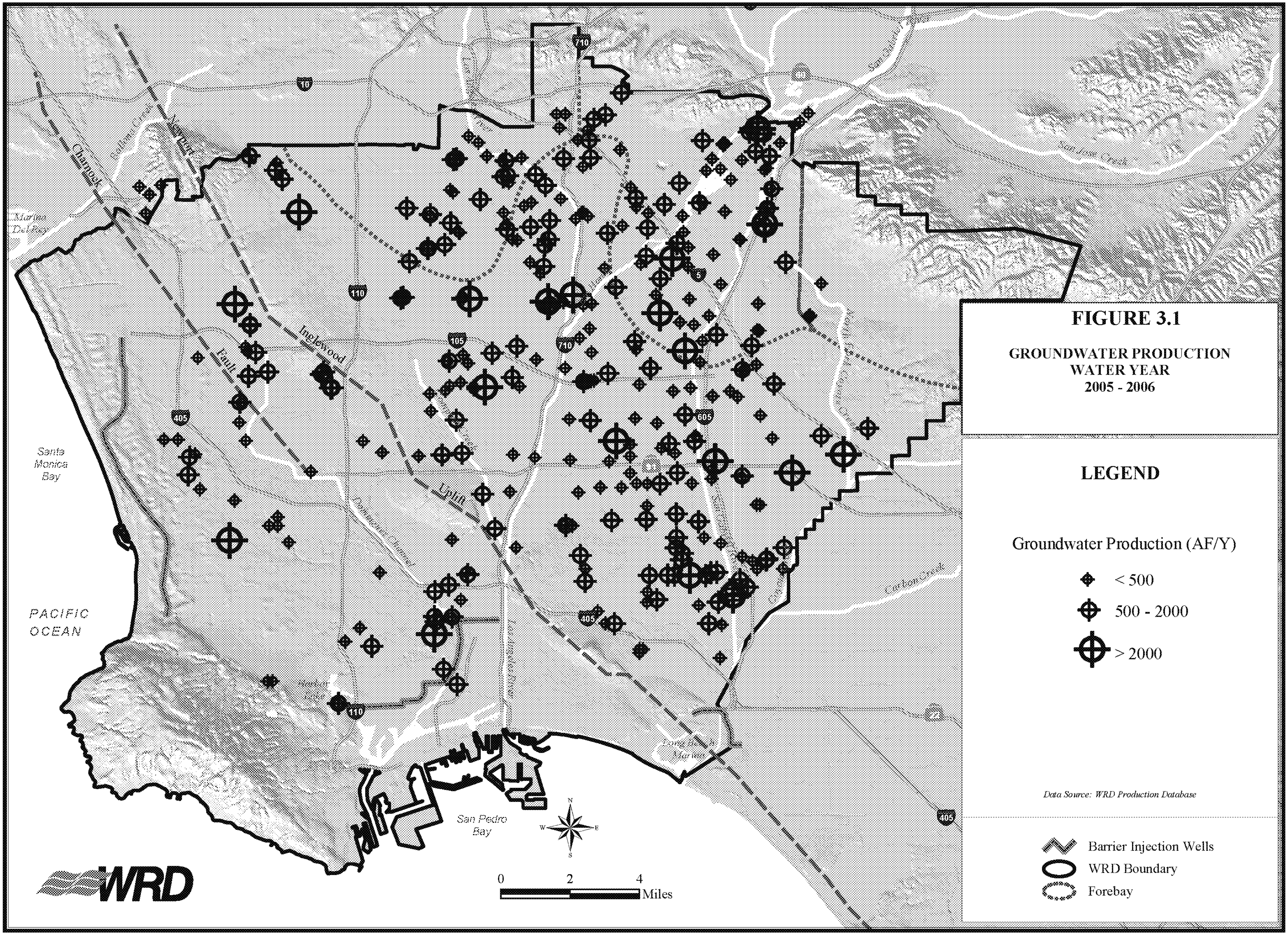


Figure C-4:
Water Level Contours, Spring 2006

<u>Source:</u>
Figure 3.2
WRDSC, 2007, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 2005-2006, Water Replenishment District of Southern California, April 2007, 172 p.

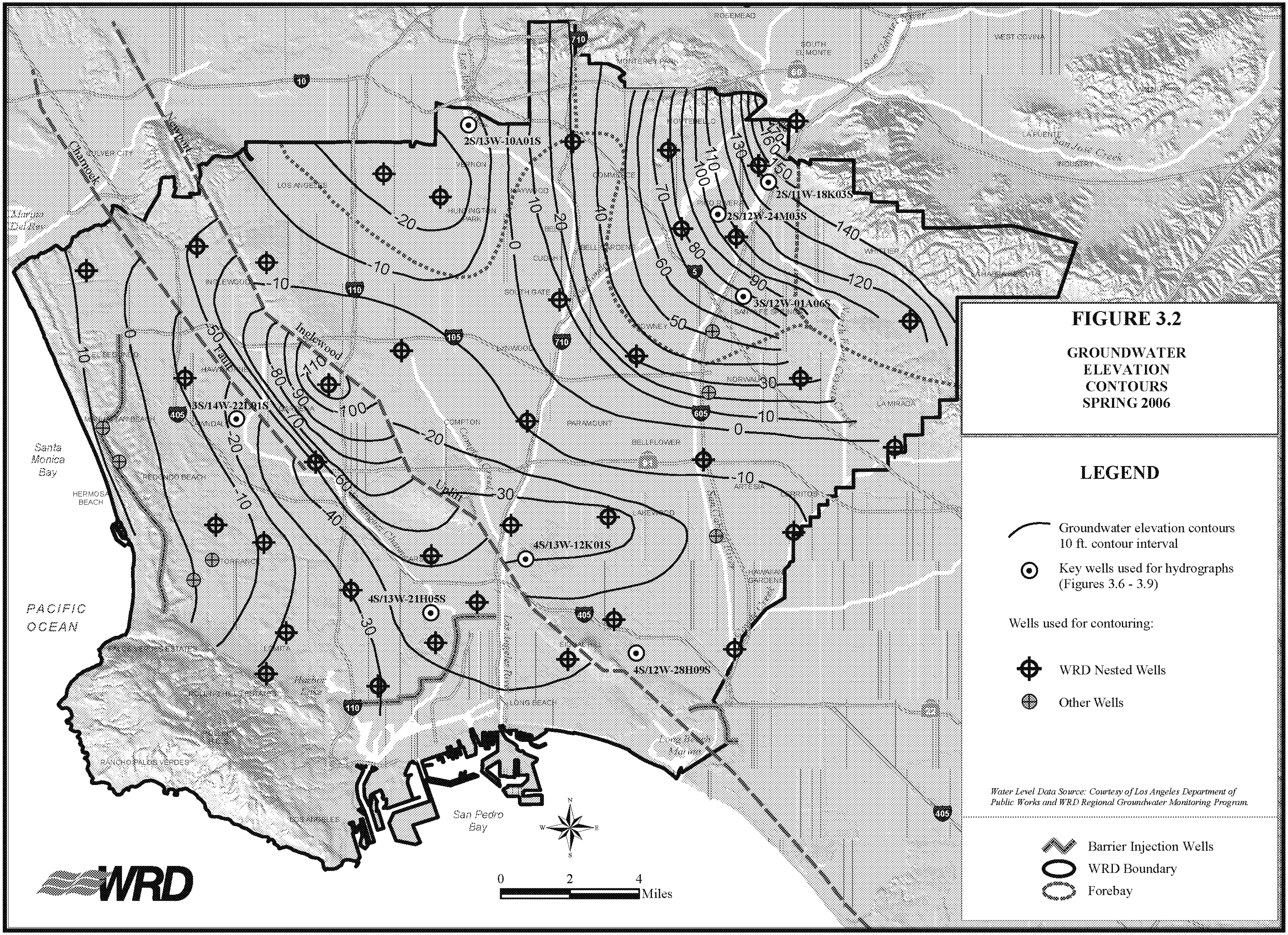


FIGURE 3.2

GROUNDWATER ELEVATION CONTOURS SPRING 2006

LEGEND

Groundwater elevation contours 10 ft. contour interval

Key wells used for hydrographs (Figures 3.6 - 3.9)

Wells used for contouring:

WRD Nested Wells

Other Wells

Water Level Data Source: Courtesy of Los Angeles Department of Public Works and WRD Regional Groundwater Monitoring Program.

Barrier Injection Wells

WRD Boundary

Forebay

Figure C-5:
Water Level Contours, Fall 2006

__Source:__
Figure 3.3
WRDSC, 2007, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 2005-2006, Water Replenishment District of Southern California, April 2007, 172 p.

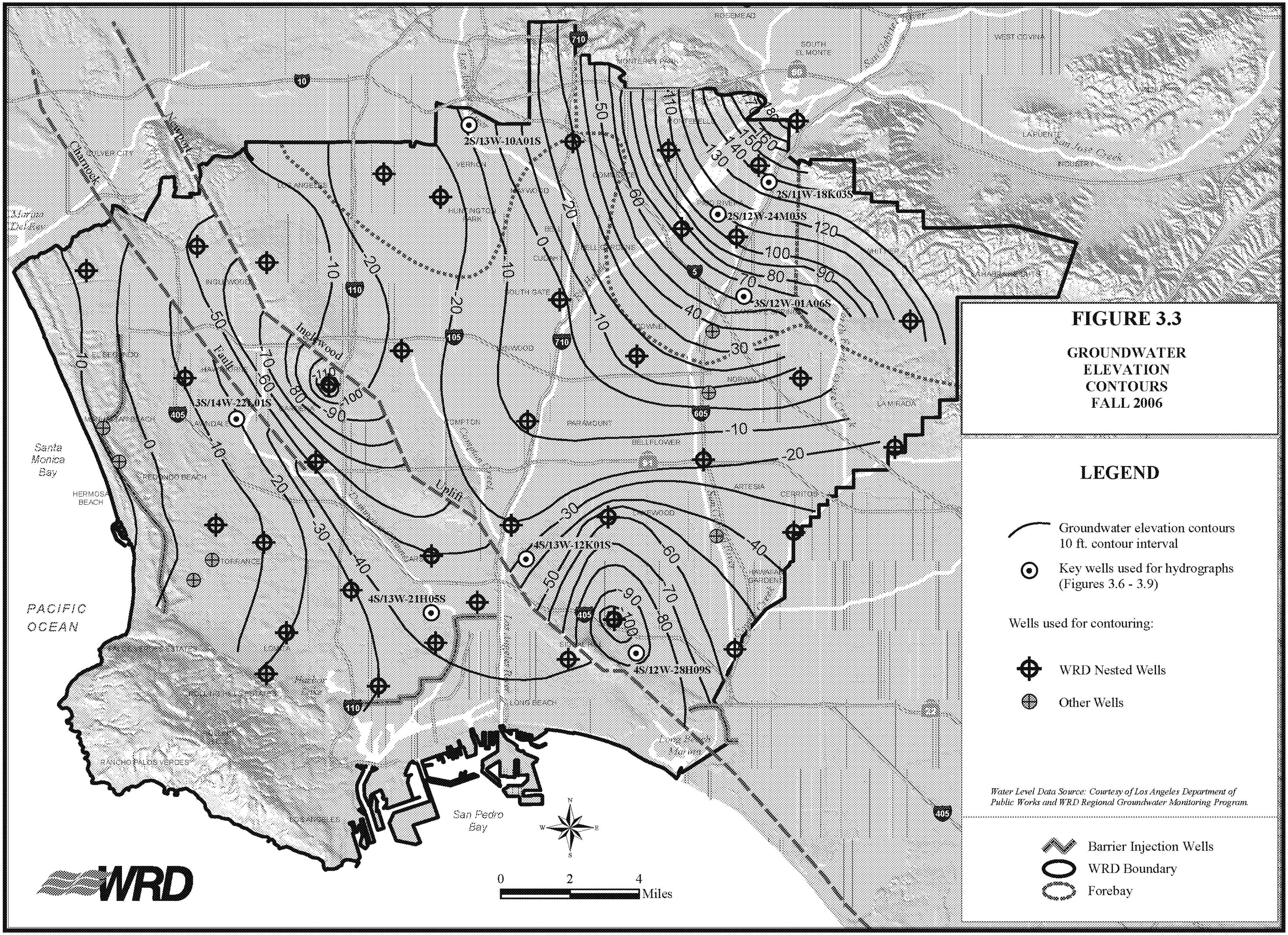


FIGURE 3.3

GROUNDWATER ELEVATION CONTOURS FALL 2006

Water Level Data Source: Courtesy of Los Angeles Department of Public Works and WRD Regional Groundwater Monitoring Program.

Figure C-6:
Nitrate Concentrations in USGS-WRDSC Monitoring Wells

__Source:__
Figure 4.7
WRDSC, 2007, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 2005-2006, Water Replenishment District of Southern California, April 2007, 172 p.

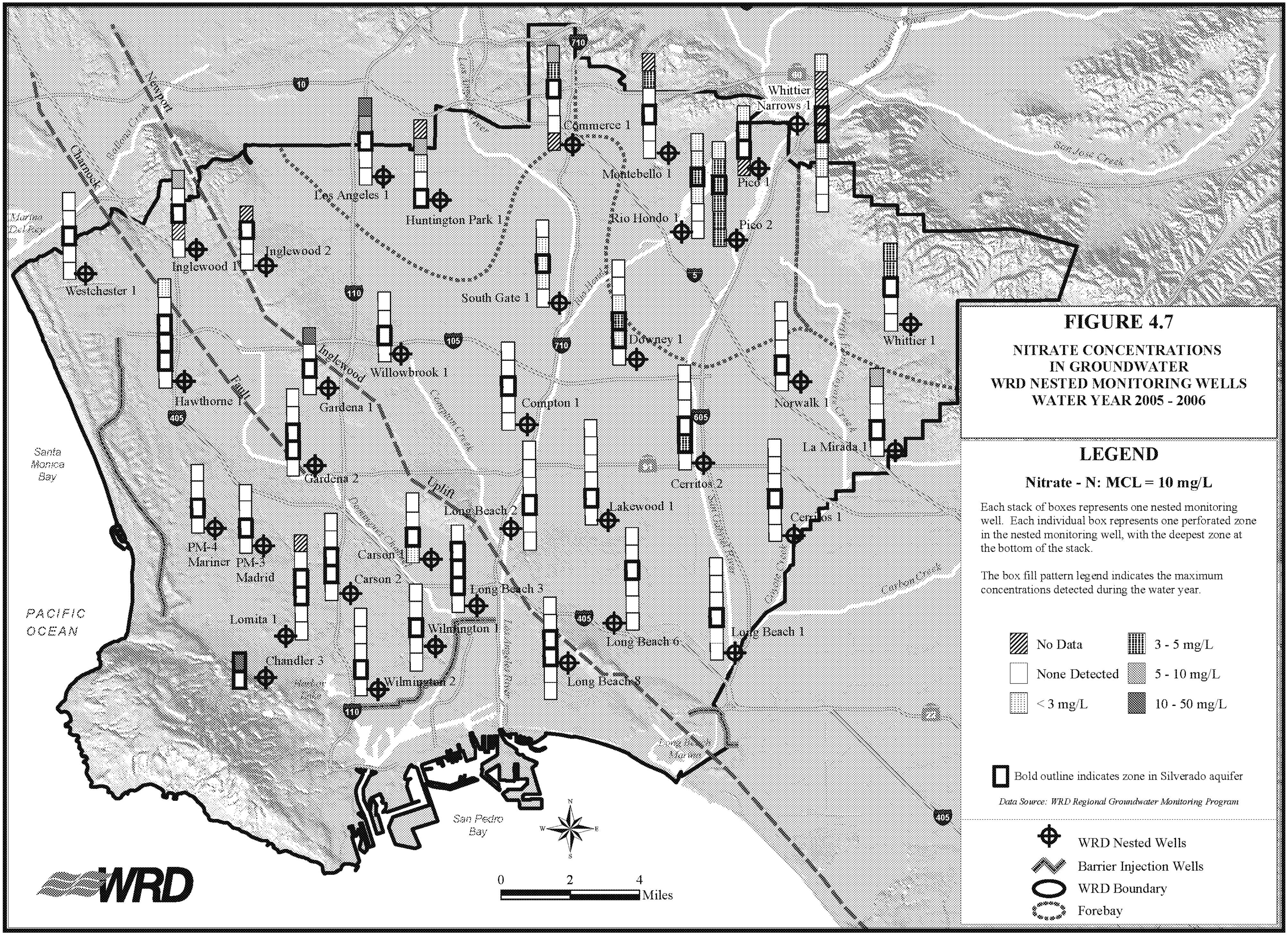
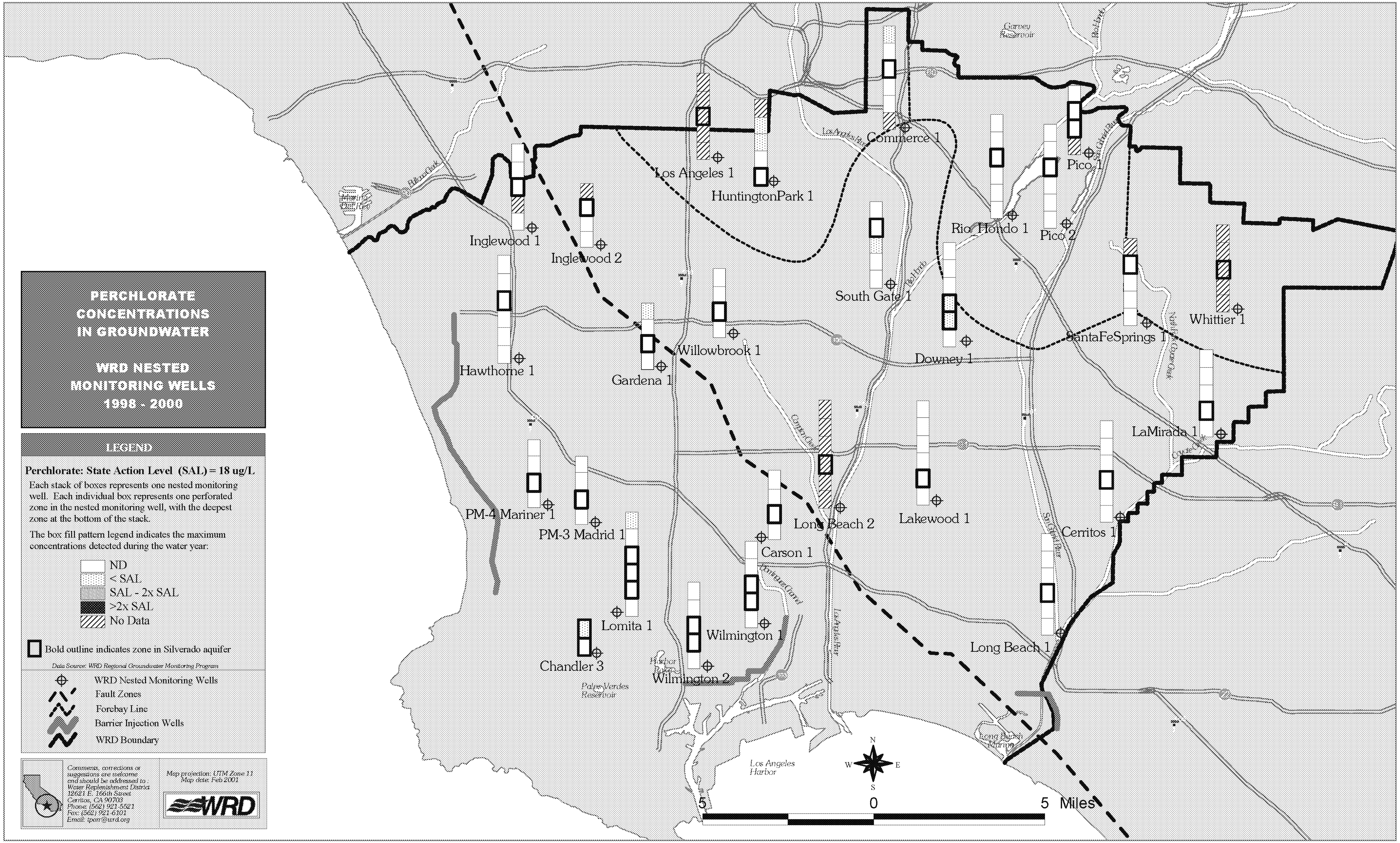


FIGURE 4.7

NITRATE CONCENTRATIONS
IN GROUNDWATER
WRD NESTED MONITORING WELLS
WATER YEAR 2005 - 2006

Figure C-7:
Perchlorate Concentrations in USGS-WRDSC Monitoring Wells

<u>Source:</u>
Figure 4.24
WRDSC, 2001, Regional Groundwater Monitoring Report Central and West Coast Basins Los Angeles County, California, Water Year 1999-2000, Water Replenishment District of Southern California, February 2001, 134 p.



PERCHLORATE CONCENTRATIONS IN GROUNDWATER

WRD NESTED MONITORING WELLS 1998 - 2000

LEGEND

Perchlorate: State Action Level (SAL) = 18 ug/L

Each stack of boxes represents one nested monitoring well. Each individual box represents one perforated zone in the nested monitoring well, with the deepest zone at the bottom of the stack.

The box fill pattern legend indicates the maximum concentrations detected during the water year:

- □ ND
- ░ < SAL
- ▒ SAL - 2x SAL
- ▓ >2x SAL
- ▨ No Data

□ Bold outline indicates zone in Silverado aquifer

Data Source: WRD Regional Groundwater Monitoring Program

- ⊕ WRD Nested Monitoring Wells
- Fault Zones
- Forebay Line
- Barrier Injection Wells
- WRD Boundary

Comments, corrections or suggestions are welcome and should be addressed to :
Water Replenishment District
12621 E. 166th Street
Cerritos, CA 90703
Phone: (562) 921-5521
Fax: (562) 921-6101
Email: tporr@wrd.org

Map projection: UTM Zone 11
Map date: Feb 2001

Figure 4.24

APPENDIX D

Excerpts of Reports for Nearby Sites

Unocal #5050
Former Holly Park Car Wash
Former Cypress Fee
Great Western Forum
United Oil #57
SoCal Gas Plant
Tosco 76 #2900

Unocal #5050

<u>Sources:</u>

Alton, 1996. *Quarterly Monitoring Report, July through September 1996, Former Unocal Station 5050, 4000 Century Boulevard, Inglewood, California,* Alton Geoscience, 30 September 1996.

RWQCB, 1996. *Underground Storage Tank Case Closure – Former Unocal Service Station #5050, 4000 West Century Boulevard, Inglewood (I-09966)*, California Regional Water Quality Control Board, Los Angeles Region, 22 October 1996.

VET, 1993. *Site Characterization and Well Installation Report, Unocal Service Station #5050, 4000 West Century Boulevard, Inglewood, California,* Vapor Extraction Technology, Inc., 9 September 1993.

RECEIVED
96 OCT 28 PM 2:06
[illegible]
QUALITY CONTROL BOARD
LOS ANGELES REGION

QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 1996

September 30, 1996

FORMER UNOCAL STATION 5050
4000 Century Boulevard
Inglewood, California

UST UNIT Case Closed 10/22/96
[illegible]
[illegible] I-9966
DATE 10/29/96
STAFF

Prepared For:

Mr. Jim Adams
UNOCAL ENVIRONMENTAL
REMEDIATION SERVICES
376 South Valencia Boulevard
Brea, California 92621

Prepared By:

John M. Lopez
Unocal Quarterly Monitoring
Program Manager

Michael W. McDonald, PE
Senior Project Manager
Registered Civil Engineer No. 45963

MICHAEL WAYNE McDONALD
No. 45963
Exp. 12-98
CIVIL

ALTON GEOSCIENCE
25A Technology Drive
Irvine, California 92718

TABLE OF CONTENTS

1.0 INTRODUCTION

Alton Geoscience submits this quarterly groundwater monitoring report for Former Unocal Station 5050, located at 4000 Century Boulevard, Inglewood, California (Figure 1). This report provides an update on groundwater monitoring activities for the period of July through September 1996.

On July 8, 1996, fluid levels were measured and groundwater samples were collected from three monitoring wells. Gauging data are presented in Table 1; see Figure 2 for a groundwater elevation contour map constructed using the current data. A description of general field procedures and monitoring well purging data is presented in Appendix A.

Purged groundwater was pumped into a vacuum truck for disposal and recycling at a Unocal approved facility. See Appendix B for a copy of the manifest.

2.0 LABORATORY ANALYSIS

Groundwater samples were submitted to a state-certified laboratory and analyzed for total petroleum hydrocarbons with gasoline distinction (TPH-G) using EPA Method 8015 modified; benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8020; and methyl tertiary butyl ether (MTBE). MTBE appears as an aditional carbon chain distribution and is run as a part of EPA Method 8015. MTBE results are estimated values. Groundwater analytical results are listed in Table 1 and are shown on Figure 3. A copy of the official laboratory report and chain of custody record are included in Appendix C.

3.0 FINDINGS AND CONCLUSIONS

- Liquid-phase hydrocarbons were not encountered during this event.

- Dissolved-phase TPH-G concentrations ranged from below laboratory detection limits to 440 micrograms per liter (μg/l). Refer to Table 2 for a comparison of results from current and previous sampling events.

- Dissolved-phase benzene concentrations ranged from below laboratory detection limits to 0.7 μg/l. Refer to Table 2 for a comparison of results from current and previous sampling events. Benzene concentrations versus time are shown in Graph 1.

- Hydrocarbon concentrations did not exceed regulatory action levels listed below. Action levels for benzene (1.0 μg/l), toluene (150 μg/l), ethylbenzene (700 μg/l), and total xylenes (1,750 μg/l) are based on the Primary Maximum Contaminant Levels (MCLs) established by the California EPA.

- The minimum depth to groundwater measured in wells was 66.11 feet below grade (Monitoring Well MW-2). Groundwater levels have generally lowered since the previous monitoring event. A hydrograph showing groundwater elevations versus time is presented in Graph 2.

- The general groundwater gradient is directed toward the northeast. This is consistent with the gradient observed during the previous monitoring event.

TABLE KEY

ABBREVIATIONS / SYMBOLS

BTEX = benzene, toluene, ethylbenzene, and total xylenes
DHS = Department of Health Services
HVOC = halogenated volatile organic compounds
LPH = liquid-phase hydrocarbons
mg/l = milligrams per liter
MTBE = methyl tertiary butyl ether
NGVD = National Geodetic Vertical Datum
NA = not applicable
ND = not detected at or above laboratory detection limit
ppb = parts per billion
ppm = parts per million
TPH-G = total petroleum hydrocarbons with gasoline distinction
TPH-D = total petroleum hydrocarbons with diesel distinction
TRPH = total recoverable petroleum hydrocarbons
Trace = less than 0.01 foot of LPH in well
µg/kg = micrograms per kilogram
µg/l = micrograms per liter
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCE = cis- and trans-1,2-Dichloroethene
PCE = tetrachloroethene
TCA = trichloroethane
TCE = trichloroethene
PCB = polychlorinated biphenyls
USTs = underground storage tanks
-- = not analyzed, measured, collected, or due to the presence of LPH

NOTES

Elevations are in feet above mean sea level (NGVD-1929).

Groundwater elevation for wells with LPH is calculated as follows:
Surface elevation – depth to water + (0.75 x LPH thickness).

Table 1

GROUNDWATER ANALYSIS AND GAUGING RESULTS
July 1996
Former Unocal Station 5050

Well No.	Monitoring Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	TPH-G (µg/l)	MTBE 8020 (µg/l)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Surface Elevation (feet)	Depth of Well (feet)	Comments
MW-2	07/08/96	0.7	ND	ND	ND	ND	ND	66.11	0.00	20.44	86.55	83.13	
MW-3	07/08/96	ND	ND	ND	ND	ND	ND	66.76	0.00	21.00	87.76	76.90	
MW-4	07/08/96	ND	ND	ND	1.7	440	ND	69.71	0.00	20.14	89.85	83.25	

Table 2

HISTORIC GROUNDWATER ANALYSIS AND GAUGING RESULTS
July 1996
Former Unocal Station 5050

Well No.	Monitoring Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	TPH-G (µg/l)	MTBE 8020 (µg/l)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Surface Elevation (feet)	Depth of Well (feet)	Comments
MW-1	08/23/93	8.4	ND	ND	3	ND	--	65.00	0.00	22.00	87.00	84.00	
MW-1	12/28/93	ND	ND	ND	ND	ND	--	64.98	0.00	22.02	87.00	84.00	
MW-1	03/16/94	110	6.2	0.86	12	350	--	65.05	0.00	21.95	87.00	83.70	
MW-1	03/30/94	19	3.9	1.4	9.5	130	--	65.22	0.00	21.78	87.00	83.70	
MW-1	04/21/94	100	ND	ND	4.2	ND	--	64.98	0.00	22.02	87.00	82.47	
MW-1	08/18/94	410	2.6	ND	19	770	--	66.30	0.00	20.70	87.00	83.55	
MW-1	11/22/94	8.4	ND	ND	ND	ND	--	66.76	0.00	20.24	87.00	83.58	
MW-1	03/23/95	10	ND	ND	ND	ND	--	66.90	0.00	20.10	87.00	83.53	
MW-1	05/30/95	93	ND	ND	1.9	200	--	66.91	0.00	20.09	87.00	83.96	
MW-1	06/13/95	--	--	--	--	--	--	66.90	0.00	20.10	87.00	--	Well destroyed 6/22
MW-1	01/23/96	--	--	--	--	--	--	--	--	--	87.00	84.00	Abandoned
MW-2	08/18/94	5.2	4.9	2.3	33	150	--	65.88	0.00	20.67	86.55	81.24	
MW-2	11/22/94	120	ND	ND	ND	260	--	66.25	0.00	20.30	86.55	81.15	
MW-2	03/23/95	75	2.1	ND	3.1	170	--	66.37	0.00	20.18	86.55	81.08	
MW-2	05/30/95	140	ND	ND	4	250	--	67.59	0.00	18.96	86.55	82.60	
MW-2	06/13/95	--	--	--	--	--	--	67.31	0.00	19.24	86.55	--	
MW-2	09/11/95	98	2.2	ND	1.7	270	--	66.10	0.00	20.45	86.55	82.55	
MW-2	10/18/95	140	ND	ND	2.8	320	--	68.05	0.00	18.50	86.55	83.13	
MW-2	01/23/96	200	ND	ND	1.4	250	--	65.95	0.00	20.60	86.55	83.13	
MW-2	04/16/96	1.2	ND	ND	ND	ND	ND	65.82	0.00	20.73	86.55	83.13	
MW-2	07/08/96	0.7	ND	ND	ND	ND	ND	66.11	0.00	20.44	86.55	83.13	
MW-3	08/18/94	1.2	2.5	1.1	16	110	--	65.97	0.00	21.23	87.20	76.46	
MW-3	11/22/94	7.6	ND	ND	ND	ND	--	66.38	0.00	20.82	87.20	78.77	
MW-3	03/23/95	5.1	1.2	ND	0.6	ND	--	66.79	0.00	20.41	87.20	76.67	
MW-3	05/30/95	0.8	ND	ND	ND	ND	--	66.83	0.00	20.37	87.20	76.90	
MW-3	06/13/95	--	--	--	--	--	--	66.73	0.00	20.47	87.20	--	
MW-3	09/11/95	ND	ND	ND	ND	ND	--	66.51	0.00	20.69	87.20	76.70	
MW-3	10/18/95	1.5	ND	ND	ND	ND	--	66.37	0.00	20.83	87.20	76.90	
MW-3	01/23/96	1.5	ND	ND	ND	ND	ND	66.69	0.00	20.51	87.20	76.90	
MW-3	04/16/96	ND	ND	ND	ND	ND	ND	66.40	0.00	20.80	87.20	76.90	
MW-3	07/08/96	ND	ND	ND	ND	ND	ND	66.76	0.00	21.00	87.76	76.90	

Table 2

HISTORIC GROUNDWATER ANALYSIS AND GAUGING RESULTS
July 1996
Former Unocal Station 5050

Well No.	Monitoring Date	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	TPH-G (µg/l)	MTBE 8020 (µg/l)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Surface Elevation (feet)	Depth of Well (feet)	Comments
MW-4	08/18/94	2.1	1.6	0.5	10	ND	--	65.87	0.00	21.06	86.93	81.22	
MW-4	11/22/94	ND	ND	ND	ND	ND	--	66.57	0.00	20.36	86.93	81.17	
MW-4	03/23/95	ND	ND	ND	ND	ND	--	66.89	0.00	20.04	86.93	81.23	
MW-4	05/30/95	ND	ND	ND	ND	ND	--	68.76	0.00	18.17	86.93	83.35	
MW-4	06/13/95	--	--	--	--	--	--	68.14	0.00	18.79	86.93	--	
MW-4	09/11/95	ND	ND	ND	ND	ND	--	66.53	0.00	20.40	86.93	83.00	
MW-4	10/18/95	ND	ND	ND	ND	ND	--	67.80	0.00	19.13	86.93	83.25	
MW-4	01/23/96	ND	ND	ND	ND	ND	--	68.53	0.00	18.40	86.93	83.25	
MW-4	04/16/96	3.1	ND	ND	ND	ND	ND	69.28	0.00	17.65	86.93	83.25	
MW-4	07/08/96	ND	ND	ND	1.7	440	ND	69.71	0.00	20.14	89.85	83.25	

SOURCE:

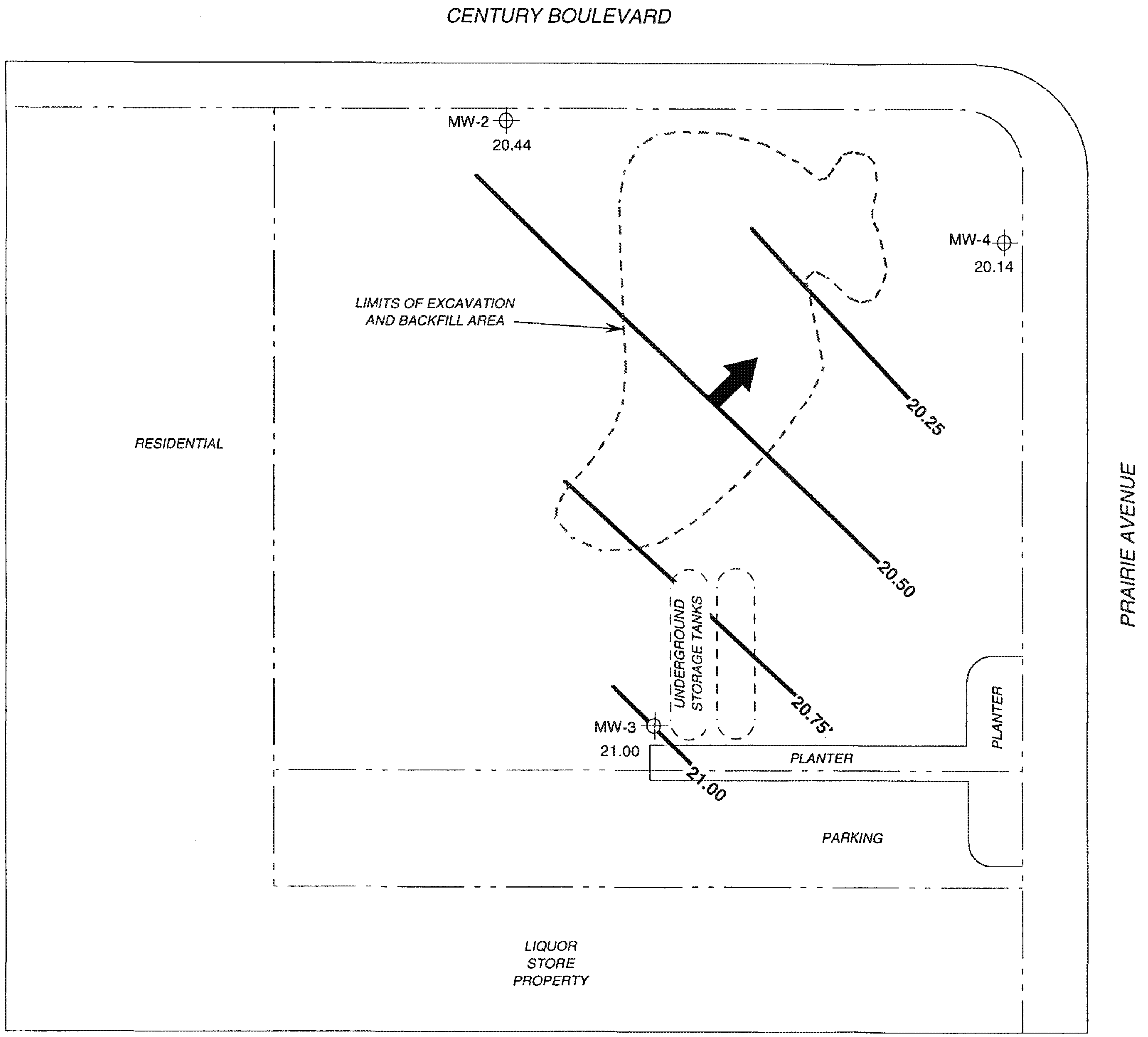
United States Geological Survey
7.5 Minute Topographic Map:
Inglewood Quadrangle

VICINITY MAP

Former Unocal Station 5050
4000 Century Boulevard
Inglewood, California

FIGURE 1

ALTON GEOSCIENCE
Irvine, California



N

LEGEND

MW-2 ⊕ 20.44	Monitoring Well with Groundwater Elevation
21.00	Groundwater Elevation Contour (Contour Interval = 0.25 foot)
➡	General Direction of Groundwater Flow

SCALE (FEET)

0 30 60

NOTES:

Contour lines are interpretive based on fluid levels measured in wells. Elevations are in feet above mean sea level (NGVD - 1929).

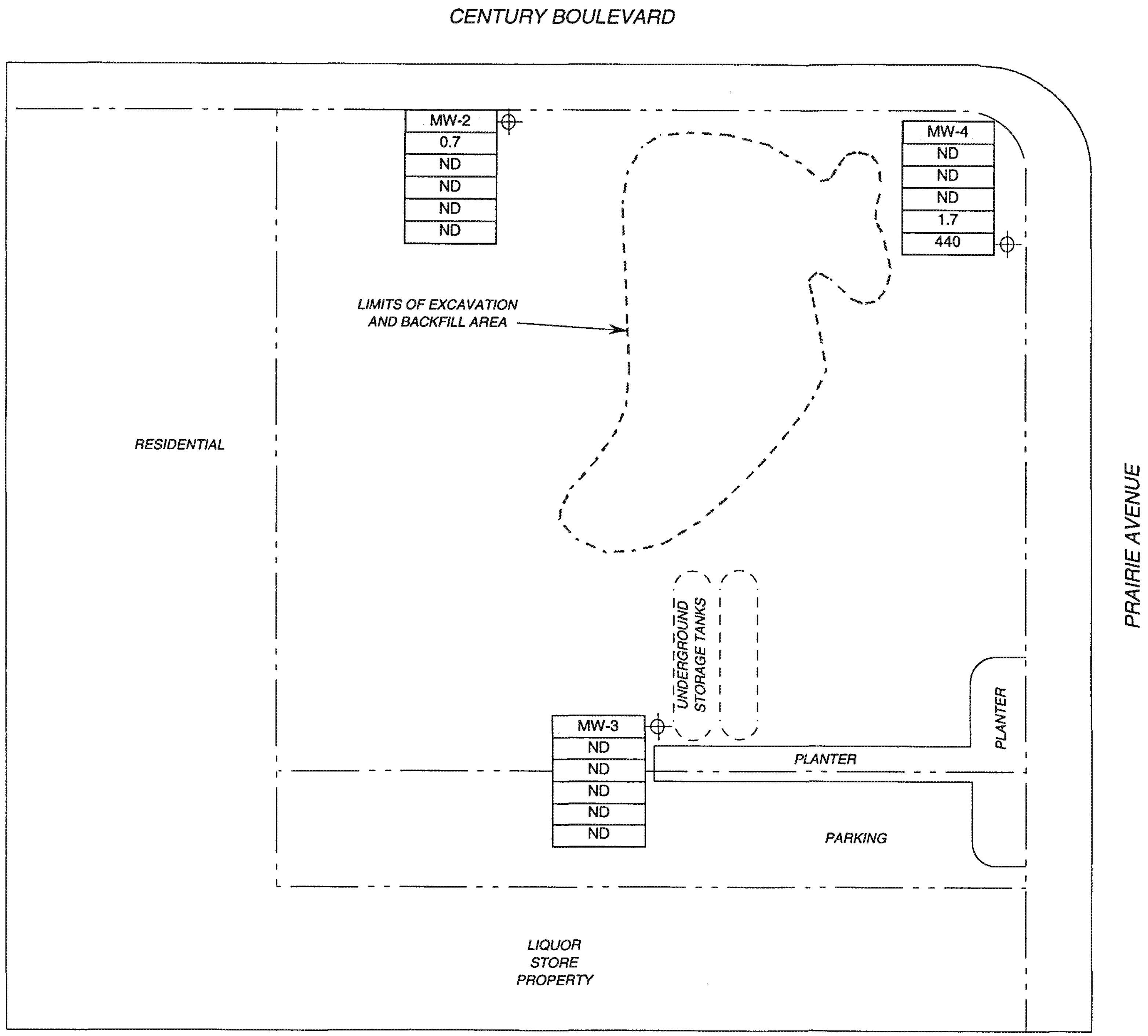
GROUNDWATER ELEVATION
CONTOUR MAP
July 8, 1996

Former Unocal Station 5050
4000 Century Boulevard
Inglewood, California

ALTON
GEOSCIENCE
Irvine, California

FIGURE 2

20-0400 10/16/96



N

LEGEND

⌖ Monitoring Well with Dissolved-Phase Hydrocarbon Concentrations (ug/l)

WELL No.
B
T
E
X
TPH-G

SCALE (FEET)

0 30 60

NOTES:

TPH-G = total petroleum hydrocarbons as gasoline.
B = benzene, T = toluene, E = ethylbenzene, X = total xylenes.
ug/l = micrograms per liter.
ND = not detected at limit indicated on official laboratory report.

DISSOLVED-PHASE HYDROCARBON CONCENTRATION MAP
July 8, 1996

Former Unocal Station 5050
4000 Century Boulevard
Inglewood, California

ALTON GEOSCIENCE
Irvine, California

FIGURE 3

20-0400 8/7/96

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
PETE WILSON, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL [illegible]
LOS ANGELES REGION
101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91754-2156
(213) 266-7500
FAX: (213) 266-7600

October 22, 1996

Mr. Jim Adams
Unocal Corporation
376 South Valencia Avenue
Brea, CA 92621

UNDERGROUND STORAGE TANK CASE CLOSURE
FORMER UNOCAL SERVICE STATION # 5050
4000 WEST CENTURY BOULEVARD, INGLEWOOD (I-09966)

Dear Mr. Adams:

This letter confirms the completion of the site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location.

Based on the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e).

If you have groundwater monitoring wells or vapor extraction wells at the subject property, you must comply with the following:

1. All wells must be located and properly abandoned.

2. Well abandonment permits must be obtained from the Los Angeles County Department of Health Services, and all other necessary permits must be obtained from the appropriate agencies prior to the start of work.

3. You must submit a report on the abandonment of the wells to this office by December 20, 1996. This report must include at a minimum, a site map, a description of the well abandonment process, and copies of all signed permits.

Please contact our office if you have any questions regarding this matter please call Mr. Harry Patel at (213) 266-7575.

Sincerely,

ROBERT P. GHIRELLI, D. Env.
Executive Officer

DAVE DEANER
Acting Assistant Executive Officer
Underground Tanks

cc: Mr. Toru Okamoto, State Water Resources Control Board, Underground Storage Tank Cleanup Fund
Mr. Allan Patton, State Water Resources Control Board, Underground Storage Tank Program
Mr. Alfredo Cardenas, Water Replenishment District of Southern California
Mr. Al Bragg, Los Angeles County Department of Health Services, Water Well Permits
Mr. Carl Sjoberg, Los Angeles County Department of Public Works, Environmental Programs Division, Underground Tanks
Mr. Michael W. McDonald, Alton Geoscience

State of California
Environmental Protection Agency

UNDERGROUND STORAGE TANK CASE REVIEW FORM

Los Angeles Regional
Water Quality Control Board

Date: October 22, 1996	LUSTIS file no.: I-09966	Case reviewer: Harry Patel	
Site Name/Address: Former Unocal Service Statin # 5050 4000 West Century Boulevard Inglewood, CA	Responsible parties: Mr. Jim Adams Unocal Corporation	Address: 376 South Valencia Avenue Brea , CA 92621	Phone no.: (714) 577-1846

I. CASE INFORMATION (N/A = Not Applicable)

Tank No.	Size in Gallons	Contents	Closed in-place/Removed?	Date
1	12,000	Unleaded Gasoline	Removed	12/92
2	12,000	Unleaded Gasoline	Removed	12/92
3	280	Waste Oil	Removed	12/92
4	-----	-----	-----	-----

II. SITE CHARACTERIZATION INFORMATION (GW=groundwater)

GW basin: Westcoast Basin	Beneficial uses: Dom, Ind, Mun, etc	Depth to drinking water aquifer: approximately 100'	
Distance to nearest municipal supply well: Unknown at this time (It appears that there are none in 1/4 mile radius)		Distance between known shallow GW contamination and aquifer: Approximately 80'	
GW highest depth: 17.65'	GW lowest depth: 22.02'	Well screen interval: 15' to 35'	Flow direction: Northeast
Soil type: Sands and siltysands		Maximum depth sampled: 40'	

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS -- Initial and Latest, --- =Not Reported, ND=Non-detect

Contaminant	Soil (mg/kg)		Water (µg/L)		Contaminant	Soil (mg/kg)		Water (µg/L)	
	Initial (Year)	Latest (Year)	Initial (Year)	Latest (Year)		Initial (Year)	Latest (Year)	Initial (Year)	Latest (Year)
TPH (Gas)	2,700/93	----	770/94	ND/96	Ethylbenzene	85/93	-----	2.3/94	ND/96
TPH (Diesel)	-----	-----	-----	-----	Xylenes	440/93	-----	12/94	ND/96
Benzene	4.1/93	-----	410/94	3.1/96	MTBE	-----	-----	ND/96	ND/96
Toluene	140/93	-----	6.2/94	ND/96	Other/	-----	-----	-----	-----

IV. SOIL REMEDIATION

Method: Excavation and offsite disposal & soil vapor extraction	Duration of remediation: Excavation-2 weeks, VES-6months

V. GROUNDWATER REMEDIATION

Method: None performed	Duration of remediation: Not Applicable

VI. FREE PRODUCT:

Was free product encountered? ~~Yes~~ No	Has free product been totally recovered? ~~Yes~~ ~~No~~
When was free product recovery project completed? Not Applicable	

VII. RECOMMENDED ACTION:

Soil Closure only: ~~Yes~~ No	Case Closure: Yes ~~No~~	Solvent Case? ~~Yes~~ No
Additional Action Required (i.e.: additional site assessment, remediation, monitoring): None at this time		

VIII. JUSTIFICATION FOR RECOMMENDED ACTION:

The site had soil and groundwater contamination. Approximately 1,100 cubic yards of petroleum hydrocarbon contaminated soil was excavated and disposed offsite. This was followed by soil vapor extraction. Soil vapor extraction removed approximately 6, 523 pounds of hydrocarbons from the subsurface. Though the groundwater was not remediated, contaminant concentrations in the groundwater have declined steadily. The remaining concentrations are low. The site is recommended for closure as a low risk site.

10-23-96

(Aug. 1996)

SITE CHARACTERIZATION AND WELL INSTALLATION REPORT

UNOCAL SERVICE STATION #5050
4000 West Century Boulevard
Inglewood, California

September 9, 1993

Prepared for:

Mr. Jim Adams
Unocal Corporation
CERT-Southern Region
376 S. Valencia
Brea, CA 92621

Prepared by:

Vapor Extraction Technology, Inc.
1062 Calle Negocio, Suite J
San Clemente, CA 92673
(714) 492-7732

Project No. 2.029.45.2

James B Reed

James B. Reed, R.G. 4803
Senior Geologist

REGISTERED GEOLOGIST
JAMES B. REED
4803
STATE OF CALIFORNIA

Thomas P Lahey

Thomas P. Lahey
President

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 PURPOSE

The primary purpose of this report is to document recent work at the site by Vapor Extraction Technology, Inc. (VET) which included: 1) installation of 10 borings, of which 5 were converted to vapor extraction wells and 1 converted to a groundwater monitoring well; 2) soil and groundwater sampling and laboratory analysis; 3) site characterization data compilation and mapping, and preparation of this report. The purpose of installing the borings was to better quantify and delineate the remaining hydrocarbons in soil below the former dispenser islands (DIs) and the previously excavated areas at the site.

1.2 SITE BACKGROUND

1.2.1 General Setting

The site, located as shown in Figure 1 is a former retail gasoline service station. All underground storage tanks (USTs), piping, and buildings have been removed and the site is fenced and vacant. The site surface consists of dirt and gravel and is relatively level. Elevation at the site is approximately 87 feet above mean sea level (MSL). The areas adjacent to the site are mixed residential and commercially developed (Figure 2).

1.2.2 Previous Site Investigations

The site has been under assessment since 1988 when borings were installed as a part of a site assessment. Since that time, the site has been extensively drilled and sampled during subsequent phases of site assessments (GTI, May 10, 1993).

The underground storage tanks (USTs), dispenser islands (DIs), product piping and other equipment were removed from the site in December 1992. Based upon all the soil sampling at the site, the only area of soil contamination at the site was apparently limited to a relatively small area beneath the DIs (see assessment maps in Appendix A). This contamination apparently extended to approximately 25 feet below ground surface (bgs). In March of 1993, most of the contaminated soil (approximately 1,100 cubic yards) was excavated to a depth of 28 feet bgs and hauled from the site (Figure 2). Excavation was terminated at 28 feet bgs because of sidewall cave-in concerns.

Samples collected from the bottom of the excavation pit during soil removal indicated that a relatively small amount of soil with up to 2,300 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH) remained beneath the middle and southern DIs at depths between approximately 28 and 35 (estimated maximum) feet bgs. This remaining contaminated soil is the main subject of this report.

1.2.3 Recent Site Characterization

Based upon an approved workplan (VET, June 7, 1993), VET performed the following tasks at the site:

1. installed 10 borings on August 19 and 20, 1993;

2. converted 5 borings to vadose-zone vapor extraction wells, and 1 well to a groundwater monitoring well;

3. analyzed soil samples with mobil lab equipment;

4. sampled groundwater on August 23, 1993.

This report describes the above characterization activities.

2.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

2.1 GEOLOGY

The site is located on the Southwestern Structural Block of the Los Angeles Basin, at the southern edge of the Baldwin Hills area, and the northern end or the Torrance Plain. Reported near-surface geology in this area consists of recent alluvium and the Lakewood Formation of Pleistocene age (Department of Water Resources, Bulletin 104). The Lakewood Formation consists of marine and continental gravel, sand, and clay with shale pebbles.

The predominant soil type encountered on site, from ground surface to approximately 10 feet below ground surface (bgs), consists primarily of sandy silt. At approximately 10 to 20 feet bgs, the soil is predominantly silty sand with occasional silt beds. Below this zone, from approximately 20 to 40 feet bgs, the predominant soil type is sandy silt with occasional beds of poorly-graded sand, silty sand, and clayey silt. Below 40 feet bgs, silty sand is again the dominant lithology, to a total explored depth of 85 feet bgs.

2.2 HYDROGEOLOGY

The site is part of the northern end of the West Coast Groundwater Basin. Well data from the Los Angeles County Flood Control District indicates that the nearest county well is well #1364J, located approximately one-half mile northeast of the site, at the Hollywood Park Race Track. This well, reportedly 500 feet deep, has an unknown screened interval. Depth-to-groundwater in this well, last measured October 29, 1991, was 220 feet below grade, or approximately 83 feet below mean sea level (MSL).

Groundwater at the site is 69 feet bgs, as measured in MW-1. The site is approximately 87 feet above MSL, thus elevation of groundwater at the site is approximately 18 feet above MSL.

3.0 SUBSURFACE CONDITIONS

VET installed 10 borings (B-30 through B-39) on August 19 and 20, 1993. Five of the borings were converted to vapor extraction wells (V-1 through V-5) and 1 was converted to a groundwater well (MW-1). The installation and sampling procedures for these borings and wells were generally according to local agency guidelines and to the procedures detailed in earlier site assessment reports and the workplan for this site. Boring logs and well logs are provided in Appendix B. Analytical laboratory reports for the samples of these installations are provided in Appendix C.

3.1 DRILLING AND SAMPLING

VET drilled 10 borings at the site in the pre-approved locations shown on Figure 2. These boring locations were selected to specifically evaluate the central and fringe portions of the known soil hydrocarbon plume that remained after excavation and soil removal at the site.

The borings were installed with a hollow-stem auger drill rig and extended to maximum depths of 40 to 85 feet bgs. The drilling and sampling was performed in accordance with state and local guidelines for site assessment and mitigation, and was conducted under the direct supervision of a California-registered geologist (see Appendix D for details).

The soil samples were collected every 5 feet with a California modified split-spoon sampler. The samples were field-screened with a Foxboro Model OVA 128-GC organic vapor analyzer to determine hydrocarbon content for laboratory analysis. The head-space gases of soil samples were immediately analyzed through a closed jar.

Soil samples for each boring were submitted to the on-site state-licensed mobile lab for analysis of petroleum hydrocarbons utilizing EPA methods 8015 and 8020.

3.2 SOIL CONDITIONS

Table 1 and Figures 3 and 4 summarize soil types beneath the site and the extent of hydrocarbons in soil, as described below.

3.2.1 Soil Composition

The site is underlain by mostly silty sand and sand (Figures 4 and 5). Rare sandy clay with minor silty clay and clayey silt occur in thin discontinuous laminae. The vadose-zone soils are generally slightly moist. The sand zones are generally loose and friable; the clay laminae are generally stiff and plastic.

3.2.2 Hydrocarbons in Soil

Adsorbed-phase hydrocarbons in soil of the unsaturated (vadose) zone range from non-detectable up to 2700 ppm TPH (Table 1, Figure 3). The vadose-zone TPH hydrocarbon plumes appear to be limited to two very small areas near the former DIs zone. The plumes are less than 8 feet in thickness. Only trace amounts of benzene (up to 0.047 ppm) and other trace component hydrocarbons occur in the soil below the TPH plumes and above the groundwater table (Table 1).

Adsorbed-phase benzene in soil of the capillary fringe and just below the water table ranges up to 0.095 ppm. The capillary fringe, for purposes of this report, is assumed to be below 65 feet bgs and above the groundwater table at 69 feet bgs. The adsorbed-phase benzene plume in and below the capillary fringe is likely to be limited to an area directly below the TPH plumes and central to MW-1.

3.3 GROUNDWATER CONDITIONS

3.3.1 Groundwater Purging and Sampling Operations

Groundwater was purged and sampled at the site by VET on August 23, 1993. The standard procedures followed for this monitoring event were according to the general agency guidelines for groundwater sampling (see Appendix D for details). MW-1 was initially developed during well installation by surging and swabbing for 30 minutes after emplacement of sand pack and prior to emplacement of the well seals.

MW-1 was purged using a submersible pump. The well was fast recharging. Three well volumes were purged from the well. Subsequent to purging, the well was sampled using a new disposable plastic bailer.

3.3.2 Hydrocarbons in Groundwater

The first groundwater monitoring event at the site was conducted by VET on August 23, 1993. Dissolved-phase TPH was below the detection limit of 100 parts per billion (ppb); benzene was 8.4 ppb; xylene was 3.0 ppb; both toluene and ethylbenzene were below the detection limit of 1 ppb. These dissolved-phase hydrocarbons are likely limited to a very small area directly beneath the known soil TPH plume and central to MW-1.

4.0 CONCLUSIONS

Based upon the findings of this characterization and the data of previous site work, and subject to the limitations presented in this report, VET concludes the following:

1. The TPH in soil at the site is limited to 2 very small areas just below and adjacent to the former DI zone. One area is approximately 10 feet in diameter and less than 8 feet thick; the other area is approximately 5 feet in diameter and less than 5 feet thick.

2. The total quantity of hydrocarbons at the site, based upon the two small soil plumes, is estimated to be approximately 200 to 400 pounds (30 to 60 gallons) of hydrocarbons as gasoline.

3. Based upon the drilling and soil sampling to date, it appears that the soil hydrocarbon plume is adequately delineated both vertically and laterally.

4. A dissolved-phase hydrocarbon plume in groundwater directly underlies the soil hydrocarbon plume at the site. The plume is of very low concentration with benzene at only 8.4 ppb.

5. Based upon the groundwater monitoring and the location of the monitoring well with respect to the soil data at the site, it appears that the groundwater hydrocarbon plume at the site is likely of very limited lateral extent.

5.0 RECOMMENDATIONS

Based upon the findings and conclusions presented above, and subject to the limitations of this report, VET provides the following recommendations:

1. The site is adequately covered by wells and borings for the delineation of hydrocarbons. More wells on-site would appear to be unnecessary and are not recommended.

2. Realistic cleanup levels for hydrocarbons in soil and groundwater should be determined and approved by the agencies for this site before any further remediation is attempted.

6.0 LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. Opinions, conclusions and recommendations contained in this report apply to conditions existing when the services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. Where subsurface exploratory work, monitoring, and/or testing was performed, our professional opinions and conclusions are based in part on interpretation of data from discrete sampling or measurement locations that may not represent actual conditions at unsampled or unmeasured locations. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of the services. We assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when the services were performed. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

7.0 REFERENCES

Groundwater Technology, Inc., May 10, 1993. Tank Closure and Dispenser Island Excavation Report, Former Unocal Service Station #5050, 4000 West Century Boulevard, Inglewood, California.

Vapor Extraction Technology, Inc., June 7, 1993. Workplan For Verification Soil Sampling/Site Closure, Former Unocal Service Station #5050, 4000 West Century Boulevard, Inglewood, California.

TABLE 1

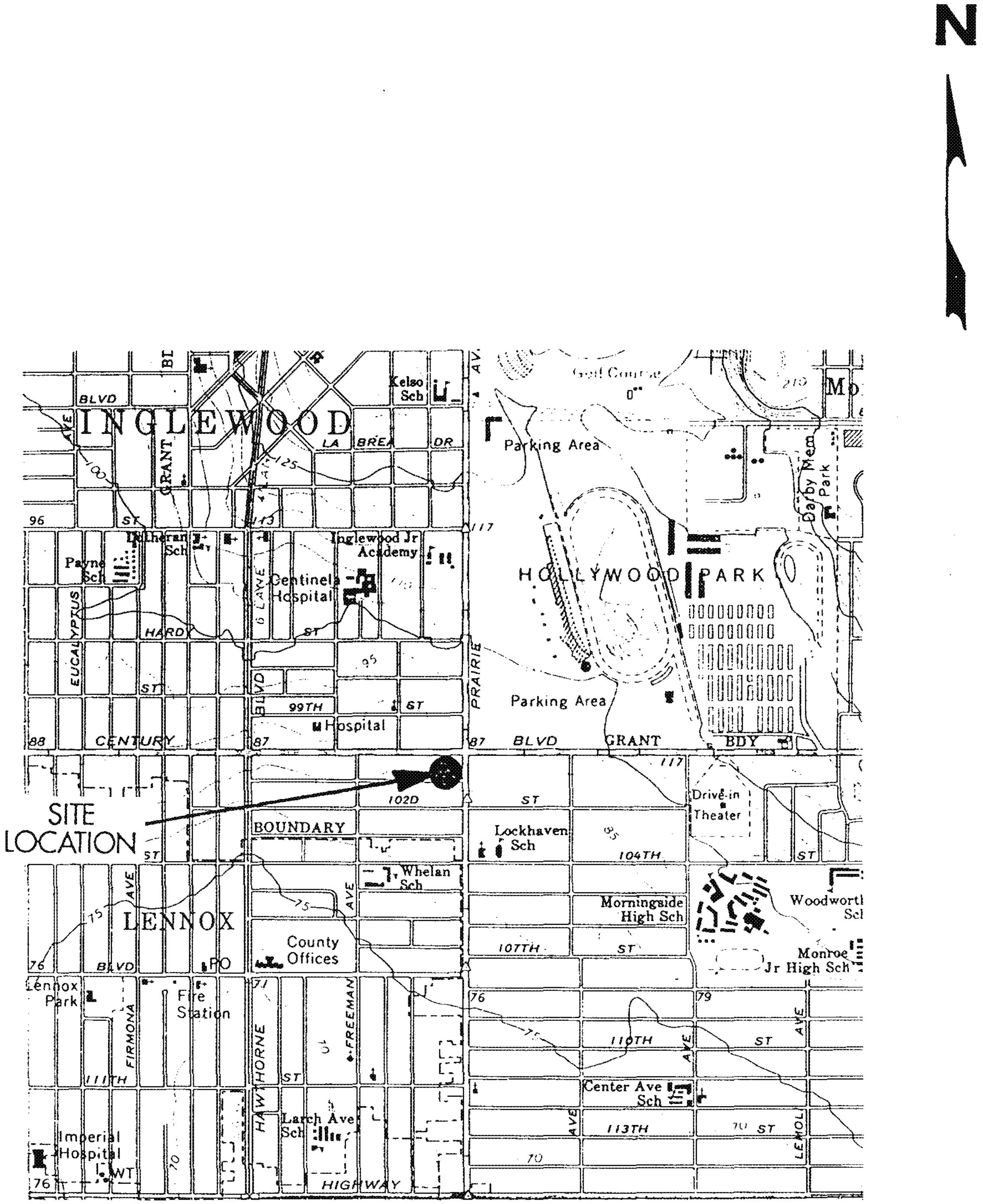
SOIL ANALYTICAL RESULTS SUMMARY

UNOCAL STATION #5050

SAMPLE DATE	SAMPLE LOCATION / ID	DEPTH (Feet bgs)	TPH (8015) (ppm)	TRPH (418.1) (ppm)	BENZENE (ppm)	TOLUENE (ppm)	ETHYL-BENZENE (ppm)	XYLENES (ppm)	ORGANIC LEAD (ppm)	REFERENCE
BORING AND WELL INSTALLATION SAMPLES:										
8/19/93	B-30	15.5	<10	NA	0.007	0.064	0.007	0.22	NA	This Report
8/19/93	B-30	25.5	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	B-30	40	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	B-31	30	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	B-31	50	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	V-2 (B-32)	25	<10	NA	0.066	1.1	0.21	0.91	NA	This Report
8/19/93	V-2 (B-32)	30	<10	NA	0.006	0.01	0.005	<0.015	NA	This Report
8/19/93	V-2 (B-32)	45	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	B-33	25	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	B-33	35	<10	NA	0.018	<0.005	<0.005	0.043	NA	This Report
8/19/93	B-33	40	<10	NA	0.013	0.01	<0.005	0.026	NA	This Report
8/19/93	V-4 (B-34)	25	<10	NA	0.044	0.81	0.21	1.3	NA	This Report
8/19/93	V-4 (B-34)	30	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	V-4 (B-34)	40	<10	NA	0.027	0.016	<0.005	0.02	NA	This Report
8/19/93	V-3 (B-35)	25	2700	NA	4.1	140	85	440	NA	This Report
8/19/93	V-3 (B-35)	35	<10	NA	0.02	<0.005	<0.005	0.047	NA	This Report
8/19/93	V-3 (B-35)	50	<10	NA	0.021	0.029	0.005	0.034	NA	This Report
8/19/93	V-5 (B-36)	10	74	NA	0.043	0.25	0.3	4.5	NA	This Report
8/19/93	V-5 (B-36)	25	<10	NA	<0.005	0.01	<0.005	0.051	NA	This Report
8/19/93	V-5 (B-36)	40	<10	NA	0.019	0.017	<0.005	0.02	NA	This Report
8/19/93	MW-1 (B-37)	30	<10	NA	0.016	0.063	0.015	0.094	NA	This Report
8/19/93	MW-1 (B-37)	45	<10	NA	0.026	0.026	0.006	0.033	NA	This Report
8/19/93	MW-1 (B-37)	60	<10	NA	0.05	0.043	<0.005	0.024	NA	This Report
8/19/93	MW-1 (B-37)	65	<10	NA	0.095	0.046	<0.005	0.037	NA	This Report
8/19/93	MW-1 (B-37)	70	<10	NA	0.06	0.01	<0.005	0.023	NA	This Report
8/19/93	MW-1 (B-37)	75	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	MW-1 (B-37)	80	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	V-1 (B-38)	30	<10	NA	<0.005	0.01	<0.005	0.024	NA	This Report
8/19/93	V-1 (B-38)	40	<10	NA	0.047	0.081	0.012	0.066	NA	This Report
8/19/93	V-1 (B-38)	45	<10	NA	<0.005	<0.005	<0.005	<0.015	NA	This Report
8/19/93	V-1 (B-38)	50	<10	NA	0.045	0.061	0.006	0.044	NA	This Report
8/20/93	B-39	30	<10	NA	<0.005	0.007	<0.005	0.016	NA	This Report
8/20/93	B-39	40	<10	NA	0.074	<0.005	<0.005	<0.015	NA	This Report
8/20/93	B-39	45	<10	NA	0.017	<0.005	<0.005	<0.015	NA	This Report

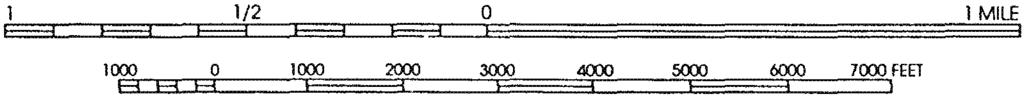
NOTES:

REFERENCE = Reference of document for the source of the analytical data.
NA = Not analyzed.
bgs = below ground surface
ppm, ppb = parts per million and billion, respectively.
TPH = Total petroleum hydrocarbons as gasoline.
TRPH = Total recoverable hydrocarbons, by EPA method 418.1.



Source: U.S.G.S. Inglewood, Calif. 1964
Photorevised 1981

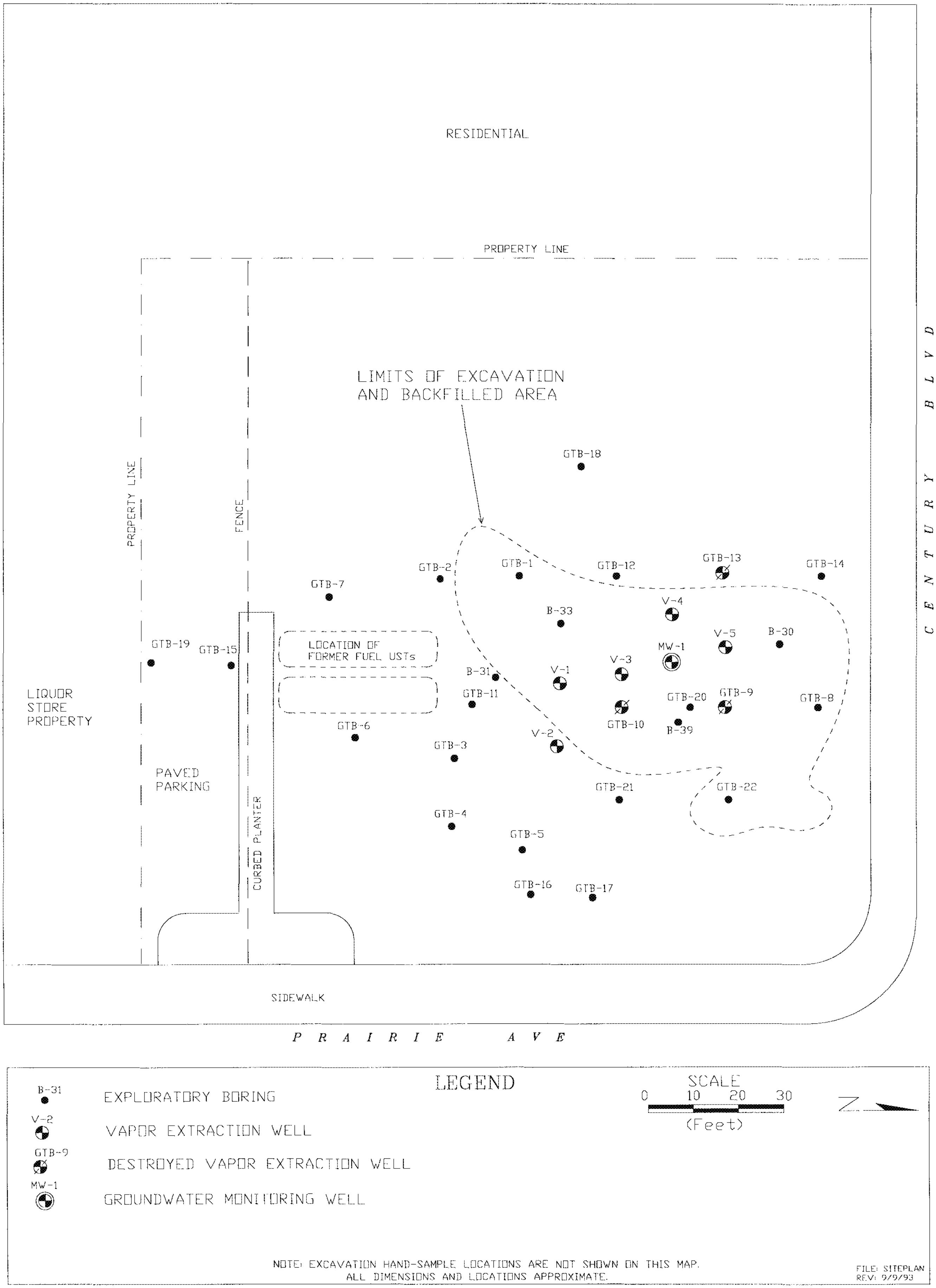
SCALE 1:24 000



UNOCAL SERVICE STATION #5050
4000 CENTURY BOULEVARD
INGLEWOOD, CA
VET PROJECT NO. 1.029.45.2

FIGURE NO. 1
SITE LOCATION

Vapor Extraction Technology, Inc.



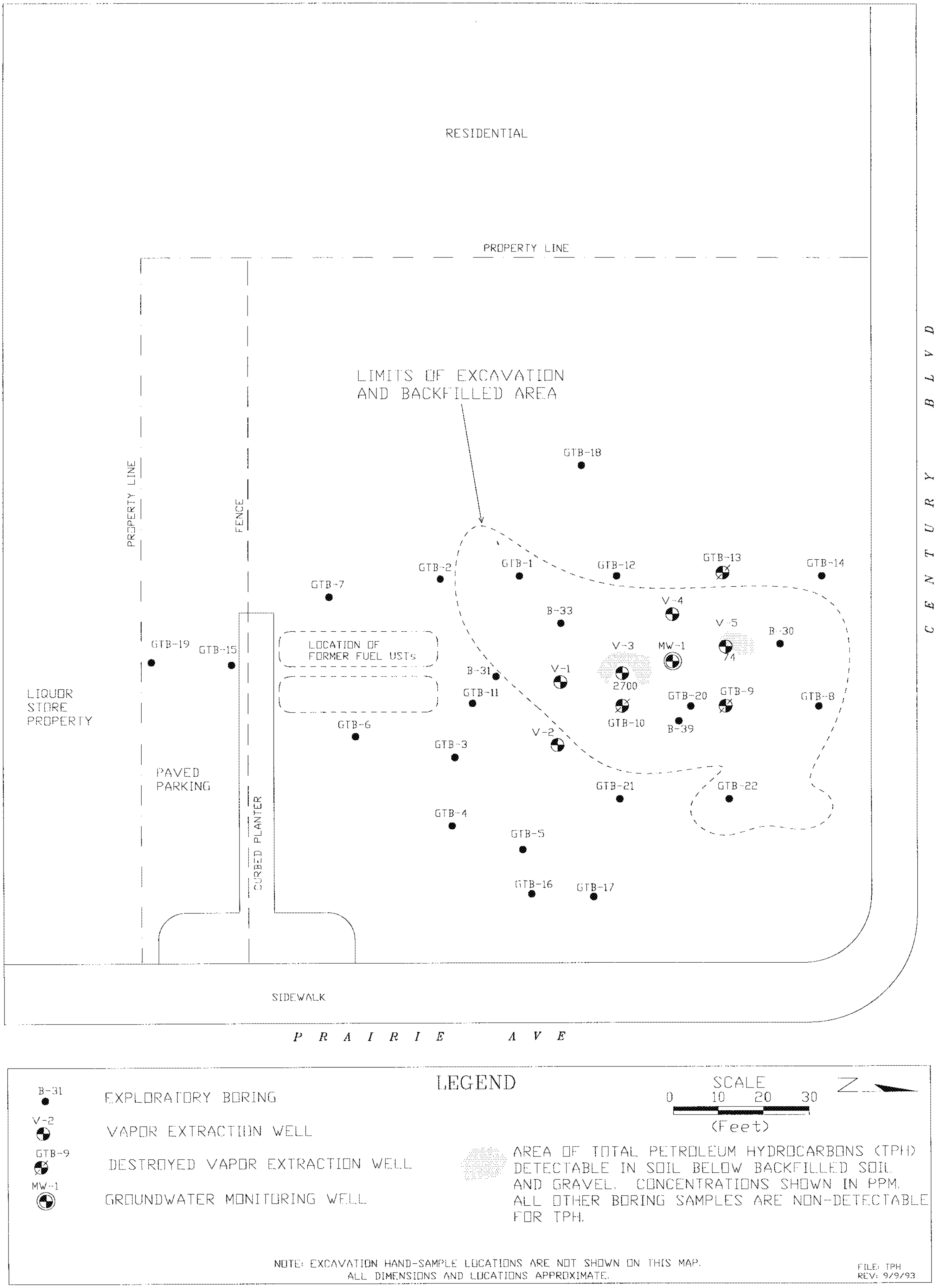
NOTE: EXCAVATION HAND-SAMPLE LOCATIONS ARE NOT SHOWN ON THIS MAP.
ALL DIMENSIONS AND LOCATIONS APPROXIMATE.

FILE: SITEPLAN
REV: 9/9/93

UNOCAL SERVICE STATION #5050
4000 CENTURY BOULEVARD
INGLEWOOD, CA
VET PROJECT NO. 1.029.45.2

FIGURE NO. 2
SITE PLAN

Vapor Extraction Technology, Inc.

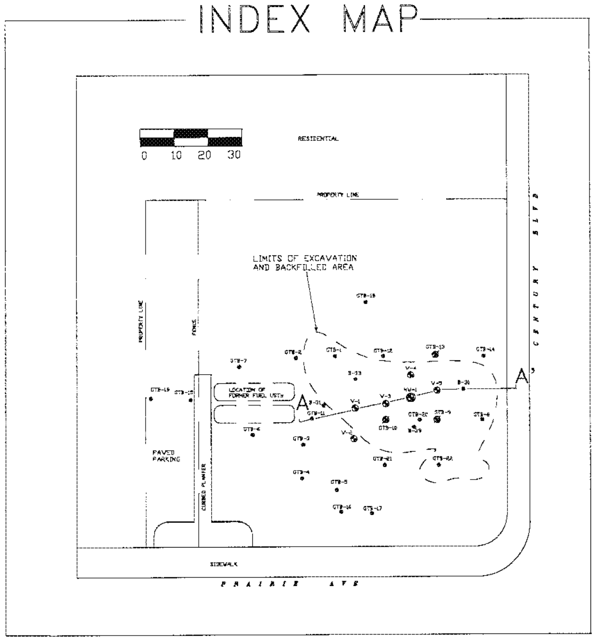


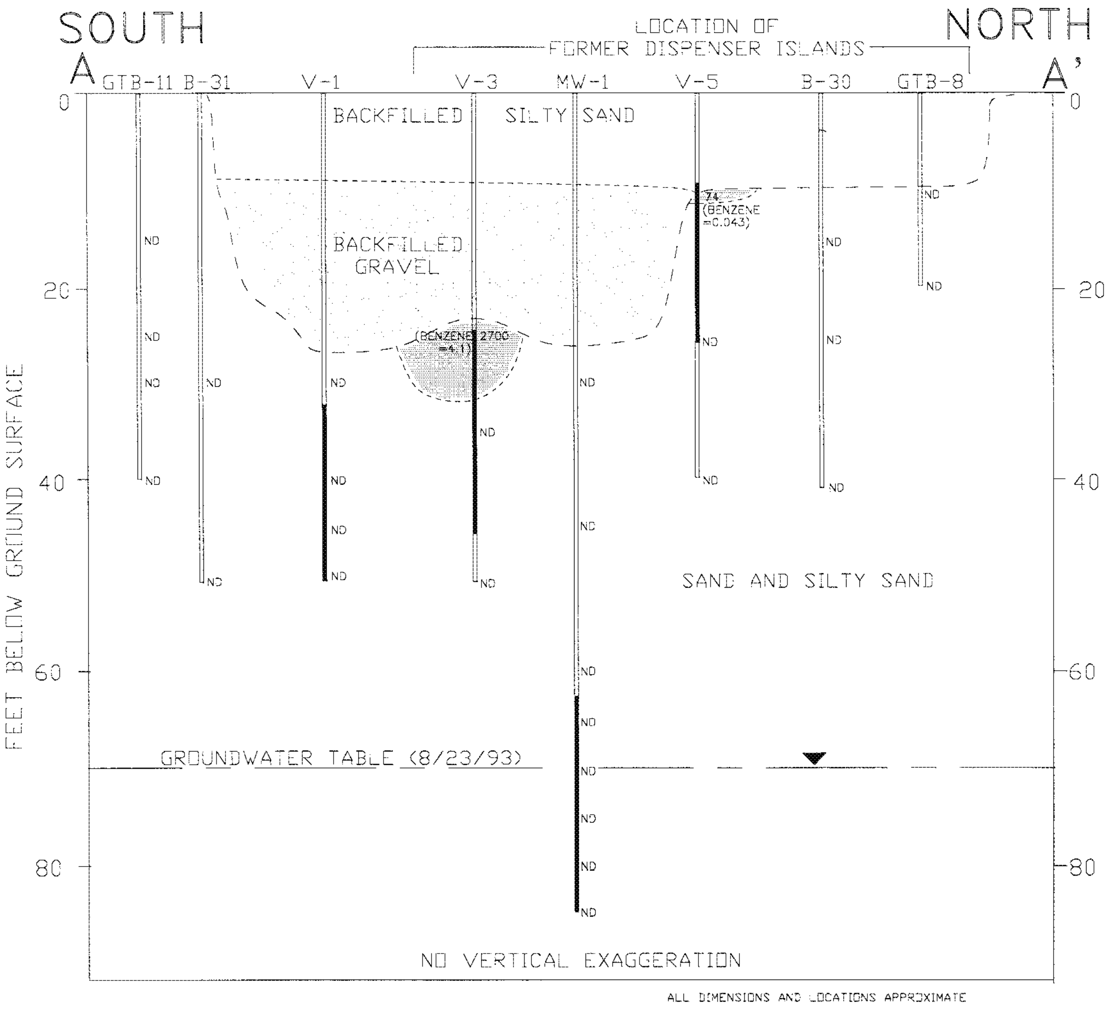
UNOCAL SERVICE STATION #5050
4000 CENTURY BOULEVARD
INGLEWOOD, CA
VET PROJECT NO. 1.029.45.2

FIGURE NO. 3
TPH MAP

Vapor Extraction Technology, Inc.

Vapor Extraction Technology, Inc.





LEGEND

B-1 BORING OR WELL

← BLANK CASING OR BACKFILLED BORING

← SCREENED CASING AND GRAVEL-PACKED INTERVAL

(0) 270 ← ADSORBED-PHASE TPH IN PARTS PER MILLION (PPM) (ND = NON-DETECTABLE)

FIELD GAS DETECTOR READING IN PPM

EXTENT OF DETECTABLE ADSORBED-PHASE TOTAL PETROLEUM HYDROCARBONS (TPH) IN SOIL

HORIZONTAL SCALE 1" = 20'

0 10 20 30

FILE: CROSSECA
REVISED: 9/19/93

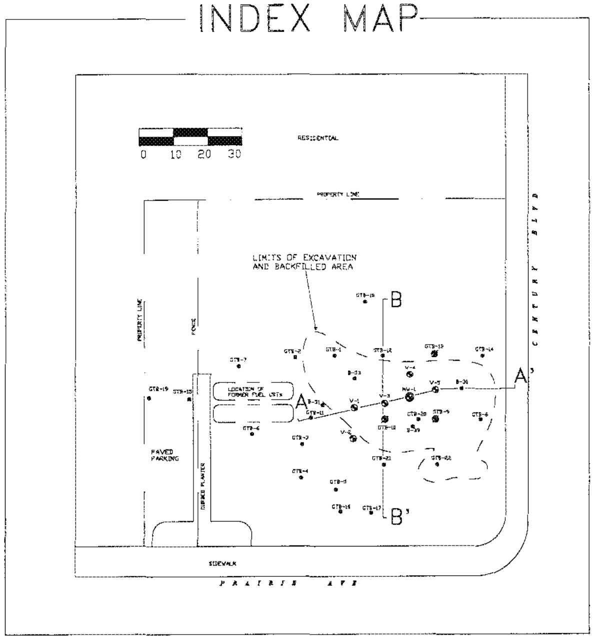
VAPOR EXTRACTION TECHNOLOGY, INC.

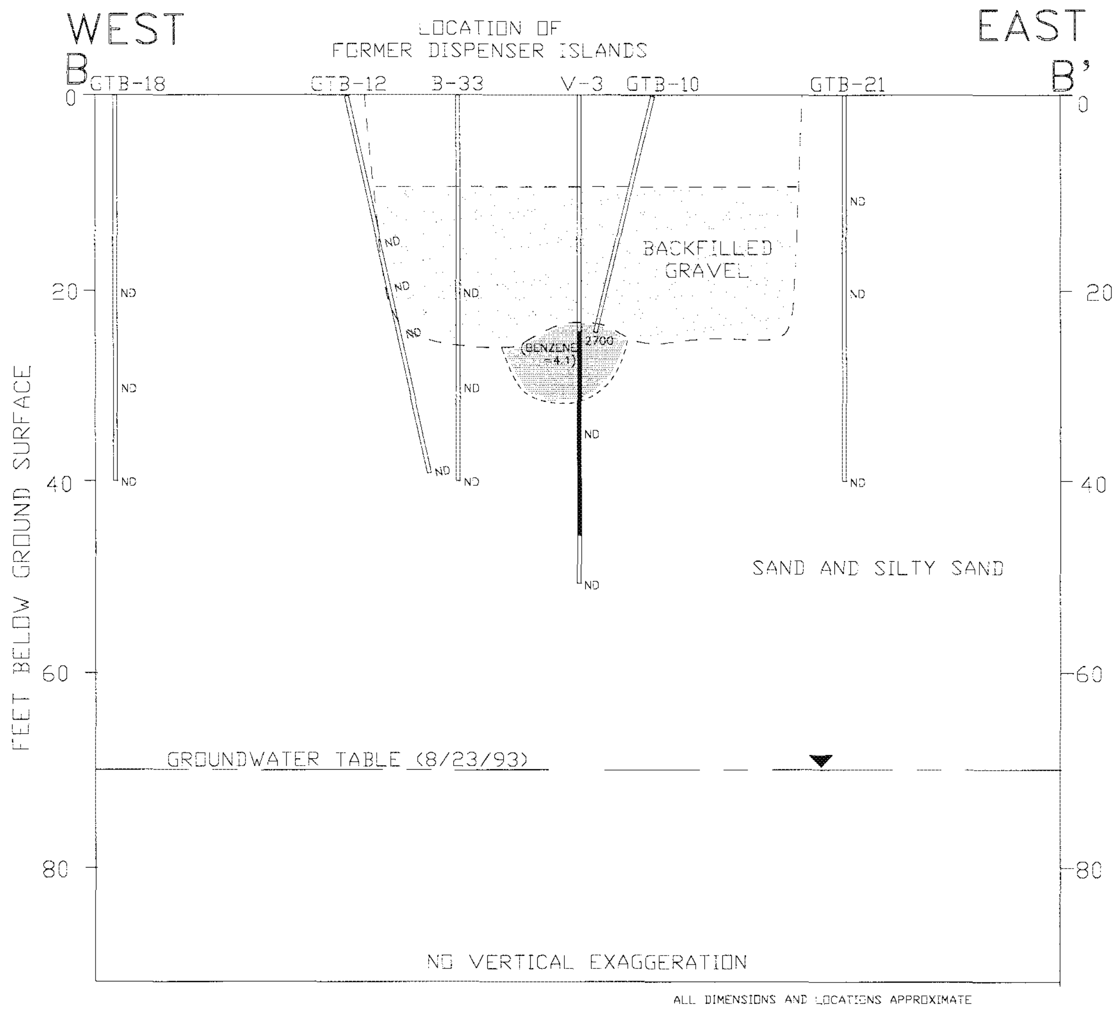
UNOCAL SERVICE STATION #5050
4000 CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA
VET PROJECT NO. 1029.45.2

FIGURE NO. 4
CROSS SECTION A-A'

Vapor Extraction Technology, Inc.

INDEX MAP





ALL DIMENSIONS AND LOCATIONS APPROXIMATE

LEGEND

B-1 BORING OR WELL

← BLANK CASING OR BACKFILLED BORING

← SCREENED CASING AND GRAVEL-PACKED INTERVAL

(0) 270 ← ADSORBED-PHASE TPH IN PARTS PER MILLION (PPM) (ND = NON-DETECTABLE)

FIELD GAS DETECTOR READING IN PPM

EXTENT OF DETECTABLE ADSORBED-PHASE TOTAL PETROLEUM HYDROCARBONS (TPH) IN SOIL

HORIZONTAL SCALE 1" = 20'

0 10 20 30

FILE: CROSSECB
REVISED: 9/19/93

VAPOR EXTRACTION TECHNOLOGY, INC.

UNOCAL SERVICE STATION #5050
4000 CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA
VET PROJECT NO. 1029.45.2

FIGURE NO. 5
CROSS SECTION B-B'

Appendix B

Boring Logs

DRILLING COMPANY: WEST HAZMAT
RIG NO: CME 55
DATE: 8/19/93
BORING DIAMETER: 6 INCHES
GEOLOGIST: JR

BORING B-30

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.	
5		■	5 6 11		36		SM	SAND. BROWN. FINE GRAINED. 10 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
10		■	4 8 12		16		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 20 % SILT, 10 % CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
15		■	5 9 10	ND	100		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 20 % SILT, 10 % CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
20		■	20 26 30		64		SP	SAND. YELLOW-BROWN. FINE GRAINED. CLEAN, NO SILT OR CLAY. LOOSE. DRY. NONPLASTIC.	
25		■	8 9 12	ND	4		SM	SAND. LIGHT GRAY-BROWN. FINE GRAINED. 20 % SILT, 2 % CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
30		■	7 12 19		3		SM	SAND. AS ABOVE.	
35		■	50		7		SM	SAND. AS ABOVE.	
40		■	50	ND	3		SM	SAND. AS ABOVE.	
								40' TOTAL DEPTH DRILLED	

WELL CONSTRUCTION DETAILS:
Boring backfilled with original clean cuttings from total depth to 8 feet below ground surface (bgs). Sealed with bentonite chips from 8 to 6 feet bgs, and concrete from 6 feet bgs to ground surface.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2
SITE: UNOCAL SS #5050, INGLEWOOD, CA
FILE: B-30LOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

BORING DIAMETER: 6 INCHES GEOLOGIST: JR

BORING B-31

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.	
5		■	6 8 11		0		SM	SAND. BROWN. FINE GRAINED. 10 % SILT, 5 % CLAY. SOFT, FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
10		■	4 7 12		0		SP	SAND. GRAY. FINE GRAINED. 5 % SILT, 2 % CLAY. SOFT, FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
15		■	7 12 15		0		SP	SAND. LIGHT GRAY. MEDIUM GRAINED. CLEAN, NO SILT OR CLAY. LOOSE. SLIGHTLY MOIST. NONPLASTIC.	
20		■	8 18 20		14		SP	SAND. AS ABOVE.	
25		■	8 14 14		90		SM	SAND. GRAY. VERY FINE GRAINED. 30 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
30		■	12 15 19	ND	100		SP	SAND. LIGHT YELLOW-BROWN. FINE GRAINED. 5 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
35		■	10 17 20		90		SM	SAND. GRAY-BROWN. VERY FINE GRAINED. 30 % SILT, 5 % CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
40		■	10 18 20		50		SM	SAND. GRAY-BROWN. VERY FINE GRAINED. 30 % SILT, 5 % CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	

(LOG CONTINUED ON NEXT PAGE)

WELL CONSTRUCTION DETAILS:

Boring backfilled with original clean cuttings from total depth to 8 feet below ground surface (bgs). Sealed with bentonite chips from 8 to 6 feet bgs, and concrete from 6 feet bgs to ground surface.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-31ALOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

BORING DIAMETER: 6 INCHES GEOLOGIST: JR

BORING B-31

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
40									
45		■	9 9 15		50		SM	SAND. LIGHT GRAY-BROWN. FINE GRAINED. 20 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
50		■	9 20	ND	12		SM	SAND. AS ABOVE. 50' TOTAL DEPTH DRILLED	
55									
60									
65									
70									
75									
80									

WELL CONSTRUCTION DETAILS:

Boring backfilled with original clean cuttings from total depth to 8 feet below ground surface (bgs). Sealed with bentonite chips from 8 to 6 feet bgs, and concrete from 6 feet bgs to ground surface.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-31BLOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

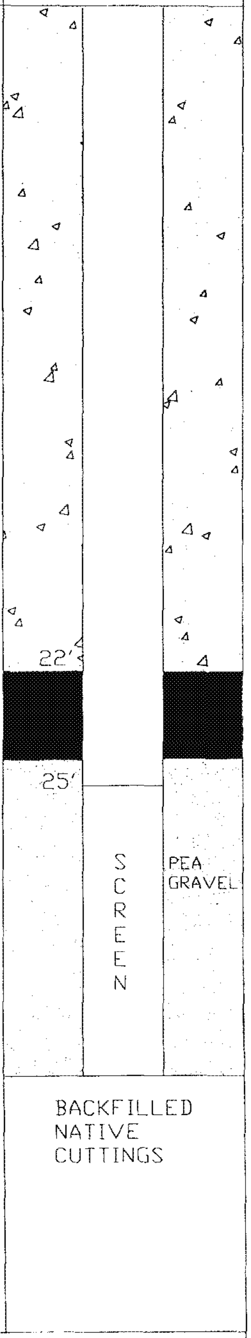
BORING DIAMETER: 6 INCHES GEOLOGIST: JR

WELL V-2 (B-32)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
0								
5		■	4 7 10		0		SM	SAND. REDDISH-BROWN. FINE GRAINED. 10 % SILT, 2% CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.
10		■	7 7 9		0		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 20 % SILT, 2 % CLAY. FRIABLE. SOFT. SLIGHTLY MOIST. NONPLASTIC.
15		■	28 50		0		SM	SAND AS ABOVE.
20		■			340		SP	SAND. LIGHT GRAY. FINE GRAINED. CLEAN, NO SILT OR CLAY. SOFT. LOOSE. SLIGHTLY MOIST. NONPLASTIC.
25		■	9 12 18	ND	>1000		SM	SAND. GRAY. FINE GRAINED. 20 % SILT, 5 % CLAY IN LAMINAE. FRIABLE. SLIGHT ODOR. SOME SILTY CLAY LAMINAE.
30		■	15 18 23	ND	180		SM	SAND. AS ABOVE.
35		■	8 13 18		100		SP	SAND. BROWN. FINE GRAINED. CLEAN. FRIABLE.
40		■	9 18 20		80		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 30% SILT. 5% CLAY. FRIABLE. SLIGHTLY PLASTIC.

(LOG CONTINUED ON NEXT PAGE)

WELL CONSTRUCTION



WELL CONSTRUCTION DETAILS:
CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea gravel.
SEAL: Bentonite chips, 24 to 22 feet; Concrete, 22 to 0 feet.
Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.29.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-32LOG

DRILLING COMPANY: WEST HAZMAT	RIG NO: CME 55		DATE: 8/19/93
BORING DIAMETER: 6 INCHES	GEOLOGIST: JR		

WELL V-2 (B-32)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS		WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
				LAB.	FIELD				
				TPH GC/FID gas (ppm)	OVA (ppm)				
40									
45		■	18 50	ND	30		SP	SAND, LIGHT BROWN, FINE GRAINED, FRIABLE, CLEAN, NO SILT OR CLAY, SLIGHTLY MOIST. NONPLASTIC. 45' TOTAL DEPTH DRILLED	
50									
55									
60									
65									
70									
75									
80									

WELL CONSTRUCTION DETAILS:
(SEE PREVIOUS PAGE OF LOG)

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2	SITE: UNOCAL SS #5050, INGLEWOOD, CA	FILE: B-32BLOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/19/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

BORING B-33

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
0									
5		■	7 8 9		0		SP	SAND. DARK REDDISH-BROWN. FINE GRAINED. FRIABLE, LOOSE. SLIGHTLY MOIST. NONPLASTIC.	
10		■			0		SP	SAND. LIGHT BROWN. FINE GRAINED. 5 % SILT, NO CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
15		■	10 14 18		1		SP	SAND. LIGHT GRAY. MEDIUM GRAINED. CLEAN, NO SILT OR CLAY.	
20		■	20 30 35		0		SP	SAND. AS ABOVE.	
25		■	16 18 24	ND	18		SM	SAND. LIGHT GRAY-BROWN. FINE GRAINED. 30 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
30		■	15 16 30		2		SM	SAND. AS ABOVE.	
35		■	15 18 16	ND	20		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 30% SILT, 5% CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
40		■	14 18 23	ND	30		SM	SAND. AS ABOVE WITH INTERBEDS OF SILTY CLAY (CL). 40' TOTAL DEPTH DRILLED	

WELL CONSTRUCTION DETAILS:
Boring backfilled with original clean cuttings from total depth to 8 feet below ground surface (bgs). Sealed with bentonite chips from 8 to 6 feet bgs, and concrete from 6 feet bgs to ground surface.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-33LOG

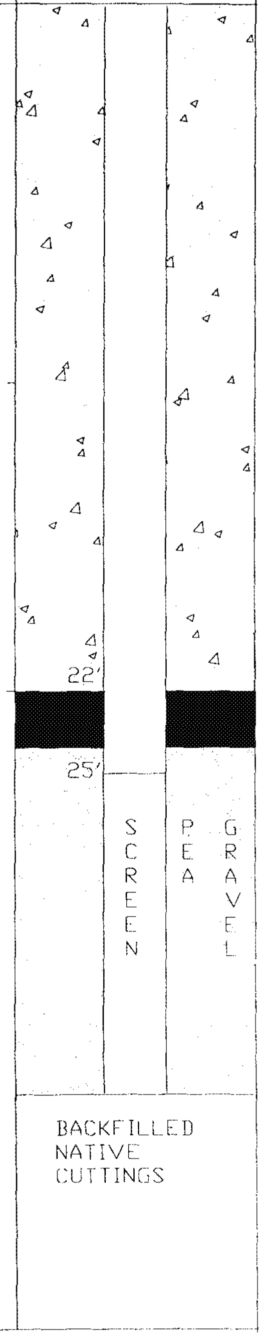
DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/19/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

WELL V-4 (B-34)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.
5		■	6 11 14		1		SM	SAND. REDDISH-BROWN. FINE GRAINED. 10% SILT. 5% CLAY. CRUMBLY. FIRM. DRY.
10		■	8 11 12		0.5		SM	SAND. MEDIUM BROWN. FINE GRAINED. FRIABLE. 10% SILT. TRACE CLAY. SLIGHTLY MOIST. NONPLASTIC.
15		■	8 13 15		0		SP	SAND. LIGHT GRAY. MEDIUM GRAINED. CLEAN, NO SILT OR CLAY. LOOSE. SLIGHTLY MOIST.
20		■	8 14 18		1.5		SP	SAND. AS ABOVE.
25		■	13 30 35	ND	28		SM	SAND. GRAY. FINE GRAINED. 10 % SILT, TRACE CLAY. FRIABLE. NONPLASTIC. RARE PEBBLES
30		■	10 14 18	ND	80		SM	SAND. LIGHT BROWN. FINE GRAINED. 20% SILT. TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.
35		■	8 10 12		40		SM	SAND. AS ABOVE.
40		■	10 14 17	ND	16		SM	SAND. AS ABOVE.
								40' TOTAL DEPTH DRILLED

WELL CONSTRUCTION



WELL CONSTRUCTION DETAILS:
CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea Gravel.
SEAL: Bentonite chips, 24 to 22 feet; Concrete, 22 to 0 feet.
Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-34LOG

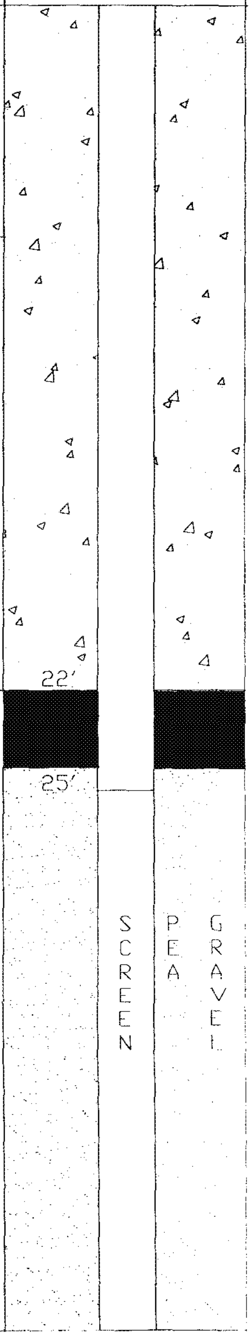
DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

WELL V-3 (B-35)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.
5					4		SM	SAND. REDDISH-BROWN. FINE GRAINED. FRIABLE. 10% SILT. TRACE CLAY. SLIGHTLY MOIST. NONPLASTIC
10			9 12 18		10		GP	SAND AND GRAVEL (AC) BACKFILL.
15					NR		GP	AS ABOVE.
20			7 10 11		NR		GP	AS ABOVE.
25			12 16 18	2700	>1000		SM	SAND. LIGHT BROWN. VERY FINE GRAINED. 20 % SILT. TRACE CLAY. LOOSE-SOFT. NONPLASTIC. SLIGHTLY MOIST. MODERATE HYDROCARBON ODOR.
30			7 15 18		>1000		SM	SAND AS ABOVE
35			10 14 18	ND	700		SM	SAND. LIGHT BROWN. FINE GRAINED. 10% SILT. TRACE CLAY. FRIABLE. SLIGHTLY PLASTIC. SLIGHTLY MOIST.
40			9 14 17		300		SM	SAND. AS ABOVE.

WELL CONSTRUCTION



(LOG CONTINUED ON NEXT PAGE)

WELL CONSTRUCTION DETAILS:
CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea Gravel.
SEAL: Bentonite chips, 24 to 22 feet; Concrete, 22 to 0 feet.
Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 | SITE: UNOCAL SS #5050, INGLEWOOD, CA | FILE: B-35LOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

BORING DIAMETER: 6 INCHES GEOLOGIST: JR

WELL V-3 (B-35)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
40									PEA GRAVEL SCREEN
45		■			400		SM	SAND. AS ABOVE, BUT NONPLASTIC.	BACKFILLED NATIVE CUTTINGS
50		■	9 11 16	ND	140		SM	SAND. AS ABOVE, LOOSE, NONPLASTIC. 50' TOTAL DEPTH DRILLED	
55									
60									
65									
70									
75									
80									

WELL CONSTRUCTION DETAILS:
(SEE PREVIOUS PAGE OF LOG)

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-35BLOG

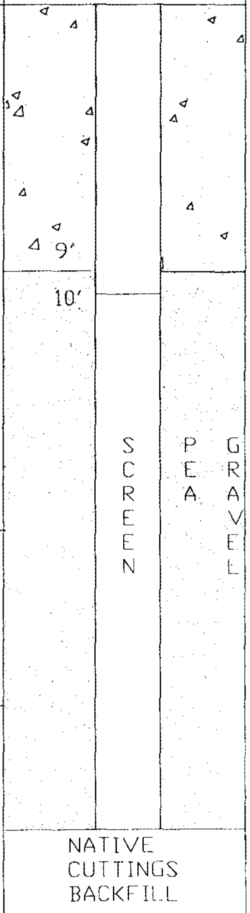
DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/19/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

WELL V-5 (B-36)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.
5		■			0		SM	SAND. BROWN. FINE GRAINED. FRIABLE. LOOSE. DRY. 20% SILT. 2% CLAY.
10		■	10 13 14	74	>1000		SM	SAND. REDDISH-BROWN. FINE GRAINED. 20% SILT. 5% CLAY. FRIABLE. SLIGHTLY PLASTIC. SLIGHTLY MOIST. MODERATE HYDROCARBON ODOR.
15		■	14 18 20		100		SM	SAND. LIGHT BROWN. FINE GRAINED. 10% SILT. TRACE CLAY. FRIABLE. NONPLASTIC. SLIGHTLY MOIST.
20		■	18 50		24		SP	SAND. LIGHT BROWN. FINE GRAINED. CLEAN, NO SILT OR CLAY. LOOSE. NONPLASTIC.
25		■	13 15 20	ND	100		SM	SAND. LIGHT GRAY. VERY FINE GRAINED. 30 % SILT. TRACE CLAY. SOFT. NONPLASTIC. SLIGHTLY MOIST.
30		■	15 17 22		60		SM	SAND. LIGHT BROWN. FINE GRAINED. 20% SILT. TRACE CLAY. LOOSE-FRIABLE. SLIGHTLY MOIST. NONPLASTIC.
35		■	10 15 30		16		SM	SAND. LIGHT GRAY. VERY FINE GRAINED. 20% SILT. 2% CLAY. LOOSE-SOFT. SLIGHTLY PLASTIC. SLIGHTLY MOIST.
40		■	18 20 22	ND	11		SM	SAND. AS ABOVE.
								40' TOTAL DEPTH DRILLED

WELL CONSTRUCTION



WELL CONSTRUCTION DETAILS:

CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea Gravel.

SEAL: Concrete, 9 to 0 feet.

Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-36LOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/20/93

BORING DIAMETER: 10 INCHES GEOLOGIST: JR

WELL MW-1 (B-37)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.	
5		■	7 12 14		20		SM	SAND. REDDISH-BROWN. FINE GRAINED. 20 % SILT, 5 % CLAY. SOFT, FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.	
10								NOTE: GRAVEL FROM 9' TO 28'.	CONCRETE
15									
20							GP		
25									
30		■	13 23 36	ND	120		SM	SAND. LIGHT BROWN. FINE GRAINED. 10 % SILT, TRACE CLAY. FRIABLE. SLIGHTLY MOIST. NONPLASTIC.	
35		■	18 22 30		80		SM	SAND. MEDIUM BROWN. VERY FINE GRAINED. 30% SILT. TRACE CLAY. FRIABLE, SOFT. SLIGHTLY MOIST. NONPLASTIC.	
40		■	13 18 29		80		SM	SAND. AS ABOVE.	

(LOG CONTINUED ON NEXT PAGE)

WELL CONSTRUCTION DETAILS:
CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea Gravel, 63'-70'; SAND, 70'-85'.
SEAL: Bentonite chips, 63 to 57 feet; Concrete, 57 to 0 feet.
Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-37ALOG

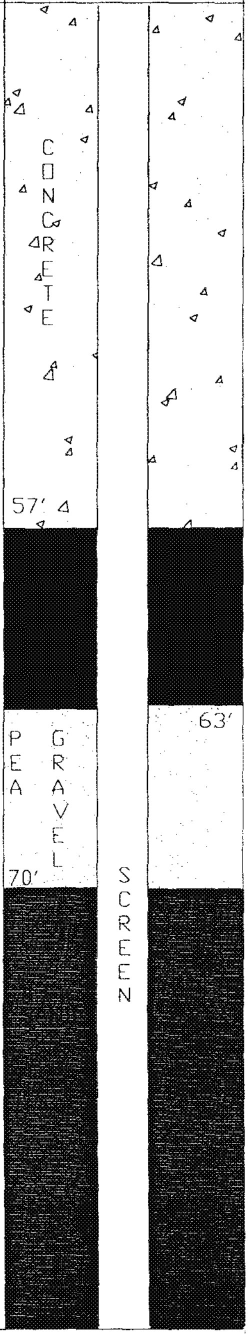
DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/20/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

WELL MW-1 (B-37)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
45		■	17 50	ND	400		SM	SAND. LIGHT BROWN. FINE GRAINED. 10% SILT, TRACE CLAY. LOOSE. SLIGHTLY MOIST. NONPLASTIC.
50		■	22 44 45		640/0		SP	SAND. LIGHT GRAY-BROWN. FINE GRAINED. CLEAN NO SILT OR CLAY. LOOSE. SOFT. SLIGHTLY MOIST. NONPLASTIC. NOTE: SAMPLE OVA READINGS WERE 0 AFTER SAMPLE WAS BROKEN APART FOR 2 MINUTES AND EXPOSED TO THE AIR..
55		■	18 36 32		240		SM	SAND. LIGHT GRAY-BROWN. FINE GRAINED. 20% SILT, 10% CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC.
60		■	20 50	ND	60		SM	SAND. AS ABOVE.
65		■	22 50	ND	56		SM	SAND AS ABOVE.
70		■	17 32 50	ND	24		SM	SAND. LIGHT BROWN . VERY FINE GRAINED. 30% SILT. 10% CLAY. FRIABLE. SLIGHTLY MOIST. PLASTIC.
75		■	18 21 27	ND	8		SP	SAND. BROWN. MEDIUM GRAINED. CLEAN, SILT OR CLAY. LOOSE. WET.
80		■	18 24 36	ND	6		SM	SAND. LIGHT GRAY-BROWN. FINE GRAINED. 20% SILT. 5% CLAY. FRIABLE. SLIGHTLY PLASTIC. WET. 85' TOTAL DEPTH DRILLED

WELL CONSTRUCTION



WELL CONSTRUCTION DETAILS:
(SEE PREVIOUS PAGE OF LOG)

85' TOTAL WELL DEPTH

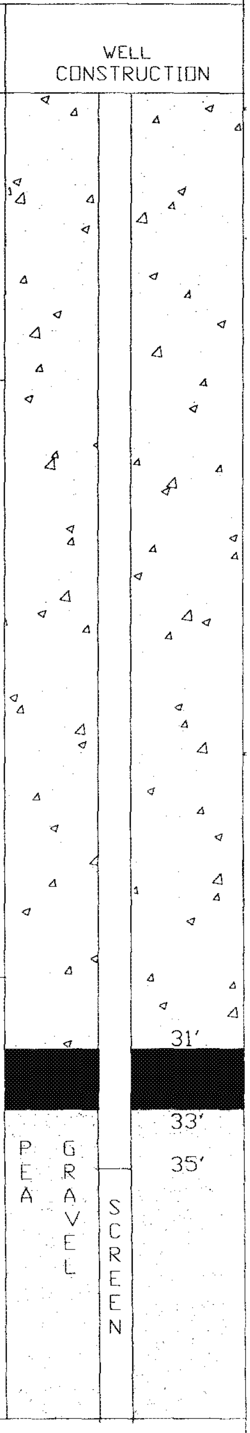
VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-37BLOG

DRILLING COMPANY: WEST HAZMAT
RIG NO: CME 55
DATE: 8/19/93
BORING DIAMETER: 6 INCHES
GEOLOGIST: JR

WELL V-1 (B-38)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS
0								
5							SM	BACKFILLED SANDY SOIL 0-10'
10							GP	BACKFILLED GRAVEL AT 10'-29'
15							GP	
20							GP	
25							GP	
30		■	10 18 20	ND	160		SM	SAND, BROWN, FINE GRAINED. 10 % SILT, TRACE CLAY, FRIABLE, SLIGHTLY MOIST, NONPLASTIC.
35		■	9 12 18		460		SM	SAND AS ABOVE, SOFT.
40		■	8 12 18	ND	25		SM	SAND AS ABOVE, SOFT.



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WELL CONSTRUCTION DETAILS:
(SEE NEXT PAGE OF LOG)

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2
SITE: UNOCAL SS #5050, INGLEWOOD, CA
FILE: B-38LOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 55 DATE: 8/19/93

BORING DIAMETER: 6 INCHES GEOLOGIST: JR

WELL V-1 (B-38)

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
40									PEA GRAVEL SCREEN
45		■	10 16 18	ND	26		SP	SAND. LIGHT BROWN. VERY FINE GRAINED. CLEAN, NO SILT OR CLAY. SOFT. SLIGHTLY MOIST.	
50		■	15 18 20	ND	220/0		SP	SAND. AS ABOVE. NOTE: OVA IS 0 AFTER SAMPLE IS OUT OF JAR AND IN AIR FOR 2 MINUTES THEN BACK IN JAR FOR HEAD-SPACE READING. 50' TOTAL DEPTH DRILLED	50'
55									
60									
65									
70									
75									
80									

WELL CONSTRUCTION DETAILS:

CASING: Schedule 40 PVC, 2-inch diameter. SLOTS: 0.020 inches. FILTER PACK: Pea Gravel.
SEAL: Bentonite chips, 33 to 31 feet; Concrete 31 to 0 feet.
Flush-threaded bottom cap. Top of casing hard-piped to VES unit manifold via 2-inch PVC in trench.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-38BLOG

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/20/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

BORING B-39

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
0								UNPAVED, DIRT AND GRAVEL GROUND SURFACE.	
5		■	6 11 14		10		SM	BACKFILLED SOIL 0-10'	
10	NS	■	8 9 13						
15		■	4 7 10		11		SM	SAND AS ABOVE.	
20		■	2 3 2				GP	GRAVEL FROM 18' TO 28'	
25		■					GP		
30		■	8 10 19	ND	74		SM	SAND GRAY. VERY FINE GRAINED. 20% SILT. 2% CLAY. FRIABLE. SLIGHTLY MOIST. SLIGHTLY PLASTIC. SOME SILT LAMINAE 1-2 CM THICK.	
35		■	15 18 28		20		SM	SAND AS ABOVE.	
40		■	18 20 30	ND	46		SM	SAND AS ABOVE.	

WELL CONSTRUCTION DETAILS:
Boring backfilled with original clean cuttings from total depth to 8 feet below ground surface (bgs). Sealed with bentonite chips from 8 to 6 feet bgs, and concrete from 6 feet bgs to ground surface.

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-39LOG

Vapor Extraction Technology, Inc.

DRILLING COMPANY: WEST HAZMAT RIG NO: CME 75 DATE: 8/20/93

BORING DIAMETER: 8 INCHES GEOLOGIST: JR

BORING B-39

DEPTH (FEET)	BAG SAMPLE	SAMPLE	BLOWS PER 1/2 FT	CHEM ANALYSIS LAB. TPH GC/FID gas (ppm)	CHEM ANALYSIS FIELD OVA (ppm)	WATER LEVEL (NON-STATIC)	SOIL CLASS (U.S.C.S)	SOIL DESCRIPTIONS	WELL CONSTRUCTION
40									
45		■	20 24 36	ND	30		SM	SAND. BROWN. VERY FINE GRAINED. 20% SILT. 2% CLAY. FRIABLE-SOFT. SLIGHTLY MOIST. SLIGHTLY PLASTIC. 45' TOTAL DEPTH DRILLED	
50									
55									
60									
65									
70									
75									
80									

WELL CONSTRUCTION DETAILS:
(SEE PREVIOUS PAGE OF LOG)

VAPOR EXTRACTION TECHNOLOGY, INC.

VET PROJECT NO. 1.029.45.2 SITE: UNOCAL SS #5050, INGLEWOOD, CA FILE: B-39BLOG

Former Holly Park Car Wash

Sources:

Altec, 2006. *Monitoring Well Installation & Sampling Report, Site Location: Former Holly Park Car Wash, 3350 West Century Boulevard, Inglewood, California, ID# I-10850A*, Altec Testing & Engineering, Inc., 30 November 2006.

Altec, 2007. *Groundwater Monitoring Report, February 14, 2007 Sampling Event, The Village at Century (Former Holly Park Car Wash), 3350 West Century Boulevard, Inglewood, California, ID# I-10850A,* Altec Testing & Engineering, Inc., 1 March 2007.

Monitoring Well Installation
& Sampling Report

Site Location:
Former Holly Park Car Wash
3350 West Century Boulevard
Inglewood, California

Altec Project No. 464-4116
November 30, 2006

Prepared For:
HCL INGLEWOOD VILLAGE, LLC
23456 Hawthorne Boulevard, #120
Torrance, California
(310) 375-0900 (Telephone)
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Submitted By:

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Riverside, California 92504
(951) 352-6510 (Telephone)
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Prepared by:	Prepared by:
M Wolff	
Michael Wolff, RG #3347 Principal Geologist	Lynn Laborde, REA Senior Project Manager

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LOS ANGELES REGION

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WORK PLAN ✓
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DATE REV'D 2/23/07
STAFF INITIAL MSH

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COMMON ACRONYMS

msl	above mean sea level
bgs	below ground surface
°C	degrees Celsius
CAP	Corrective Action Plan
CLP	Contract Laboratory Program
COC	chain of custody
cpm	count(s) per minute
CRWQCB	California Regional Water Quality Control Board
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
ft	foot (feet)
fbg	feet below grade
gal	gallon(s)
GC-MS	gas chromatograph(y)-mass spectrometer(-metry)
gpm	gallon(s) per minute
in.	inch(es)
µg/kg	microgram(s) per kilogram
µg/L	microgram(s) per liter
µS/cm	microsiemen(s) per centimeter
LACDPW	Los Angeles County Department of Public Works
MCL	maximum contaminant level
mg/kg	milligram(s) per kilogram
mg/L	milligram(s) per liter
mi	mile(s)
mV	millivolt(s)
MW	monitoring well
ORP	oxidation-reduction potential
QA/QC	quality assurance/quality control
RPD	relative percent difference
SDG	sample delivery group
TOC	top of casing
TPH	total petroleum hydrocarbons
TPHg	total petroleum hydrocarbons quantified as gasoline
TPHd	total petroleum hydrocarbons quantified as diesel
UST	underground storage tanks
VOC	volatile organic compound

1.0 INTRODUCTION

Altec Testing & Engineering, Inc. (Altec) has prepared this Monitoring Well Installation and Sampling Report for the former Holly Park Car Wash located at 3350 West Century Boulevard, in Inglewood, California (subject site). The subject site is a former car wash/gasoline station that has been recently redeveloped into a commercial shopping center known as The Village at Century.

Site assessment work performed by Altec resulted in the discovery of hydrocarbon impacts to vadose zone soil beneath the former USTs associated with the prior car wash (Altec 2005a). Accordingly, a Corrective Action Plan (CAP) was prepared to address remediation of hydrocarbon impacts in soil below the former UST area (Altec 2005b). The Regional Water Quality Control Board – Los Angeles Region (RWQCB) requested that assessment of subject site groundwater be conducted. This report presents the results of the installation and sampling of four groundwater monitoring wells (MW-1 through MW-4).

2.0 SITE BACKGROUND

The subject site is located at 3350 West Century Boulevard in Inglewood, California (Figure 1) and is bordered to the north by West Century Boulevard and to the west by Club Drive.

The subject site is currently developed as a commercial shopping center known as The Village at Century. The area of the former car wash USTs comprises a small portion of the commercial development near the 3382-3396 West Century Boulevard building. The surrounding community is a blend of commercial shopping centers and residential use.

The subject site was developed agriculturally with row crops between 1927 and 1946 and was vacant between 1947 and 1962. The subject site was used as a car wash and dispensed gasoline from 1964 to 1991. In 1991, three gasoline USTs at the subject site were removed. Impacted soil found beneath the USTs was reportedly excavated to a depth of roughly 25 feet, and impacted soil beneath the dispenser piping was reportedly excavated to a depth of roughly 15 feet.

Approximately 500 tons of soil exceeding clean-up criteria was transported for disposal. Confirmation soil samples collected from the bottoms of the excavations reportedly indicated that the underlying soil was clean (Tetra Tech 1991). The excavations were then backfilled with clean imported backfill soil or gravel. The Los Angeles County Department of Public Works (LACDPW) reviewed the closure report and issued a no further action letter on November 12, 1991.

Assessment work performed by Altec for HCL Inglewood Village LLC prior to their purchase of the subject site resulted in the discovery of hydrocarbon impacts to soil at deeper depths below the former USTs (Altec 2004b, 2005a). Altec prepared a CAP to address remediation of hydrocarbon impacts below a depth of 25 feet in the soil below the former UST area (Altec 2005b). No impacted soil was found below the dispenser area.

The RWQCB requested assessment of groundwater conditions beneath the subject site utilizing at least three monitoring wells by letter dated July 25, 2005. Altec submitted a work plan for groundwater assessment dated August 3, 2005 (Altec 2005c). Altec requested that, owing to the depth to groundwater (>100 feet bgs) and the high cost of installing monitoring wells, an initial monitoring well be installed and sampled in the source zone prior to proceeding with installation of additional wells. The RWQCB concurred with this phased approach.

The initial monitoring well, MW-1, was installed and sampled in March 2006. The analytical results showed that benzene was present in the groundwater at a concentration of 223 µg/L, which exceeds the Maximum Contaminant Level (MCL) for benzene of 1 µg/L. Accordingly, Altec proposed to install and sample three additional monitoring wells (MW-2, 3, and 4) located upgradient and downgradient of MW-1 to further delineate the lateral extent of groundwater hydrocarbons. By this time, the construction of the shopping center was nearing completion and the well installation had to be deferred to avoid damage to the wells by construction activities such as installation of buried sewer lines, a large underground restaurant grease trap, and finish grading and paving in the area of the planned well installations.

In the meantime, a soil vapor extraction (SVE) system was designed and installed at the subject site to remediate hydrocarbon impacts in soil beneath the former USTs in accordance with the CAP. The initial SVE wells had been installed in January 2006 and a pilot test had been performed. Altec reported the SVE pilot test results in 2006. The remaining SVE wells were installed following the pilot test. The SVE permit to operate was obtained from the South Coast Air Quality Management District (SCAQMD), and the system equipment was delivered and installed in May 2006. The SVE system started up and commenced routine operation on July 1, 2006.

In May 2006, following completion of the shopping center improvements in the area of the proposed monitoring wells, the three additional groundwater monitoring wells were installed and developed. The locations of the monitoring wells are shown in Figure 2.

3.0 GEOLOGIC SETTING

3.1 Regional Hydrogeologic Setting

The subject site is located within the area shown on the United States Geological Survey (USGS) Inglewood, California 7 ½ Minute Topographic Quadrangle Map. The subject site is located at a surface elevation of approximately 125 to 140 feet above mean sea level and is within Range 14 West and Township 3 South. The map was compiled in 1964 and photo-revised in 1981. The subject site is located at the same general ground elevation as the surrounding properties with a local trending slope to the southwest. The subject site is designated within a FEMA Flood Zone C, which includes areas that are determined not to be subject to flooding in a 100- or 500-year rainstorm. The surrounding area is similarly zoned.

There are two groundwater basins underlying the heavily urbanized Los Angeles Coastal Plain. They are the West Coast Basin and the Central Basin (DWR, 1961). Together, they extend from the Pacific Ocean on the southwest to the Repetto, Merced and Puente Hills on the northeast. They extend from the Santa Monica and Hollywood basins on the north, to the Pacific Ocean and Orange County on the south. The two basins are divided along a northwest-southeast trend by the Newport-Inglewood uplift and associated fault zone. The West Coast Basin underlies 160 square miles and the Central Basin, 277 square miles. The Pacific Ocean is the southwestern boundary of the West Coast Basin, and the Orange County line is arbitrarily considered the southern boundary of the Central Basin.

The subject site is located within the Newport-Inglewood fault zone at the western edge of the Central Basin (DWR, 1961). This area is referred to as the Central Basin Pressure area because many of the productive aquifers are under hydraulically confined conditions beneath this area. The upper three productive aquifers beneath the subject site are the Exposition, Gage and Lynwood aquifers. In the site area, the Exposition and Gage aquifers merge vertically and are hydrologically indistinguishable from each other. The top of the merged aquifer zones is shown in DWR, 1961 as existing at a depth of approximately 100 feet below ground surface. The Lynwood aquifer also merges with the lower portion of the Gage aquifer in the subject site area at a depth of approximately 250 feet.

Deeper aquifers beneath the subject site include the Silverado aquifer at depths of from 350 to 450 feet below ground surface, and the Sunnyside aquifer at depths of from 450 to 650 feet below ground surface.

3.2 Subsurface Lithologic Conditions

Soils at the subject site consist of fine- to medium-grained fluvial deposits. The well borings encountered brown and gray silt and clayey silt deposits from the surface to a depth of approximately 55 feet below ground surface (bgs). Gray and brown silty sand deposits were encountered between 55 feet and approximately 95 feet bgs. Poorly graded sand was generally present between approximately 95 and 105 feet, underlain by clayey silt to the total depth drilled of 125 feet bgs. Geologic cross sections through the well borings are shown in Figures 3 and 4. Boring logs are included as Appendix D.

4.0 SOIL HYDROCARBON IMPACTS

The exploratory soil boring and sampling program reported in the SAR (Altec 2005a) found that TPHg concentrations exceeded the RWQCB Soil Screening Levels (SSLs) at various depths from approximately 30 to 65 feet bgs. TPHd (actually weathered gasoline) concentrations exceeded the SSLs at scattered depths from 25 to 90 feet bgs. BTEX concentrations exceed SSLs at various depths from 30 to 115 feet bgs.

There were no detections of fuel oxygenates in the VOC analyses. Nor were there any detections of other non-petroleum hydrocarbon VOCs.

There were no detections of organic lead (by DHS-LUFT Method) in any of the collected soil samples. The detection limit was 1.0 mg/Kg.

The majority of the hydrocarbon mass was found to be in the silty soils at depths generally between 25 and 55 feet bgs. Hydrocarbon-impacted soil above 25 feet had been previously removed during the 1991 remedial excavation work. In the sandy zone below 55 feet bgs, hydrocarbon concentrations were found to attenuate to low levels with increasing depth, with the exception of an apparent small pocket of TPHd (weathered gasoline) around 90 feet bgs.

Benzene in soil was detected at low concentrations down to a depth of 115 feet in assessment boring B-13 (Altec 2005a). At this depth, the benzene concentration (0.053 mg/kg) exceeded the RWQCB SSL of 0.004 mg/kg. Benzene was not detected below this depth.

The vadose zone assessment produced the following conclusions (Altec 2005a):

- The vertical and lateral extent of residual hydrocarbon impacts to vadose zone soil had been adequately delineated both laterally and vertically.
- The majority of residual TPHg and TPHd (actually weathered gasoline) mass was within the silty soils between 25 and 55 feet bgs.
- Detectable TPHg and TPHd concentrations exceeding RWQCB SSLs extended to a depth of 90 feet bgs.
- Detectable benzene concentrations exceeding RWQCB SSLs extended to a depth of 115 feet bgs.
- Subsurface soil lithology was amenable to SVE.

5.0 ON-GOING SOIL REMEDIATION

The SVE remediation plan for vadose zone hydrocarbons was described in the CAP (Altec 2005b). The design involved two parallel SVE systems operating simultaneously with one system extracting and destroying hydrocarbon vapors from the silty zone from 25 to 55 feet bgs, and the second system extracting and destroying hydrocarbon vapors from the sandier zone extending from 60 feet down to groundwater. The SVE pilot test was documented in the pilot test report (Altec 2006a).

As discussed above, the two SVE systems commenced operation on June 22, 2006. Following approximately one week of system tuning, routine operations commenced approximately July 1, 2006. The first full quarter of SVE operation beginning June 22 and ending October 2, 2006 was reported in the quarterly progress report dated October 16, 2006 (Altec 2006b).

In general, both systems operated with good to excellent efficiency during the quarter. The following table summarizes highlights of contaminant removal progress:

Activity	**25 to 55 ft. bgs**	**60 ft. bgs to top of groundwater**
Startup date	6/22/06	6/22/06
Run hours since start	2452	2078
Percent Uptime	100	84
TPHg mass removed - current quarter (lbs.)	10,745	4,372
TPHg mass removed since start (lbs.)	10,745	4,372

Activity	**25 to 55 ft. bgs**	**60 ft. bgs to top of groundwater**
Benzene mass removed - current quarter (lbs.)	55	46
Benzene mass removed since start (lbs.)	55	46

The Quarterly Soil Vapor Extraction Progress Report (Altec 2006b) presented the following conclusions:

- The A Zone system (25-55 feet bgs) has removed a large quantity of TPHg and was continuing to remove contamination at a substantial rate at the end of the quarter.
- The B&C Zones system (60 feet bgs to top of groundwater) initially removed a substantial quantity of TPHg, then the rate of removal significantly flattened towards late July. This was expected since the relative quantity of hydrocarbons is much lower in the deeper B&C Zones than in the A Zone, and the soil is more permeable in the B&C Zones.
- Together, the two systems have removed and destroyed roughly 15,000 lbs of hydrocarbons quantified as TPHg, and roughly 100 lbs of benzene since startup.

SVE operations are continuing.

6.0 MONITORING WELL INSTALLATION AND DEVELOPMENT

6.1 Work Plan

A work plan for monitoring well installation was prepared and submitted to the CRWQCB in August 2005 (Altec 2005c). Altec proposed a phased installation approach that was accepted by the RWQCB in January 2006. Copies of the RWQCB correspondence are included in Appendix A. The phased approach involved the installation of one initial monitoring well and then subsequent wells if the initial well showed detectable TPH or VOCs.

As previously discussed, the initial well (MW1) showed the presence of VOCs; therefore, three additional wells were subsequently installed. The installation of the additional wells was delayed somewhat due to construction interferences from the subject site re-development. There are a total of four monitoring wells currently installed at the subject site. A copy of the well permit documentation is included as Appendix B.

6.2 Monitoring Well Installation and Development

Field work for the drilling and installation of the monitoring wells occurred on February 21 through February 24, and May 15 through May 18, 2006. Procedures used for installation and well development are included as Appendix C.

Altec collected soil samples for laboratory analysis in accordance with EPA Method 8260B and 8015B modified during the installation of MW1. The boring for this well was identified as B21 and was later renamed MW1 after the boring was converted to a monitoring well. Since the location of MW1 is in an area of the subject site that has been extensively assessed, samples were collected from 10-foot intervals beginning at 30 feet and then at 5-foot intervals beginning at 100 feet. The boring was terminated at 125 ft and a monitoring well was installed.

Analysis showed no detectable TPH-cc and no VOCs (with the exception of benzene) in any of the soil samples. Benzene was detected at 110 and 115 feet (16.5 and 22.5 µg/kg, respectively). No benzene was detected at 120 or 125 feet. The certified analytical reports for these samples are included in Appendix G.

The spacing and depths of the remaining three monitoring wells were constrained by the presence of surface and subsurface obstructions associated with the commercial shopping center re-development. One well, MW-2, was located in an upgradient direction and is sufficiently removed from the source area to function as a background well. Wells MW-3 and MW-4 are both located downgradient from the source area in slightly different directions (Figure 5). All three additional wells are removed from any historical sources of hydrocarbon releases; therefore, soil sampling for lithologic logging of these borings was performed but no samples were submitted for laboratory analyses. Boring logs are included as Appendix D.

Well construction details are shown on the boring logs in Appendix D, and summarized in Table 1. The surface completions for the wells are flush mount traffic-rated vault boxes.

Wells were developed during installation by surging to settle the annular sand pack prior to installing the bentonite seals. Following completion, each well was further developed by surging and bailing until the water was relatively free of sediment. Each well was then developed using an electric submersible pump until the pump discharge was clear. Development water was placed in drums for temporary storage prior to disposal.

6.3 Investigation-Derived Waste

Investigation derived waste (IDW) consisted primarily of soil cuttings generated during well construction; water generated from decontamination of drilling and sampling equipment; and groundwater generated from well development and sampling activities. In general, soil cuttings were collected in drums and soil profiles (showing the highest contaminant levels) from the previous site investigation were used to profile the cuttings for disposal. The soil cuttings were disposed offsite as nonhazardous waste. Groundwater accumulated during well development and sampling was profiled based on the corresponding sample analysis and was collected in 55-gallon drums for temporary onsite storage. The water was removed by vacuum truck and recycled offsite. Available waste profiles and manifests are included in Appendix E.

7.0 MONITORING WELL SAMPLING

7.1 Survey Data

To provide horizontal and vertical control for water level monitoring, the four monitoring wells (MW1–MW4) were surveyed by Dulin & Boynton of Signal Hill, California. Elevations of both the paved asphalt surface, the rim of the steel cover and the top of the well casing were surveyed. The survey data for the monitoring wells are as follows:

Well	Description	Elevation	North	East
MW1	2" PVC North Notch	137.63	1802523.4	6461444.4
	Cover Rim	138.00		
	Asphalt	137.99		
MW2	4" PVC North Notch	139.10	1802603.6	6461556.9
	Cover Rim	139.76		
	Asphalt	139.80		
MW3	4" PVC North Notch	136.19	1802466.8	6461403.2
	Cover Rim	136.58		
	Asphalt	136.58		
MW4	4" PVC North Notch	137.69	1802524.8	6461393.6
	Cover Rim	138.13		
	Asphalt	138.14		

7.2 Groundwater Sampling

Prior to purging, the depth to groundwater was measured in all wells. The wells were then purged of at least three casing volumes of groundwater using an electric submersible pump prior to sampling. During purging, measurements of pH, temperature and electrical conductivity were made. When successive measurements of these parameters had stabilized to within plus or minus 10 percent, and at least three casing volumes had been removed, groundwater samples were collected from each well using disposable bailers. Well purging data are included in Appendix F.

Samples were collected in 40-mL vials with Teflon™ septa for volatile organic analysis (VOA). Sufficient VOA vials were collected for each well for TPHg and VOC analyses. Samples were placed in an iced cooler at 4 degrees Centigrade for storage and transportation to the laboratory. Chain-of-Custody documentation was maintained for all samples.

8.0 RESULTS AND DISCUSSION

8.1 Groundwater Gradient

The general direction of groundwater flow is to the southwest (Figure 5). As seen in the figure, the apparent groundwater gradient is fairly flat between upgradient well MW-2 and well MW-1 on the downgradient side of the source area (0.013 ft/ft). The gradient then markedly steepens to approximately 0.163 ft/ft downgradient to the south and west between MW-1, and MW-3 and MW-4 to the south and west, respectively (Figure 5). The reason for this change in gradient is not clear from the present data. It could be the result of underlying lithologic changes, or the effect of upwelling from operation of the SVE system in the vicinity of MW-1, or both. The subject site lies within the active Newport-Inglewood fault zone, so local disruption of lithologic zones due to faulting could create hydraulic conductivity and groundwater gradient changes over short distances. In any event, it is clear that the direction of groundwater flow is from northeast to southwest.

8.2 Groundwater Analytical Results

Groundwater samples from all wells were analyzed for TPHg and VOCs, including fuel oxygenates, by Associated Laboratories of Orange, California, a state-certified analytical laboratory. Analytical results are summarized in Table 2. Certified Analytical Reports and chain-of-custody documentation are included in Appendix G. Results for TPHg, benzene and MTBE are also shown in Figure 5.

Benzene, 1,3,5-trimethylbenzene, toluene, xylenes and DIPE were initially detected in the groundwater samples collected from MW-1 on March 6, 2006. Benzene was detected at 223 μg/L, which is substantially above the Maximum Contaminant Level (MCL) of 1 μg/L.

Altec collected an additional water sample from MW-1 on March 24, 2006 to confirm the March 6, 2006 results. In the March 24, 2006 sample, 1,2,4- trimethylbenzene, 1,3,5-trimethylbenzene, benzene, isopropylbenzene, n-butylbenzene, n-propylbenzene, toluene, p-isopropyltoluene, ethylbenzene, xylenes, and DIPE were detected. Benzene was detected at 1,210 μg/L, which is substantially above the MCL and above the concentration detected on March 6, 2006. Toluene was detected at a low concentration (178 μg/L,) that nevertheless exceeds the MCL of 150 μg/L.

Based on the March 6, 2006 and March 24, 2006 findings the installation of three additional wells was planned.

In the meantime, the SVE system had commenced operation and has been actively remediating vadose zone VOCs within the source area. The SVE system includes extraction wells screened in the deep vadose zone, and one extraction well screened across the groundwater table in the vicinity of MW-1.

The three additional groundwater monitoring wells were installed after installation and start-up of the SVE system.

In the October 19, 2006 sampling event, MW-1, MW-2 and MW-4 had no detectable TPHg or VOCs. Benzene was detected in MW-3 at 14 μg/L, above the MCL of 1 μg/L. It is apparent that operation of the SVE system has reduced VOC concentrations in MW-1 to below detectable levels. This is the only well so far to have been sampled more than once, so additional rounds of groundwater sampling will be needed to identify concentration trends in MW-2, MW-3, and MW-4.

9.0 CONCLUSIONS

Based on the findings of the groundwater assessment, Altec concludes the following:

- The groundwater flow direction is towards the southwest.

- TPHg were not detectable in groundwater samples from all four monitoring wells in the October 19, 2006 sampling event.
- BTEX were not detectable in MW-1, MW-2 and MW-4 in the October 19, 2006 sampling event.
- Benzene was present in one well (MW-3), at a low concentration (14 µg/L) that nevertheless exceeds the MCL.
- Fuel oxygenates were not detectable in any of the four wells in the October 19, 2006 sampling event.
- Operation of the SVE system has reduced VOCs in MW-1 to presently-nondetectable levels, and should therefore continue to favorably affect groundwater quality in the area of influence of the system while it continues to operate.
- Groundwater sampling and monitoring should continue at least until SVE operations cease, and then be re-evaluated.

10.0 REFERENCES

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Regional Water Quality Control Board – Los Angeles Region, May.

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TABLE 1
WELL COMPLETION DATA

3350 W. Century Blvd.
Inglewood, Calif.

Well No.	Completion Date	Reference Elevation (ft. msl)	Boring Diameter (in.)	Casing Diameter (in.)	Depths/Elevations							Screen slot size (in.)
					Total Depth (ft.)	Top of Sand		Top of Screen		Bottom of Screen		
						Depth (ft.)	Elev. (ft. msl)	Depth (ft.)	Elev. (ft. msl)	Depth (ft.)	Elev. (ft. msl)	
MW-1	02/22/06	137.63	8.00	2.00	120.51	88.00	49.63	90.00	47.63	120.00	17.63	0.02
MW-2	05/15/06	139.10	8.00	4.00	115.41	93.00	46.10	95.00	44.10	115.00	24.10	0.02
MW-3	05/17/06	136.19	8.00	4.00	118.39	96.00	40.19	98.00	38.19	118.00	18.19	0.02
MW-4	05/22/06	137.69	8.00	4.00	120.45	98.00	39.69	100.00	37.69	120.00	17.69	0.02

TABLE 2
Groundwater Analytical Results
3350 W. Century Blvd.
Inglewood, Calif.

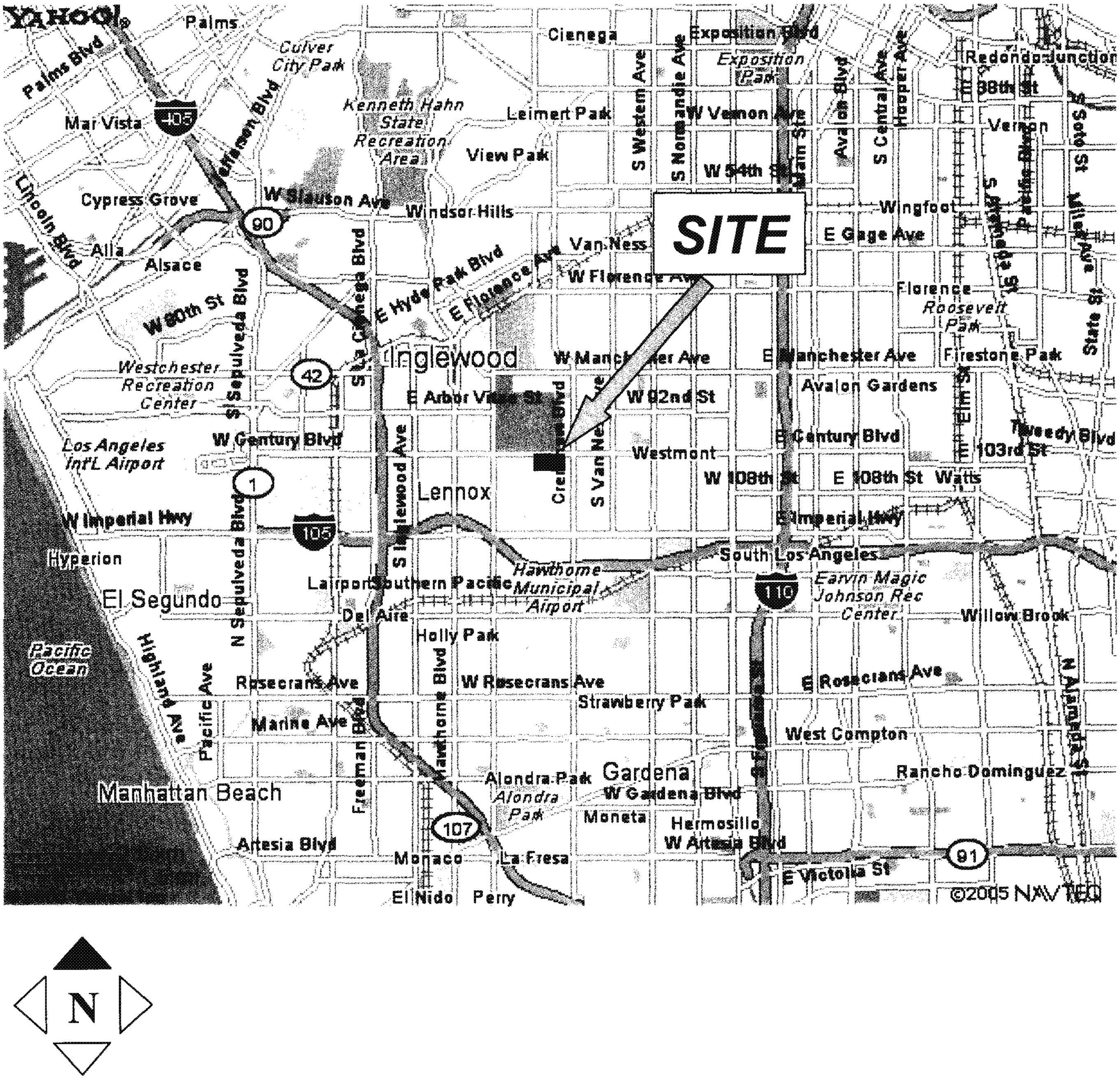
Well No./ Ref. Elev. (ft msl)	Date	Depth to Water (ft)	Groundwater Elevation (ft msl)	Analytical Results														Lab
				TPH (C6 C10)	TPH (C10-C22)	TPH (C22-C36)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	Other		
			Units:	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
			EPA Method:	8015B			8260B											
MW-1	3/6/2006	105.3	32.33	ND<0.4	ND<0.4	ND<0.6	**223**	16	ND<5	69	ND<1	2.4	ND<1	ND<1	ND<10	see CAR		Associated
137.63	3/24/2006	105.31	32.32	2.1	ND<0.2	ND<0.3	**1210**	**178**	59	952	ND<1	3.7	ND<1	ND<1	ND<10	see CAR		Associated
	10/19/2006	105.41	32.22	ND<0.2	ND<0.2	ND<0.3	ND<1	1.8J	ND<5	2.4J	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
MW-2	10/19/2006	105.29	33.81	ND<0.2	ND<0.2	ND<0.3	ND<1	1.8J	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
139.1																		
MW-3	10/19/2006	108.25	27.94	ND<0.2	ND<0.2	ND<0.3	**14**	ND<5	ND<5	1.2J	ND<1	2.7	ND<1	ND<1	ND<10			Associated
136.19																		
MW-4	10/19/2006	118.51	19.18	ND<0.2	ND<0.2	ND<0.3	ND<1	1.1J	ND<5	1.2J	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
137.69																		
Quality Control Samples:																		
LMB	3/4/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
LMB	3/28/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
LMB	10/23/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10			Associated
			Regulatory Levels (a):	-	-	-	1	150	300	1750	13	-	-	-	12 (b)			

Notes:

TPH = total petroleum hydrocarbons (carbon chain range)
MTBE = methyl-tert-butylether
DIPE = di-isopropyl ether
ETBE = ethyl-tertbutyl ether
TAME = tert-amylmethyl ether
TBA = tert-butyl alcohol
EB = equipment blank
LMB = laboratory method blank

CAR = Certified Analytical Report
J = detected but below practical quantitation limit of laboratory
(a) = California Maximum Contaminant Level (MCL) for drinking water unless otherwise noted
(b) = Calif DHS Action Level for drinking water

Shading indicates exceedance of regulatory level



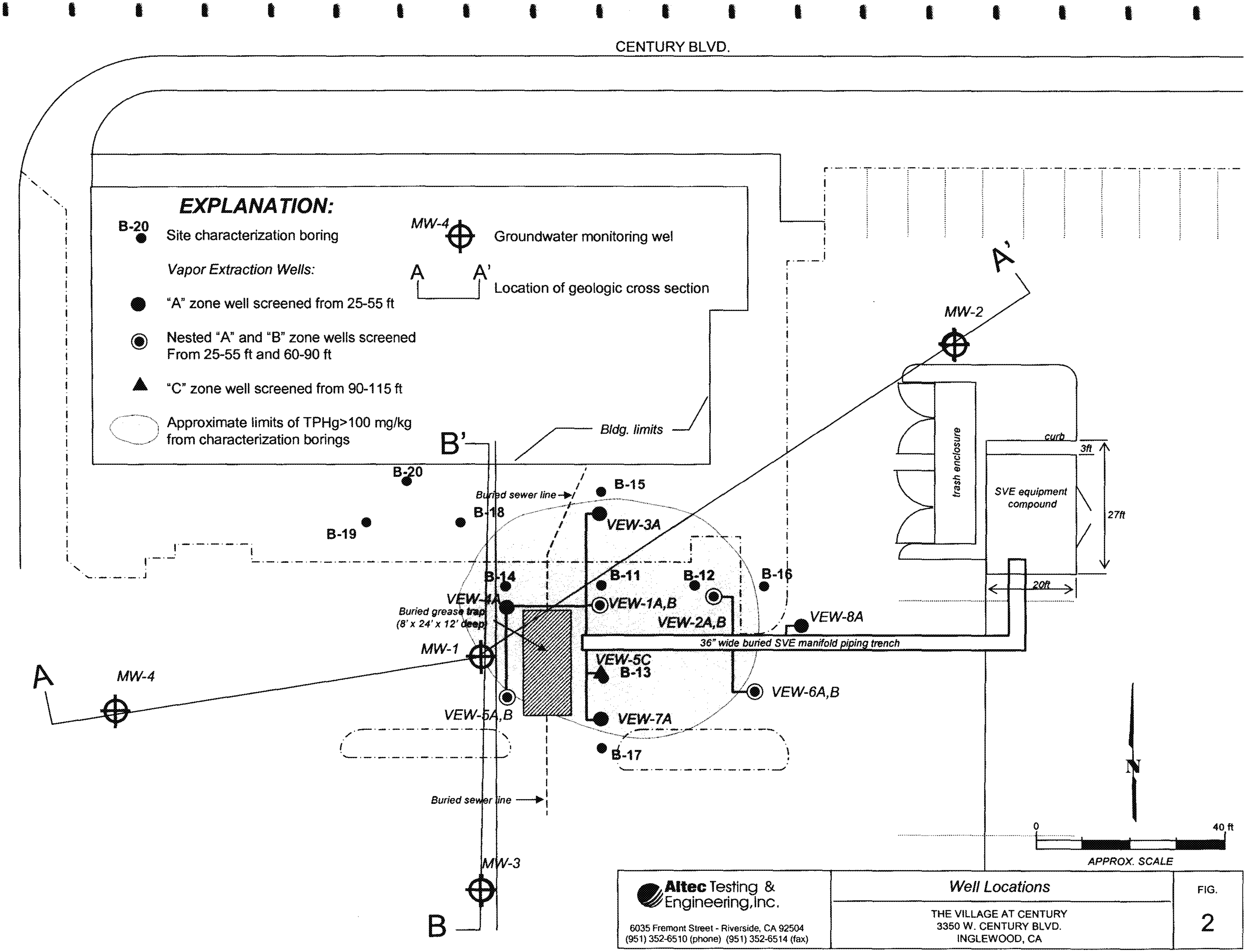
Altec Testing & Engineering, Inc.

6035 Fremont Street Riverside, CA 92504 (951) 352-6510 (tele)
(951) 352-6514 (fax)

Site Location Map

THE VILLAGE AT CENTURY
3350 W. Century Blvd.
Inglewood, CA

FIG.
1



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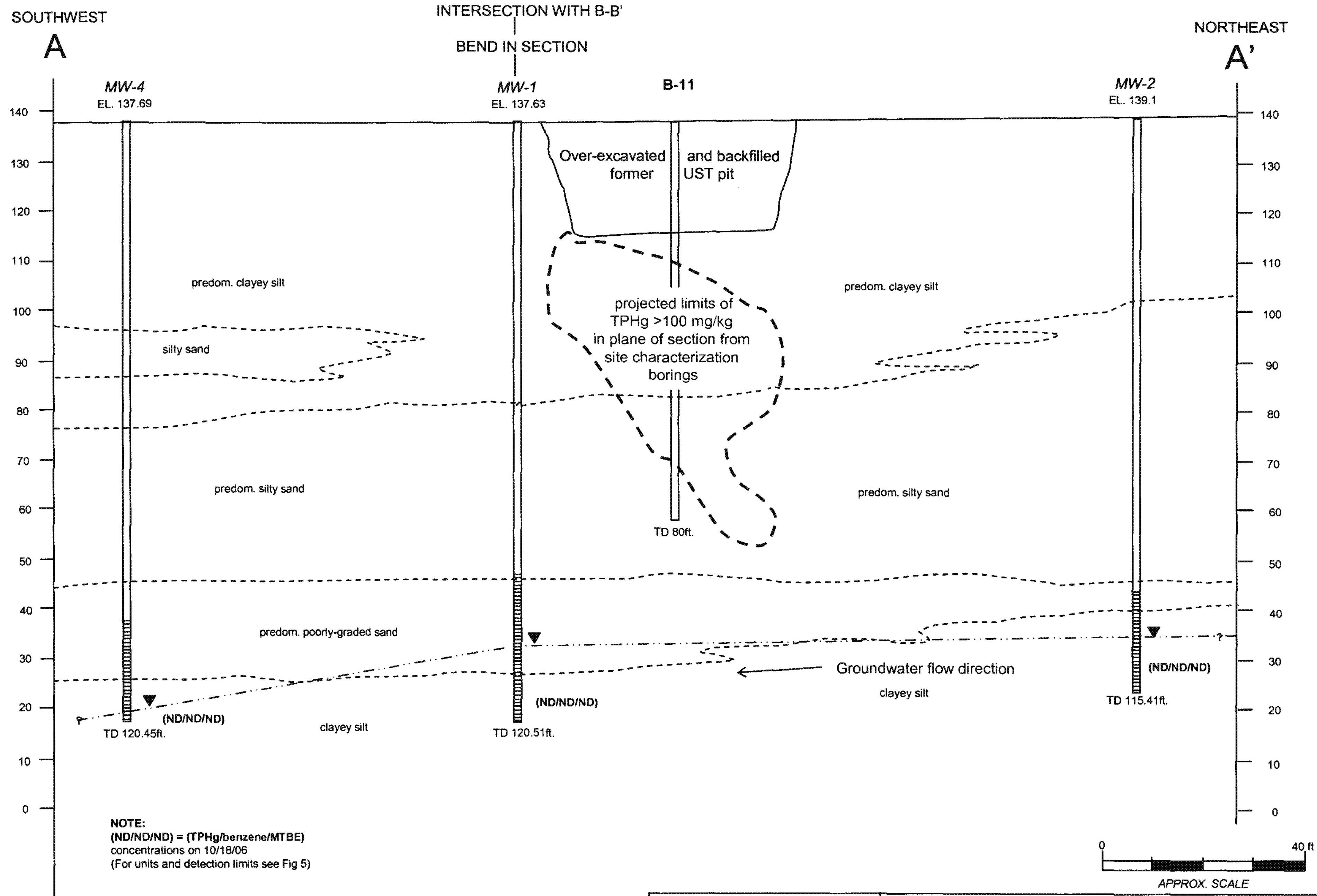
Well Locations

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
2



NOTE:
(ND/ND/ND) = (TPHg/benzene/MTBE)
concentrations on 10/18/06
(For units and detection limits see Fig 5)

FOR LOCATION OF SECTION SEE FIG. 2

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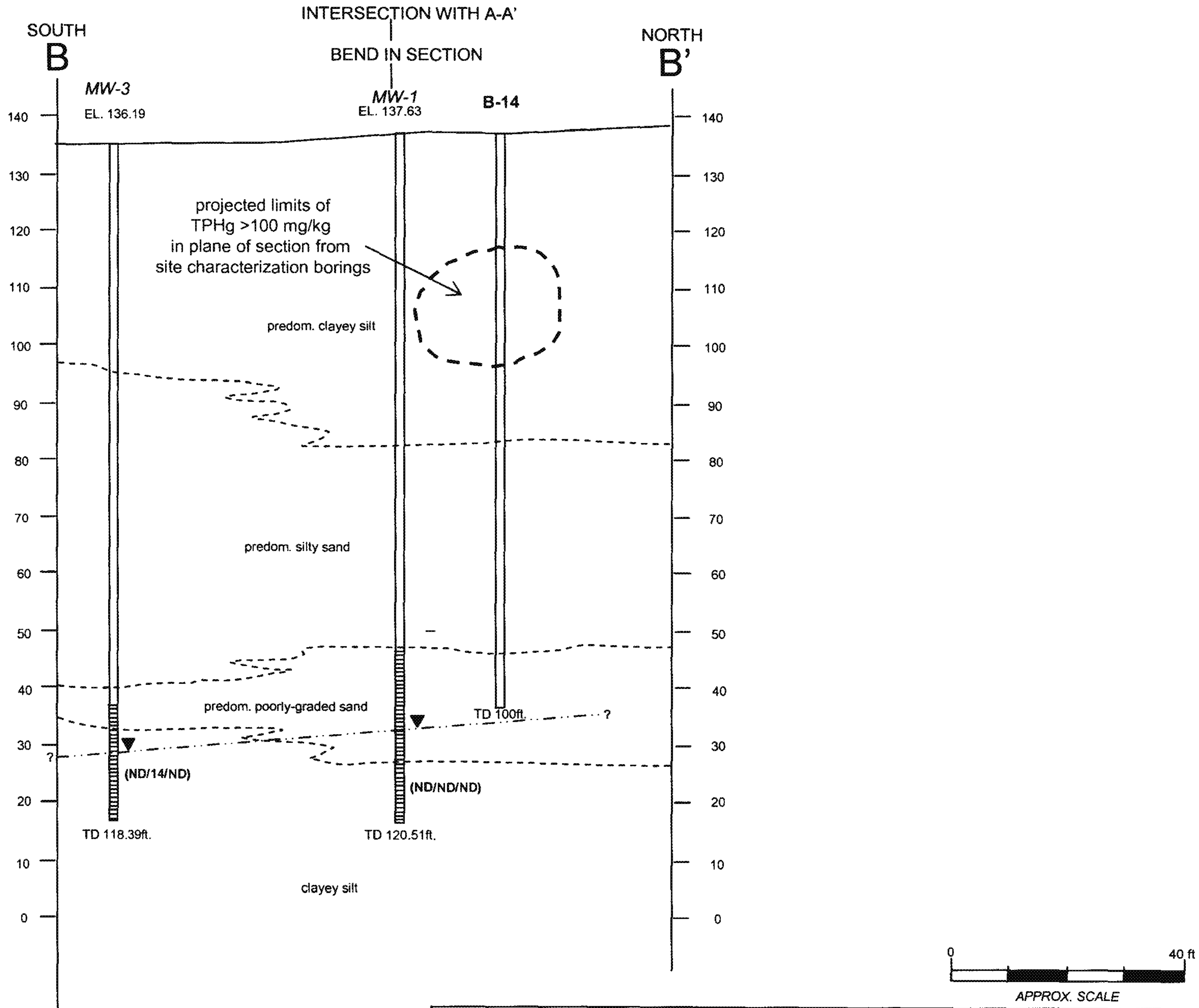
Geologic Cross Section A-A'

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
3



NOTE:
(ND/ND/ND) = (TPHg/benzene/MTBE)
concentrations on 10/18/06
(For units and detection limits see Fig 5)

FOR LOCATION OF SECTION SEE FIG. 2

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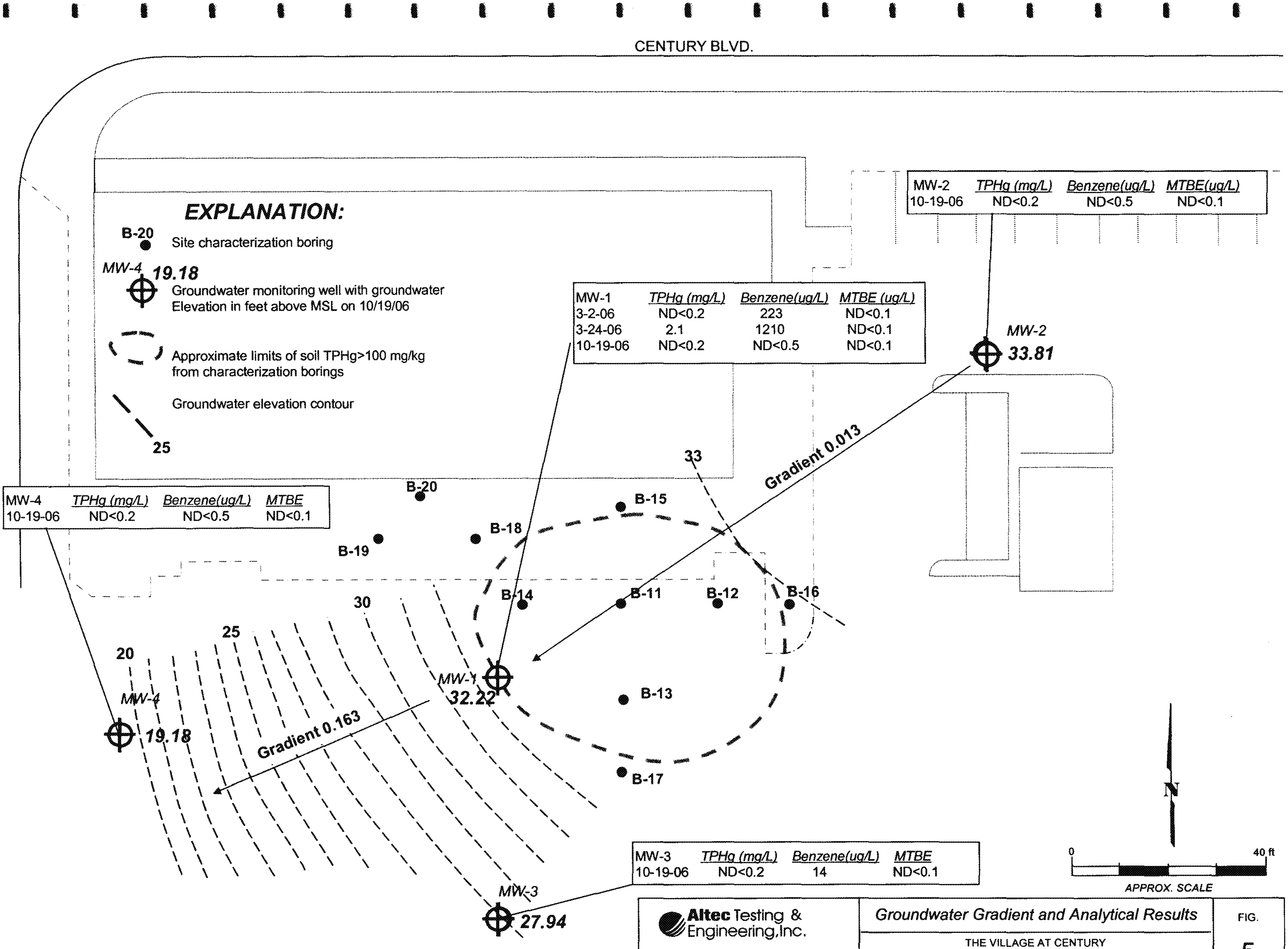
Geologic Cross Section B-B'

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
4



EXPLANATION:

B-20 ● Site characterization boring

MW-4 19.18 Groundwater monitoring well with groundwater Elevation in feet above MSL on 10/19/06

Approximate limits of soil TPHg>100 mg/kg from characterization borings

25 Groundwater elevation contour

MW-1	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE (ug/L)*
3-2-06	ND<0.2	223	ND<0.1
3-24-06	2.1	1210	ND<0.1
10-19-06	ND<0.2	ND<0.5	ND<0.1

MW-2	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE(ug/L)*
10-19-06	ND<0.2	ND<0.5	ND<0.1

MW-3	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE*
10-19-06	ND<0.2	14	ND<0.1

MW-4	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE*
10-19-06	ND<0.2	ND<0.5	ND<0.1

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Groundwater Gradient and Analytical Results

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
5

Appendix D
Boring/Well Logs

MW1

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.63 Feet
Date Drilled	2/22/06	Total Depth of Borehole	125 Feet
Borehole Diameter	8 Inches	Depth to Water	105.5 Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
		5				
		10				
		15				
		20				
		25				
	@ 30' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 5/3 brown, 90% Recovery	30	▨	n/a	33-51	
	@ 35' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 5/3 brown, 90% Recovery	35	▨	n/a	25-32-44	

C:\Program Files\Porpoise Media\Well Logger\Inglewood - 3350 W. Century Blvd..wl2

MW1

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.63 Feet
Date Drilled	2/22/06	Total Depth of Borehole	125 Feet
Borehole Diameter	8 Inches	Depth to Water	105.5 Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 40' - SM, Silty Sand, fine grain, dry, dense, 10Y 5/4 yellowish brown, 90% Recovery			n/a	40-65	
	@ 45' - SM, Silty Sand, fine grain, dry, dense, 10Y 5/4 yellowish brown, 90% Recovery	45		n/a	28-52-65	
	@ 50' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	50		n/a	23-31-42	
	@ 55' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	55		n/a	35-75	
	@ 60' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	60		n/a	34-62-50	
	@ 65' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	65		n/a	38-76	
	@ 70' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	70		n/a	79-105	
	@ 75' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	75		n/a	55-79	

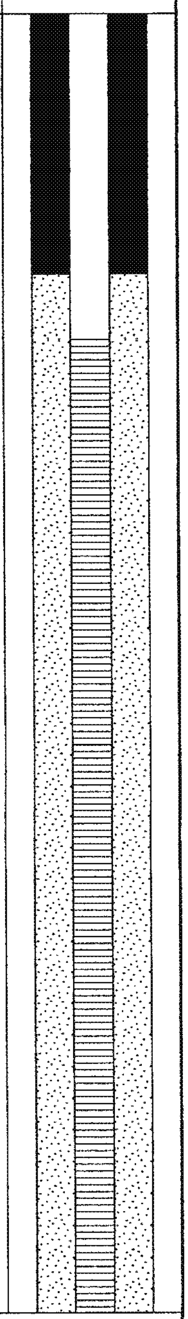
C:\Program Files\Porpoise Media\Well Logger\Inglewood - 3350 W. Century Blvd.wl2

MW1

Former Holly Park Car Wash	3350 West Century Boulevard	Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.63 Feet
Date Drilled	2/22/06	Total Depth of Borehole	125 Feet
Borehole Diameter	8 Inches	Depth to Water	105.5 Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 80' - SP, Poorly Graded Sand, fine to medium grain, dry, dense, 2.5Y 5/2 grayish brown, 90% Recovery			n/a	62-107	
	@ 85' - SM, Silty Sand, fine grain with some silt, dry, medium dense, 10Y 5/2 grayish brown, 80% Recovery	85		n/a	43-77	
	@ 90' - SM, Silty Sand, fine grain with some silt, dry, medium dense, 10Y 5/2 grayish brown, 80% Recovery	90		n/a	49-66	
	@ 95' - SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	95		n/a	38-79	
	@ 100' - SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	100		n/a	85	
	@ 105' - SP, Poorly Graded Sand, fine to medium grain with pebbles and stones, moist, dense, 10YR 4/2 dark grayish brown, 80% Recovery	105		n/a	68-77	
	@ 110 - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	110		n/a	48-69	
	@ 115' - ML, Clayey-Silt, very moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/1 dark gray, 90% Recovery	115		n/a	66-84	



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MW1

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.63 Feet
Date Drilled	2/22/06	Total Depth of Borehole	125 Feet
Borehole Diameter	8 Inches	Depth to Water	105.5 Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
▥	@ 120' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 2.5Y 3/1 very dark gray, 90% Recovery		▨	n/a	65-82	
	@ 125' - Boring terminated Boring converted to monitoring well MW1 MW1 installed with a 30 foot screen from 90'-120' MW1 has 2-inch casing	125				
		130				
		135				
		140				
		145				
		150				
		155				

MW2

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	139.10 Feet
Date Drilled	5/15/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
		5				
		10				
		15				
		20				
		25				
	@ 30' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 olive brown, 85% Recovery	30	▨	n/a	37-68	
	@ 35' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 dark grayish brown, 90% Recovery	35	▨	n/a	39-48	

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MW2

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	139.10 Feet
Date Drilled	5/15/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 40' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/3 light olive brown, 85% Recovery		▨	n/a	23-36-41	
	@ 45' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/2 grayish brown, 90% Recovery	45	▨	n/a	27-46	
	@ 50' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/3 light olive brown, 90% Recovery	50	▨	n/a	22-49-66	
	@ 55' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	55	▨	n/a	29-27-41	
	@ 60' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/2 light brownish gray, 90% Recovery	60	▨	n/a	30-45	
	@ 65' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	65	▨	n/a	29-43	
	@ 70' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	70	▨	n/a	64-96	
	@ 75' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	75	▨	n/a	45-77	

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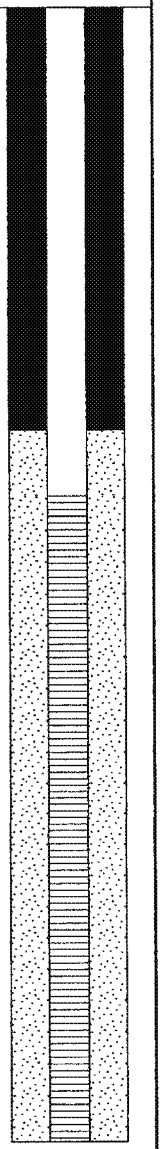
MW2

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	139.10 Feet
Date Drilled	5/15/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 80' - SC, Clayey Sand, fine to medium grain, dry, dense, 2.5Y 5/3 light olive brown, 90% Recovery			n/a	63-72	
	@ 85' - SM, Silty Sand, fine grain with some silt, dry, medium dense, 2.5Y 6/2 light brownish gray, 90% Recovery	85		n/a	38-21-45	
	@ 90' - SM, Silty Sand, fine grain with some medium grains, dry, medium dense, 2.5Y 5/2 grayish brown, 90% Recovery	90		n/a	44-72	
	@ 95' - SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	95		n/a	29-35-71	
	@ 100' - ML, Clayey-Silt, very moist, medium plasticity, medium stiff, medium dense, 2.5YR 6/3 light yellowish brown, 90% Recovery	100		n/a	45-44-57	
	@ 105' - ML, Clayey-Silt, very moist, medium plasticity, medium stiff, medium dense, 2.5YR 5/2 grayish brown, 90% Recovery	105		n/a	44-57	
	@ 110' - ML, Clayey-Silt, wet, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 brown, 90% Recovery	110		n/a	48-62	
	@ 115' - ML, Clayey-Silt, very moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 5/2 grayish brown, 90% Recovery	115		n/a	71-82	



MW2

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	139.10 Feet
Date Drilled	5/15/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 120' - Boring terminated					
	Boring converted to monitoring well MW2					
	MW2 installed with a 20 foot screen from 95-115 fbg					
	MW2 has 4-inch casing					
		125				
		130				
		135				
		140				
		145				
		150				
		155				

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MW3

Former Holly Park Car Wash	3350 West Century Boulevard	Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	136.19 Feet
Date Drilled	5/17/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
		5				
		10				
		15				
		20				
		25				
	@ 30' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 olive brown, 85% Recovery	30		n/a	25-32-44	
	@ 35' - ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 dark grayish brown, 90% Recovery	35		n/a	40-65	

MW3

Former Holly Park Car Wash   3350 West Century Boulevard   Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	136.19 Feet
Date Drilled	5/17/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 40' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/3 light olive brown, 85% Recovery			n/a	51-69	
	@ 45' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/2 grayish brown, 90% Recovery	45		n/a	35-38-45	
	@ 50' - SM, Silty Sand, fine grain, dry, dense, 2.5Y 5/3 light olive brown, 90% Recovery	50		n/a	21-29-38	
	@ 55' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	55		n/a	31-29-41	
	@ 60' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/2 light brownish gray, 90% Recovery	60		n/a	47-65	
	@ 65' - SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	65		n/a	33-42	
	@ 70' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	70		n/a	66-63	
	@ 75' - SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	75		n/a	40-46	

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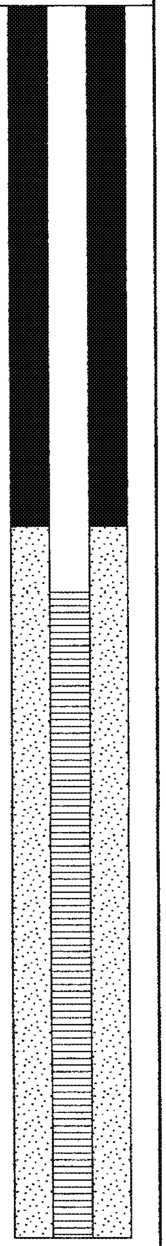
MW3

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	136.19 Feet
Date Drilled	5/17/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts
	@ 80' - SC, Clayey Sand, fine to medium grain, dry, dense, 2.5Y 5/3 light olive brown, 90% Recovery		☒	n/a	55-62
	@ 85' - SM, Silty Sand, fine grain with some silt, dry, medium dense, 2.5Y 6/2 light brownish gray, 90% Recovery	85	☒	n/a	38-39
	@ 90' - SM, Silty Sand, fine grain with some medium grains, dry, medium dense, 2.5Y 5/2 grayish brown, 90% Recovery	90	☒	n/a	49-65
	@ 95' - SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	95	☒	n/a	31-29-66
	@ 100' - ML, Clayey-Silt, very moist, medium plasticity, medium stiff, medium dense, 2.5YR 6/3 light yellowish brown, 90% Recovery	100	☒	n/a	42-44-53
	@ 105' - ML, Clayey-Silt, very moist, medium plasticity, medium stiff, medium dense, 2.5YR 5/2 grayish brown, 90% Recovery	105	☒	n/a	69
	@ 110' - ML, Clayey-Silt, wet, low-medium plasticity, medium stiff, medium dense, 2.5YR 4/3 brown, 90% Recovery	110	☒	n/a	69
	@ 115' - ML, Clayey-Silt, very moist, low-medium plasticity, medium stiff, medium dense, 2.5YR 5/2 grayish brown, 90% Recovery	115	☒	n/a	68-75

Completion



MW3

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	136.19 Feet
Date Drilled	5/17/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 120' - Boring terminated					
	Lithology and blow count data obtained from 5 and 10 foot intervals as well as from previous Boring No. B17					
	Boring converted to monitoring well MW3					
	MW3 installed with a 20 foot screen from 98'-118'					
	MW3 has 4-inch casing					
		125				
		130				
		135				
		140				
		145				
		150				
		155				

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MW4

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.69 Feet
Date Drilled	2/22/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
		5				
		10				
		15				
		20				
		25				
	ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 5/3 brown, 90% Recovery	30		n/a	24-45	
	ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 5/3 brown, 90% Recovery	35		n/a	32-44-54	

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MW4

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.69 Feet
Date Drilled	2/22/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	SM, Silty Sand, fine grain, dry, dense, 10Y 5/4 yellowish brown, 90% Recovery			n/a	39-69	
	SM, Silty Sand, fine grain, dry, dense, 10Y 5/4 yellowish brown, 90% Recovery	45		n/a	42-45	
	ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	50		n/a	40-72	
	ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	55		n/a	45-60	
	SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	60		n/a	58-79	
	SM, Silty Sand, fine grain with some stones, dry, very dense, 2.5Y 6/3 light yellowish brown, 80% Recovery	65		n/a	37-70	
	SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	70		n/a	69-80	
	SM, Silty Sand, fine grain, dry, very dense, 2.5Y 6/2 light grayish brown, 80% Recovery	75		n/a	59-81	

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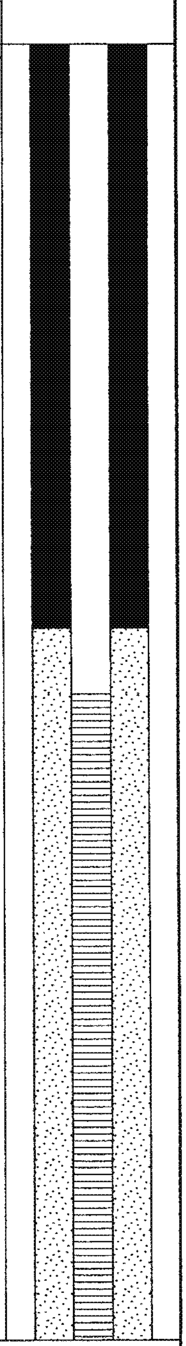
MW4

Former Holly Park Car Wash	3350 West Century Boulevard	Inglewood, CA 90305	
Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.69 Feet
Date Drilled	2/22/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts
	SP, Poorly Graded Sand, fine to medium grain, dry, dense, 2.5Y 5/2 grayish brown, 90% Recovery			n/a	41-65
	SM, Silty Sand, fine grain with some silt, dry, medium dense, 10Y 5/2 grayish brown, 80% Recovery	85		n/a	51-72
	SM, Silty Sand, fine grain with some silt, dry, medium dense, 10Y 5/2 grayish brown, 80% Recovery	90		n/a	45-65
	SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	95		n/a	92
	SP, Poorly Graded Sand, fine grain with pebbles and stones, dry, 2.5Y 6/2 light brownish gray, 80% Recovery	100		n/a	65-72
	SP, Poorly Graded Sand, fine to medium grain with pebbles and stones, moist, dense, 10YR 4/2 dark grayish brown, 80% Recovery	105		n/a	66-87
	ML, Clayey-Silt, moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/3 brown, 90% Recovery	110		n/a	41-55-62
	ML, Clayey-Silt, very moist, low-medium plasticity, medium stiff, medium dense, 10YR 4/1 dark gray, 90% Recovery	115		n/a	69-72-77

Completion



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MW4

Former Holly Park Car Wash 3350 West Century Boulevard Inglewood, CA 90305

Project Number	464-4116	Drill Rig	Mobil B-61
Geologist	L. Laborde/M. Wolff (RG)	Ground Elevation	137.69 Feet
Date Drilled	2/22/06	Total Depth of Borehole	120 Feet
Borehole Diameter	8 Inches	Depth to Water	yes Feet

Graphic Log	Description	Depth	Sample	PID	Blow Counts	Completion
	@ 120' - Boring terminated					
	Boring converted to monitoring well MW4					
	Lithology and blow count data obtained from 5 and 10 foot intervals as well as from previous Boring No. B14					
	MW4 installed with a 20 foot screen from 100-120 fbg					
	MW4 has 4-inch casing					
		125				
		130				
		135				
		140				
		145				
		150				
		155				

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Altec Testing & Engineering, Inc.

RECEIVED
2007 MAR -2 AM 8:48
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

March 1, 2007

Ms. Mercedes S. Hsu
Water Resources Control Engineer
Underground Tanks/LA Coastal
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013
(213) 576-6600

UST UNIT
CASE NO. I-10850A
DATE 3/21/07
STAFF MSH
REPORT TYPE:
SAR
WORK PLAN
MONITORING ✓
OTHER
DATE REV'D 3/26/07
STAFF MSH

RE: **Groundwater Monitoring Report**
February 14, 2007 Sampling Event
The Village at Century (Former Holly Park Car Wash)
3350 West Century Boulevard
Inglewood, California
ID# I-10850A
Altec Project No. 464-4116

Dear Ms. Hsu,

This report presents the results of the February 14, 2007 groundwater monitoring and sampling event at the subject site. The site is a former car wash/gasoline station that has been recently redeveloped into a commercial shopping center known as The Village at Century (Figure 1).

Background

The subject site was used as a car wash and dispensed gasoline from 1964 to 1991. In 1991, three gasoline USTs at the subject site were removed. Impacted soil found beneath the USTs was reportedly excavated to a depth of roughly 25 feet, and impacted soil beneath the dispenser piping was reportedly excavated to a depth of roughly 15 feet.

Approximately 500 tons of soil exceeding clean-up criteria was transported for disposal in the 1991 tank removal. Confirmation soil samples collected from the bottoms of the excavations reportedly indicated that the underlying soil was clean (Tetra Tech 1991). The excavations were then backfilled with clean imported backfill soil or gravel. The Los Angeles County Department of Public Works (LACDPW) reviewed the closure report and issued a no further action letter on November 12, 1991.

Assessment work performed by Altec for HCL Inglewood Village LLC prior to their purchase of the subject site resulted in the discovery of hydrocarbon impacts to soil at deeper depths below the former USTs (Altec 2004b, 2005a). Altec prepared a CAP to address remediation of hydrocarbon impacts below a depth of 25 feet in the soil below the former UST area (Altec 2005b). No impacted soil was found below the dispenser area.

The RWQCB requested assessment of groundwater conditions beneath the subject site utilizing at least three monitoring wells by letter dated July 25, 2005. Altec submitted a work plan for groundwater assessment dated August 3, 2005 (Altec 2005c). Altec requested that, owing to the depth to groundwater (>100 feet bgs) and the high cost of installing monitoring wells, an initial monitoring well be installed and sampled in the source zone prior to proceeding with installation of additional wells. The RWQCB concurred with this phased approach.

The initial monitoring well, MW-1, was installed and sampled in March 2006. The analytical results showed that benzene was present in the groundwater at a concentration of 223 μg/L, which exceeds the Maximum Contaminant Level (MCL) for benzene of 1 μg/L. Accordingly, Altec proposed to install and sample three additional monitoring wells (MW-2, 3, and 4) located upgradient and downgradient of MW-1 to further delineate the lateral extent of groundwater hydrocarbons (Figure 2).

In the meantime, a soil vapor extraction (SVE) system was designed and installed at the subject site to remediate hydrocarbon impacts in soil beneath the former USTs in accordance with the CAP. The initial SVE wells had been installed in January 2006 and a pilot test had been performed. Altec reported the SVE pilot test results in 2006 (Altec 2006a). The remaining SVE wells were installed following the pilot test. The SVE permit to operate was obtained from the South Coast Air Quality Management District (SCAQMD), and the system equipment was delivered and installed in May 2006. The SVE system started up and commenced routine operation on July 1, 2006. Altec has prepared and submitted progress reports on the SVE operations and results (Altec 2006b and 2007a).

In May 2006, following completion of the shopping center improvements, the three additional groundwater monitoring wells were installed and developed. Altec prepared and submitted a report on the installation, development and sampling of the monitoring wells (Altec 2006c).

Soils at the subject site consist of fine- to medium-grained fluvial deposits. The well borings encountered brown and gray silt and clayey silt deposits from the surface to a depth of approximately 55 feet below ground surface (bgs). Gray and brown silty sand deposits were encountered between 55 feet and approximately 95 feet bgs. Poorly graded sand was generally present between approximately 95 and 105 feet, underlain by clayey silt to the total depth drilled of 125 feet bgs. First groundwater at the site occurs generally between depths of approximately 105 and 118 feet bgs.

Summary of On-Going Soil Remediation

Soil remediation by SVE is occurring in the source area at depths spanning from approximately 25 feet bgs down to the groundwater surface. Two parallel SVE systems commenced operation on June 22, 2006. Following approximately one week of system tuning, routine operations commenced approximately July 1, 2006. By December 2006, a large mass of hydrocarbons had been removed and the removal rate had declined substantially. Accordingly, Altec rerouted all SVE extraction wells to a single combined system and demobilized the excess equipment on December 4, 2006. The remaining SVE system continues in operation.

To date, the SVE systems have removed and destroyed 19,551 lbs of hydrocarbons quantified as TPHg, and 120 lbs of benzene.

Results of February 14, 2007 Groundwater Monitoring and Sampling Event
Prior to purging, the depth to groundwater was measured in all wells. The wells were then purged of at least three casing volumes of groundwater using an electric submersible pump prior to sampling. During purging, measurements of pH, temperature and electrical conductivity were made. When successive measurements of these parameters had stabilized to within plus or minus 10 percent, and at least three casing volumes had been removed, groundwater samples were collected from each well using disposable bailers. Well purging data are attached.

Samples were collected in 40-mL vials with Teflon™ septa for volatile organic analysis (VOA). Sufficient VOA vials were collected for each well for TPHg and VOC analyses. Samples were placed in an iced cooler at 4 degrees Centigrade for storage and transportation to the laboratory. Chain-of-Custody documentation was maintained for all samples. In addition, one blank and one field duplicate sample were collected for quality control purposes.

The general direction of groundwater flow is to the southwest (Figure 3). As seen in the figure, the apparent groundwater gradient is fairly flat between upgradient well MW-2 and well MW-1 on the downgradient side of the source area (0.012 ft/ft). The gradient then markedly steepens to approximately 0.135 ft/ft downgradient to the south and west between MW-1, and MW-3 and MW-4 to the south and west, respectively (Figure 3). The reason for this change in gradient is not clear from the present data. It could be the result of underlying lithologic changes, or the effect of upwelling from operation of the SVE system in the vicinity of MW-1, or both. The subject site lies within the active Newport-Inglewood fault zone, so local disruption of lithologic zones due to faulting could create hydraulic conductivity and groundwater gradient changes over short distances. In any event, it is clear that the direction of groundwater flow is from northeast to southwest.

All samples were analyzed for TPHg and VOCs, including fuel oxygenates, by Associated Laboratories of Orange, California, a state-certified analytical laboratory. Analytical results are summarized in attached Table 2. Certified Analytical Reports and chain-of-custody documentation are also attached. Results for TPHg, benzene and MTBE are summarized in Figure 3.

No TPHg, BTEX or fuel oxygenates were detected in any of the groundwater samples above laboratory detection limits in the February 14, 2007 event. No detections occurred in the quality control samples either.

Conclusions
Based on the findings of the February 14, 2007 groundwater monitoring and sampling event, Altec concludes the following:

- The groundwater flow direction is towards the southwest.
- TPHg were not detectable in groundwater samples from all four monitoring wells.

- Fuel oxygenates were not detectable in groundwater samples from all four monitoring wells.
- BTEX were not detectable in groundwater samples from all four monitoring wells.
- Operation of the SVE system has reduced VOCs in groundwater to non-detectable levels, and should continue to favorably affect groundwater quality in the area of influence of the system while it continues to operate.
- Groundwater sampling and monitoring should continue until SVE operations cease, at which time Altec will request case closure.

Should you have any questions, please contact the undersigned at the telephone numbers indicated.

Sincerely,
ALTEC TESTING & ENGINEERING, INC.

Lynn A. Laborde
Senior Project Manager
Tel. 951-352-6510

Michael Wolff
California Professional Geologist #3347
Tel. 949-235-1957

Attachments:
References
Figure 1 – Site Location Map
Figure 2 – Well Locations
Figure 3 – Groundwater Gradient and Analytical Results
Table 1 – Well Completion Data
Table 2 - Groundwater Analytical Results
Field Purging and Sampling Data
Laboratory Certified Analytical Reports

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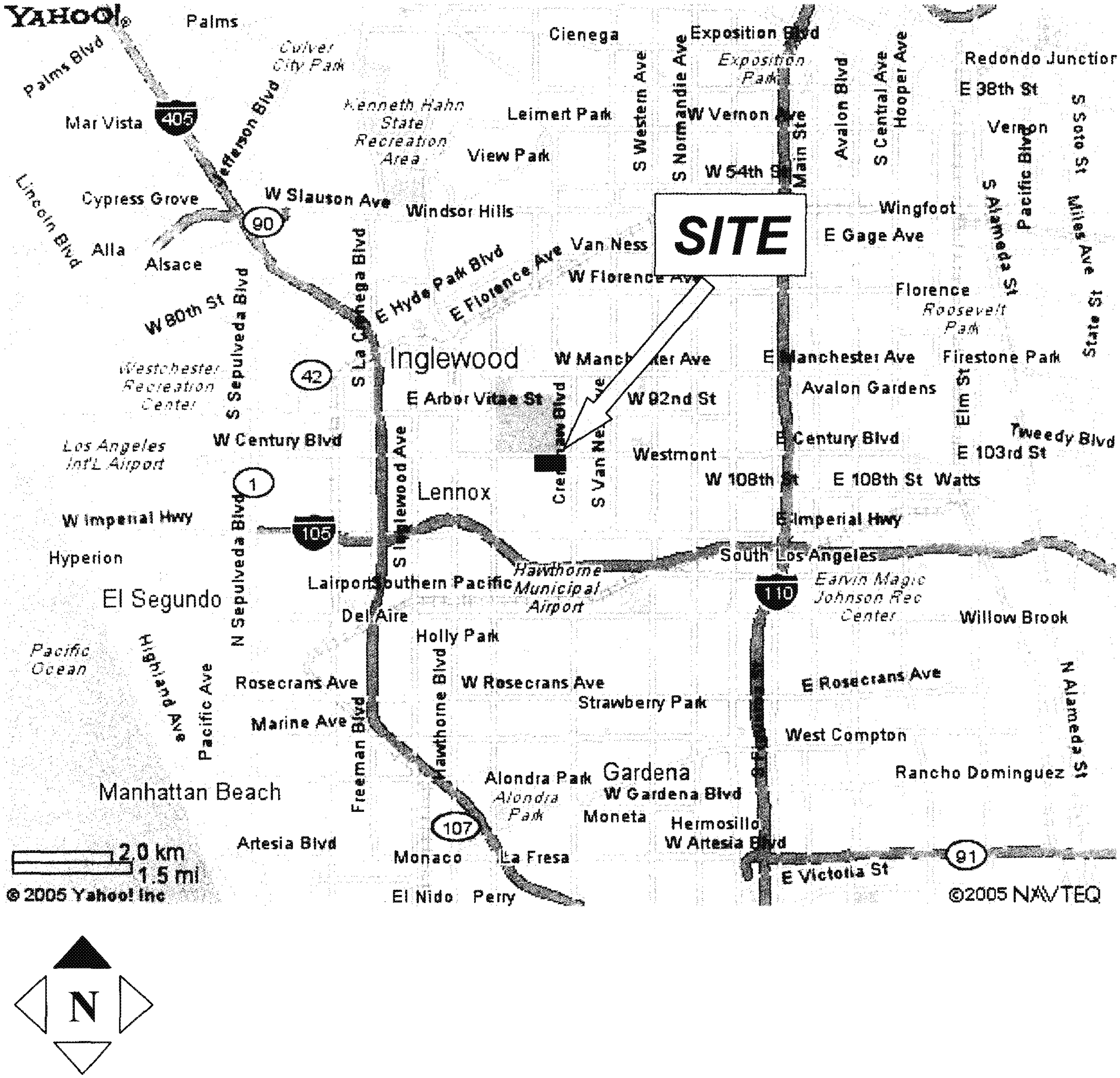


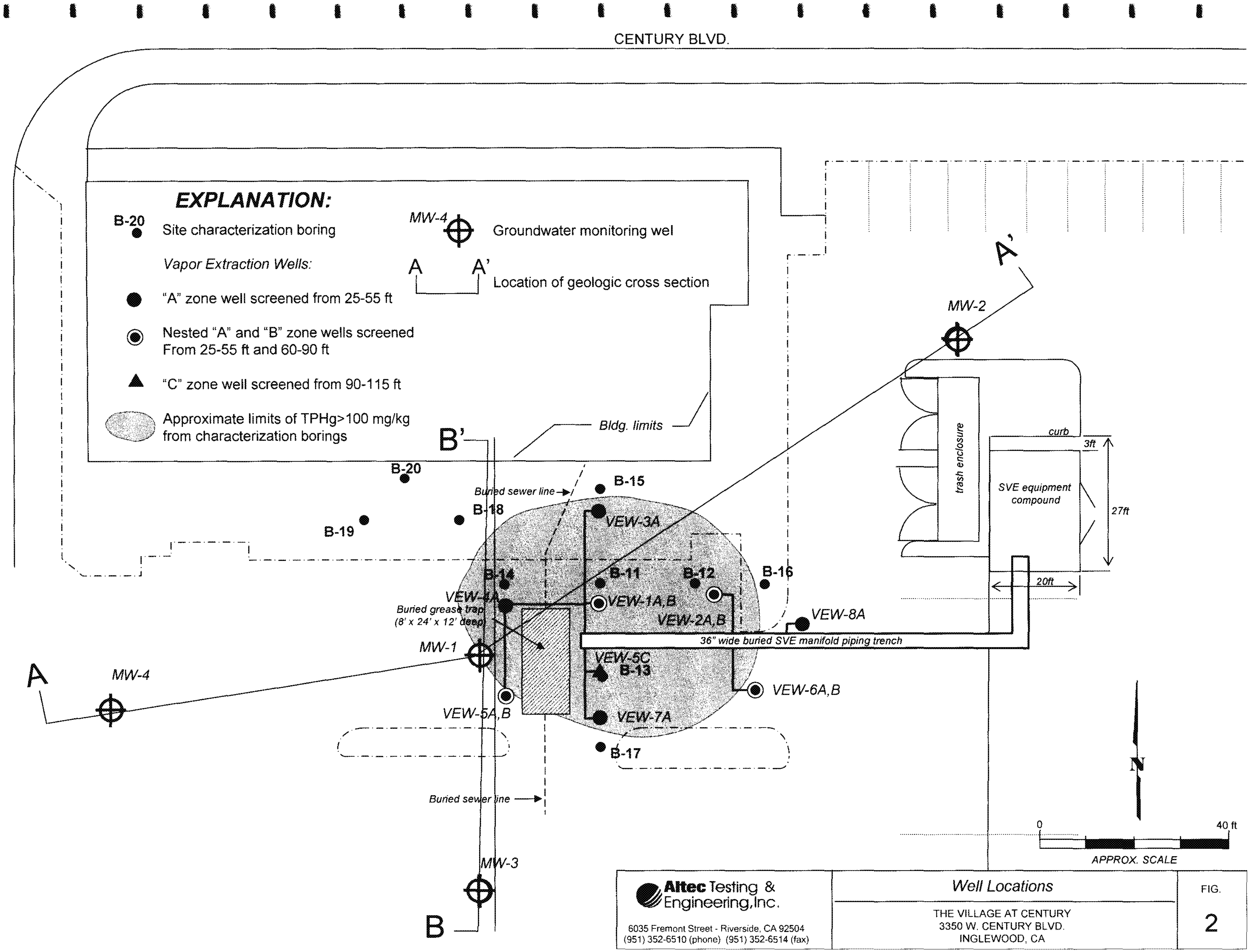
Altec Testing & Engineering, Inc.

6035 Fremont Street Riverside, CA 92504 (951) 352-6510 (tele) (951) 352-6514 (fax)

Site Location Map

THE VILLAGE AT CENTURY
3350 W. Century Blvd.
Inglewood, CA

FIG.
1

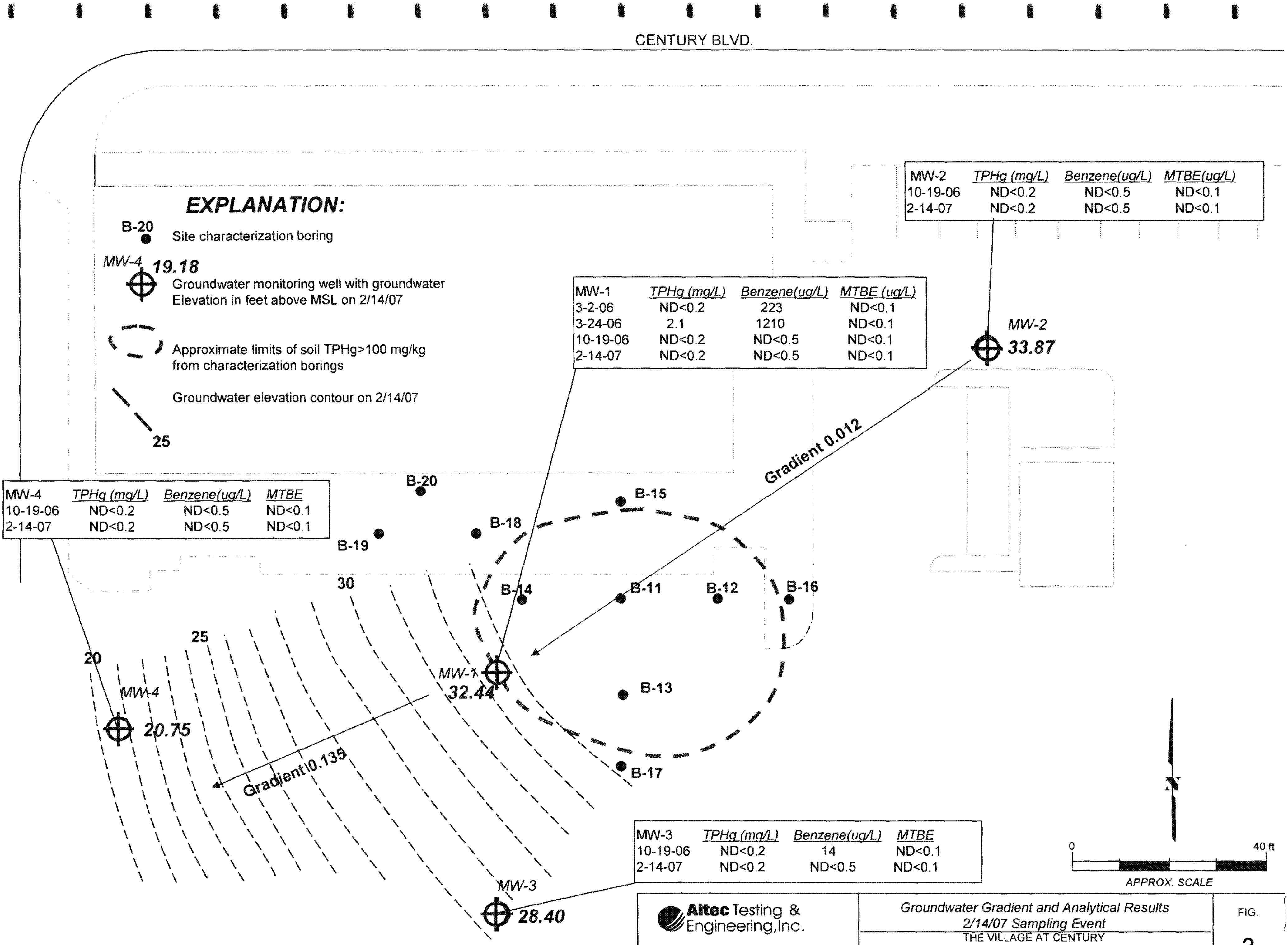


Altec Testing &
Engineering, Inc.
6035 Fremont Street - Riverside, CA 92504
(951) 352-6510 (phone) (951) 352-6514 (fax)

Well Locations

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
2



EXPLANATION:

B-20 ● Site characterization boring

MW-4 19.18 Groundwater monitoring well with groundwater Elevation in feet above MSL on 2/14/07

Approximate limits of soil TPHg>100 mg/kg from characterization borings

25 Groundwater elevation contour on 2/14/07

MW-1	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE (ug/L)*
3-2-06	ND<0.2	223	ND<0.1
3-24-06	2.1	1210	ND<0.1
10-19-06	ND<0.2	ND<0.5	ND<0.1
2-14-07	ND<0.2	ND<0.5	ND<0.1

MW-2	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE(ug/L)*
10-19-06	ND<0.2	ND<0.5	ND<0.1
2-14-07	ND<0.2	ND<0.5	ND<0.1

MW-3	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE*
10-19-06	ND<0.2	14	ND<0.1
2-14-07	ND<0.2	ND<0.5	ND<0.1

MW-4	*TPHg (mg/L)*	*Benzene(ug/L)*	*MTBE*
10-19-06	ND<0.2	ND<0.5	ND<0.1
2-14-07	ND<0.2	ND<0.5	ND<0.1

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Groundwater Gradient and Analytical Results
2/14/07 Sampling Event

THE VILLAGE AT CENTURY
3350 W. CENTURY BLVD.
INGLEWOOD, CA

FIG.
3

APPENDIX A
TABLES

TABLE 1
WELL COMPLETION DATA

3350 W. Century Blvd.
Inglewood, Calif.

Well No.	Completion Date	Reference Elevation (ft. msl)	Boring Diameter (in.)	Casing Diameter (in.)	Depths/Elevations							Screen slot size (in.)
					Total Depth (ft.)	Top of Sand		Top of Screen		Bottom of Screen		
						Depth (ft.)	Elev. (ft. msl)	Depth (ft.)	Elev. (ft. msl)	Depth (ft.)	Elev. (ft. msl)	
MW-1	02/22/06	137.63	8.00	2.00	120.51	88.00	49.63	90.00	47.63	120.00	17.63	0.02
MW-2	05/15/06	139.10	8.00	4.00	115.41	93.00	46.10	95.00	44.10	115.00	24.10	0.02
MW-3	05/17/06	136.19	8.00	4.00	118.39	96.00	40.19	98.00	38.19	118.00	18.19	0.02
MW-4	05/22/06	137.69	8.00	4.00	120.45	98.00	39.69	100.00	37.69	120.00	17.69	0.02

TABLE 2
Groundwater Analytical Results
3350 W. Century Blvd.
Inglewood, Calif.

Well No./ Ref. Elev. (ft msl)	Date	Depth to Water (ft)	Groundwater Elevation (ft msl)	Analytical Results													Lab
				TPH (C6 C10)	TPH (C10-C22)	TPH (C22-C36)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	Other	
			Units:	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
			EPA Method:	8015B			8260B										
MW-1	3/6/2006	105.3	32.33	ND<0.4	ND<0.4	ND<0.6	**223**	16	ND<5	69	ND<1	2.4	ND<1	ND<1	ND<10	see CAR	Associated
137.63	3/24/2006	105.31	32.32	2.1	ND<0.2	ND<0.3	**1210**	**178**	59	952	ND<1	3.7	ND<1	ND<1	ND<10	see CAR	Associated
	10/19/2006	105.41	32.22	ND<0.2	ND<0.2	ND<0.3	ND<1	1.8J	ND<5	2.4J	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
	2/14/2007	105.19	32.44	ND<0.2			ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		
MW-2	10/19/2006	105.29	33.81	ND<0.2	ND<0.2	ND<0.3	ND<1	1.8J	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
139.1	2/14/2007	105.23	33.87	ND<0.2			ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		
MW-3	10/19/2006	108.25	27.94	ND<0.2	ND<0.2	ND<0.3	**14**	ND<5	ND<5	1.2J	ND<1	2.7	ND<1	ND<1	ND<10		Associated
136.19	2/14/2007	107.79	28.4	ND<0.2			ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		
MW-4	10/19/2006	118.51	19.18	ND<0.2	ND<0.2	ND<0.3	ND<1	1.1J	ND<5	1.2J	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
137.69	2/14/2007	116.94	20.75	ND<0.2			ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		
Quality Control Samples:																	
LMB	3/4/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
LMB	3/28/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
LMB	10/23/2006			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
EB	2/14/2007			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
BDUP	2/14/2007			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
LMB	2/14/2007			ND<0.2	ND<0.2	ND<0.3	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10		Associated
			Regulatory Levels (a):	-	-	-	1	150	300	1750	13	-	-	-	12 (b)		

Notes:

TPH = total petroleum hydrocarbons (carbon chain range)
MTBE = methyl-tert-butylether
DIPE = di-isopropyl ether
ETBE = ethyl-tertbutyl ether
TAME = tert-amylmethyl ether
TBA = tert-butyl alcohol
EB = equipment blank (labelled MW-5)
LMB = laboratory method blank
BDUP = Blind Duplicate of MW-1 (labelled MW-6)
FSS = Field Split Sample

CAR = Certified Analytical Report
J = detected but below practical quantitation limit of laboratory
(a) = California Maximum Contaminant Level (MCL) for drinking water unless otherwise noted
(b) = Calif DHS Action Level for drinking water

Shading indicates exceedance of regulatory level

Former Cypress Fee

Sources:

Hart Crowser, 2003a. *Subsurface Investigation Report, Former Texaco Cypress Fee Facility and Inglewood Gasoline Company Property, Inglewood, California,* Hart Crowser, 4 April 2003.

Terra Vac, 1995. *Soil Investigation Report Conducted at the Texaco Cypress Fee Property, West 90th Street, Inglewood, California,* Terra Vac, 18 January 1995.

Subsurface Investigation Report

Former Texaco Cypress Fee Facility and Inglewood Gasoline Company Property
Inglewood, California

Prepared for:

Watt Developers, LLC

April 4, 2003

Project No. 16028

HARTCROWSER

Table 4

Summary of Soil Matrix Sample Analytical Results: Metals
Hollywood Park Site Development
Inglewood, California

Sample Location	Sample Depth in Feet	Sample ID	Date	Analyte											
				CAM Metals (US EPA 7000&6010s) (Results in mg/Kg)											
				As	**Ba**	**Cr**	**Co**	**Cu**	**Pb**	**Hg**	**Ni**	**Ag**	**V**	**Zn**	**Sb, Se, Be, Cd, Mo, Ti**
H-1	5	H-1@5'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	H-1@10'	12/17/02	1.8	97	17	7.9	48	9.5	0.081	6.7	1.5	32	83	ND <0.05 - <10
	15	H-1@15'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	H-1@20'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	H-1@25'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	H-1@30'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
H-2	5	H-2@5'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	H-2@10'	12/17/02	3.9	160	24	8.8	54	9.9	0.075	13	1.6	44	76	ND <0.05 - <10
	15	H-2@15'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	H-2@20'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	H-2@25'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	H-2@30'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
I-1	5	I-1@5'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	I-1@10'	12/17/02	1.9	82	15	7.1	13	4.6	ND < 0.05	5.6	1.9	34	43	ND <0.05 - <10
	15	I-1@15'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	I-1@20'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	I-1@25'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	I-1@30'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
I-2	5	I-2@5'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	I-2@10'	12/17/02	2.7	150	19	7.6	17	8.1	ND < 0.05	8.6	2	38	53	ND <0.05 - <10
	15	I-2@15'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	I-2@20'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	I-2@25'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	I-2@30'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
J-1	5	J-1@5'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	J-1@10'	12/17/02	1	53	9.8	5.2	8.3	ND < 3	ND < 0.05	3.8	1.7	26	25	ND <0.05 - <10
	15	J-1@15'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	J-1@20'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	J-1@25'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	J-1@30'	12/17/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
HB-10N	5	HB-10N@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	HB-10N@10'	12/26/02	1.8	130	13	9.1	21	4.1	0.094	9	ND < 1	37	56	ND <0.05 - <10
	15	HB-10N@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	HB-10N@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	HB-10N@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	HB-10N@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 4

Summary of Soil Matrix Sample Analytical Results: Metals
Hollywood Park Site Development
Inglewood, California

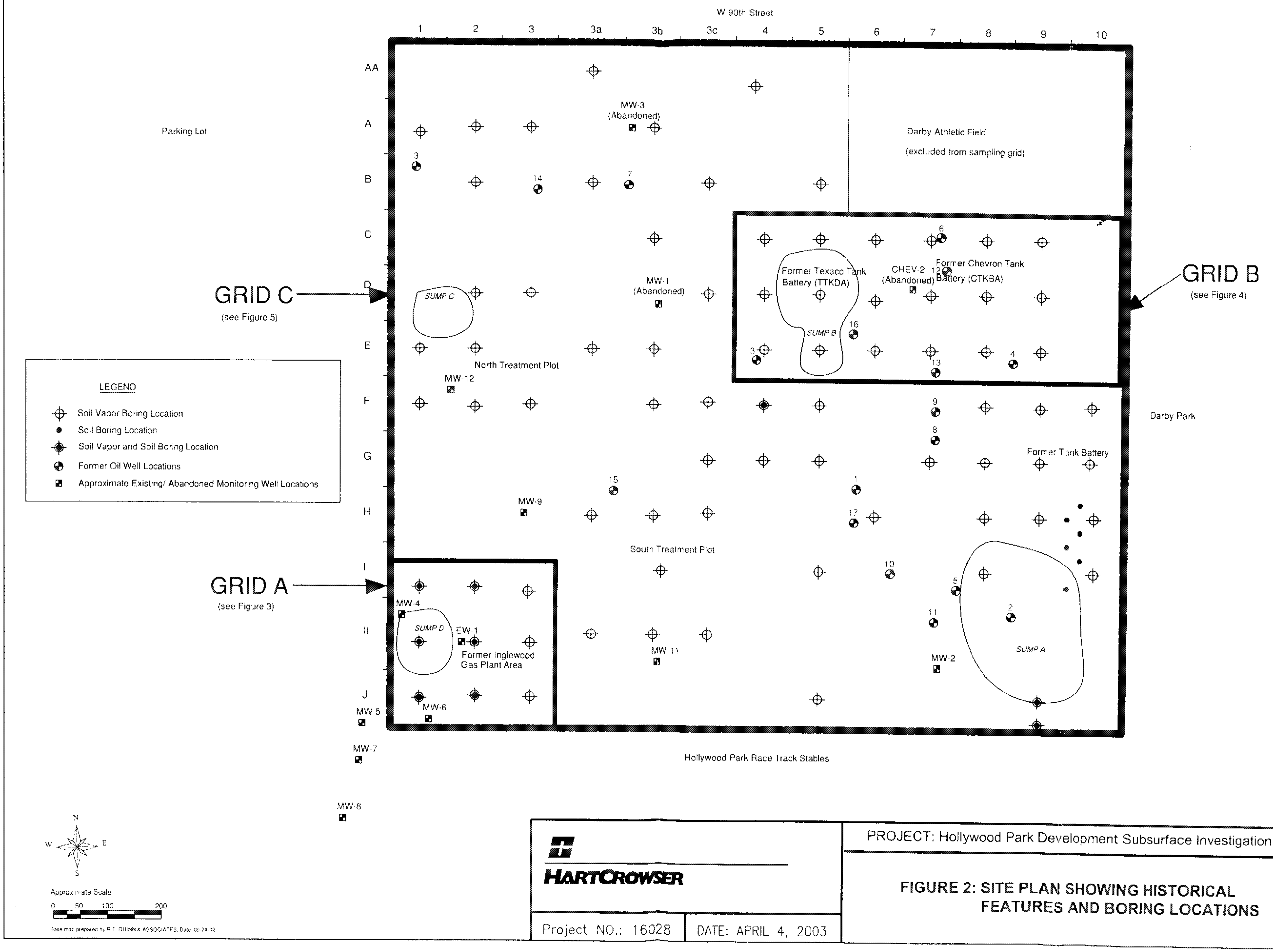
Sample Location	Sample Depth in Feet	Sample ID	Date	Analyte											
				CAM Metals (US EPA 7000&6010s) (Results in mg/Kg)											
				As	Ba	Cr	Co	Cu	Pb	Hg	Ni	Ag	V	Zn	Sb, Se, Be, Cd, Mo, Ti
HB-10WC	5	HB-10WC@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	HB-10WC@10'	12/26/02	3	160	20	11	28	5.1	0.088	12	1.2	43	67	ND <0.05 - <10
	15	HB-10WC@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	HB-10WC@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	HB-10WC@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	HB-10WC@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
HB-10S	5	HB-10S@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10	HB-10S@10'	12/26/02	2.6	190	20	7.8	19	5.1	0.1	8.1	1	44	57	ND <0.05 - <10
	15	HB-10S@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	HB-10S@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	HB-10S@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	HB-10S@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
IB-10NW	5	IB-10NW@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	IB-10NW@10'	12/26/02	4.4	110	21	8.3	20	6	0.091	13	ND < 1	36	53	ND <0.05 - <10
	15	IB-10NW@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	20	IB-10NW@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	25	IB-10NW@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	30	IB-10NW@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
IB-10C	5	IB-10C@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	IB-10C@10'	12/26/02	1.6	92	34	10	13	4.2	0.12	8.1	ND < 1	31	44	ND <0.05 - <10
	15	IB-10C@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	IB-10C@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	IB-10C@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	IB-10C@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IB-10SW	5	IB-10SW@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	IB-10SW@10'	12/26/02	4.5	160	20	11	32	7.4	0.11	14	1.8	47	69	ND <0.05 - <10
	15	IB-10SW@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	IB-10SW@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	IB-10SW@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	IB-10SW@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
JB-9C	5	JB-9C@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	JB-9C@10'	12/26/02	2.1	150	14	6.8	16	5.9	0.057	7.8	1	33	50	ND <0.05 - <10
	15	JB-9C@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	JB-9C@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	JB-9C@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	JB-9C@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4

Summary of Soil Matrix Sample Analytical Results: Metals
Hollywood Park Site Development
Inglewood, California

Sample Location	Sample Depth in Feet	Sample ID	Date	Analyte											
				CAM Metals (US EPA 7000&6010s) (Results in mg/Kg)											
				As	Ba	Cr	Co	Cu	Pb	Hg	Ni	Ag	V	Zn	Sb, Se, Be, Cd, Mo, Ti
JB-9S	5	JB-9S@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	JB-9S@10'	12/26/02	1.5	78	12	6.8	11	4.1	0.088	5.1	ND < 1	27	41	ND <0.05 - <10
	15	JB-9S@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	JB-9S@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	JB-9S@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	JB-9S@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FB-4	5	FB-4@5'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	FB-4@10'	12/26/02	3.3	200	16	7.4	14	11	0.061	6.3	1.3	30	48	ND <0.05 - <10
	15	FB-4@15'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	FB-4@20'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	FB-4@25'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	FB-4@30'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	35	FB-4@35'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	40	FB-4@40'	12/26/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
JB-2	5	JB-2@5'	01/10/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	JB-2@10'	01/10/02	2.3	84	18	9.5	15	5.1	ND < 0.05	6.7	ND < 1	40	53	ND <0.05 - <10
	15	JB-2@15'	01/10/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	20	JB-2@20'	01/10/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	25	JB-2@25'	01/10/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	30	JB-2@30'	01/10/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram
Sample depth given in feet below ground surface
ND - Not detected above stated method reporting limit
NA - Not Analyzed



HARTCROWSER

PROJECT: Hollywood Park Development Subsurface Investigation

FIGURE 2: SITE PLAN SHOWING HISTORICAL FEATURES AND BORING LOCATIONS

Project NO.: 16028

DATE: APRIL 4, 2003

H-1

Soil Matrix Sample Analytical Results

Depth Feet (bgs)	CAM Metals (mg/Kg)											TPH-CC (mg/Kg)			VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Hg	Ni	Ag	V	Zn	C12-C14	C14-C16	Total TPH	
10'	1.8	97	17	7.9	48	9.5	0.081	6.7	1.5	32	83	2.6	4.9	7.5J	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND

Soil Vapor Sample Analytical Results

VOCs (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
ND	ND	ND

H-2

Soil Matrix Sample Analytical Results

Depth Feet (bgs)	CAM Metals (mg/Kg)											TPH-CC (mg/Kg)										VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Hg	Ni	Ag	V	Zn	C12-C14	C14-C16	C16-C18	C18-C20	C20-C22	C22-C24	C24-C26	C26-C28	C28-C32	Total TPH	
10'	3.9	160	24	8.8	54	9.9	0.075	13	1.6	44	76	1.8	15	10	1.2	5.6	5	2	6	2.2	49	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	2.7	2.7	5.4J	ND

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	22	ND	ND
30'	20	ND	ND

H-3

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	26	ND	ND
30'	6.1	ND	ND

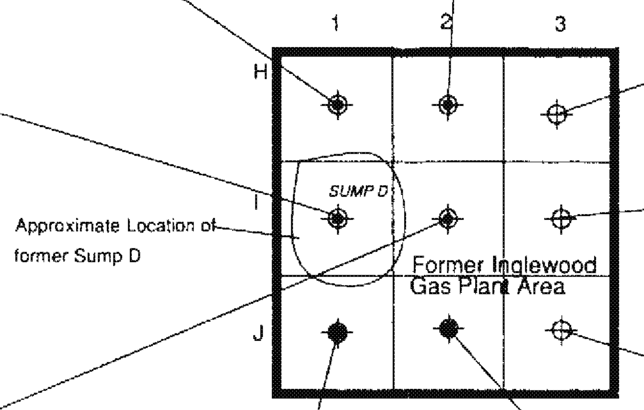
I-1

Soil Matrix Sample Analytical Results

Depth Feet (bgs)	CAM Metals (mg/Kg)										TPH-CC (mg/Kg)	VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Ni	Ag	V	Zn		
10'	1.9	82	15	7.1	13	4.6	5.6	1.9	34	43	ND	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND

Soil Vapor Sample Analytical Results

VOCs (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
ND	ND	ND



I-3

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	5.9	ND	ND
30'	5.4	ND	ND

I-2

Soil Matrix Sample Analytical Results

Depth Feet (bgs)	CAM Metals (mg/Kg)										TPH-CC (mg/Kg)	VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Ni	Ag	V	Zn		
10'	2.7	150	19	7.6	17	8.1	8.6	2	38	53	ND	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	3.8	ND	ND
10D'	2.0	ND	ND
30'	2.4	ND	ND

J-3

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	1.7	ND	ND
30'	ND	ND	ND

J-1

Soil Matrix Sample Analytical Results

Depth Feet (bgs)	CAM Metals (mg/Kg)										TPH-CC (mg/Kg)	VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Ni	Ag	V	Zn		
10'	1.0	53	9.8	5.2	8.3	ND	3.6	1.7	25	25	ND	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	ND	710	ND
30'	14	ND	ND

Hollywood Park Race Track Stables

J-2

Soil Matrix Sample Analytical Results

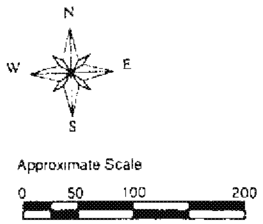
Depth Feet (bgs)	CAM Metals (mg/Kg)										TPH-CC (mg/Kg)	VOCs (ug/Kg)
	As	Ba	Cr	Co	Cu	Pb	Ni	Ag	V	Zn		
10'	2.3	84	18	9.5	15	5.1	6.7	ND	40	53	ND	ND
20'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND

Soil Vapor Sample Analytical Results

Depth Feet (bgs)	VOCs (Tetrachloroethene-PCE) (ug/L)	Methane (ppmv)	TPH-Hydrocarbons-GRO (ug/L)
10'	3.4	ND	ND
30'	2.4	ND	ND

LEGEND

⊕	Soil Vapor Boring Location
●	Soil Boring Location
⊕	Soil Vapor and Soil Boring Location



NOTE:

The Sampling Grid designation for grid H-1 through I-3 do not match sampling grid (due to a repositoning of Grid C after Grid A samples were collected

Base map prepared by R.T. QUINN & ASSOCIATES, Date 09-24-02

HARTCROWSER

Project NO.: 16028

DATE: JANUARY 28, 2003

PROJECT: Hollywood Park Development Subsurface Investigation

FIGURE 3: GRID A - SOIL VAPOR AND SOIL SAMPLING LOCATIONS AND RESULTS

TERRA VAC

SOIL INVESTIGATION REPORT
conducted at the
TEXACO CYPRESS FEE PROPERTY
West 90th Street
Inglewood, California

Prepared for:

Robert Skiba
Texaco Exploration and Production Inc.
Ventura Avenue
School Canyon Road
Ventura, California 93001

Prepared by:

TERRA
VAC

Terra Vac
1401 Dove Street, Suite 500
Newport Beach, California 92660-2429
(714) 252-8900

January 18, 1995

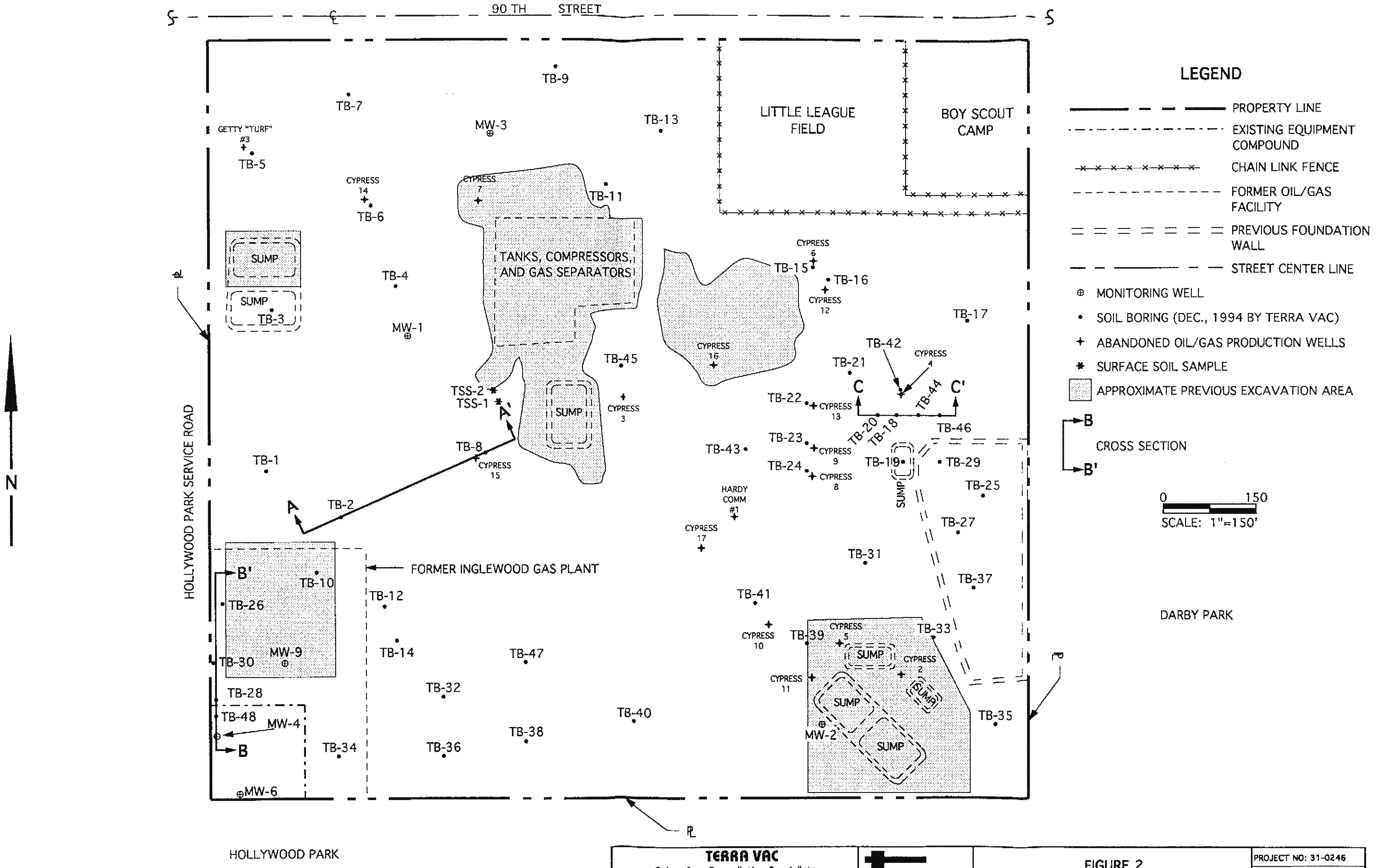
James Keegan
Sr. Project Manager

for
Bretton E. Trowbridge, P.E.
Vice President

Stephen Mutch
Project Manager

Table 2
TEXACO CYPRESS FEE
Analytical Results

TTLC Metals	Date	TSS-1 mg/Kg	TSS-2 mg/Kg
Antimony	12/21/94	ND	ND
Arsenic	12/21/94	7.9	8.3
Barium	12/21/94	140	170
Beryllium	12/21/94	ND	ND
Cadmium	12/21/94	1.6	1.9
Chromium	12/21/94	23	28
Cobalt	12/21/94	8.8	9.8
Copper	12/21/94	23	30
Lead	12/21/94	16	20
Molybdenum	12/21/94	ND	ND
Nickel	12/21/94	19	22
Selenium	12/21/94	1.1	1.6
Silver	12/21/94	ND	ND
Thallium	12/21/94	ND	ND
Vanadium	12/21/94	37	39
Zinc	12/21/94	71	87
Mercury	12/21/94	ND	ND



TERRA VAC
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- Site Assessment
- Vapor Extraction
- Dual Vacuum Extraction
- Air Sparging Systems
- Bioremediation
- Ground Water Remediation

1401 Dove St.
Suite 500
Newport Beach, CA 92660
(714) 252-8900
FAX (714) 252-8901

TERRA VAC
Subsurface Remediation Specialists

FIGURE 2
SITE MAP
TEXACO CYPRESS FEE PROPERTY
INGLEWOOD, CALIFORNIA

PROJECT NO: 31-0246
DESIGNED BY: DCH
CHECKED BY:
PROJECT MGR: SM
SHEET 1 OF 1

Great Western Forum

Sources:

Department of Public Works, 2007. *Hazardous Materials Underground Storage Permit Closure/Site Assessment Report Mitigation Referral Closure Application No. A400401, Facility Located at 3900 West Manchester Boulevard, Inglewood,* County of Los Angeles Department of Public Works, 1 February 2007.

Earth Tech, 2004. *Limited Soil and Groundwater Sampling Report, Great Western Forum, 3900 West Manchester Boulevard, Inglewood, California,* Earth Tech, Inc., 25 May 2004.

file

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

DONALD L. WOLFE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 1, 2007

IN REPLY PLEASE
REFER TO FILE: EP-1
009620-038886

Mr. Yue Rong
State of California Regional Water
Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

Dear Mr. Rong:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT
CLOSURE/SITE ASSESSMENT REPORT MITIGATION REFFERAL
CLOSURE APPLICATION NO. A400401
FACILITY LOCATED AT 3900 WEST MANCHESTER BOULEVARD, INGLEWOOD (2E)**

This office has reviewed the closure report dated March 18, 2004, and the Limited Soil and Groundwater Sampling report dated May 25, 2004, for the subject facility. Based on the report, there is significant soil and groundwater contamination at the site.

Pursuant to Section 25297(b) of the California Health and Safety Code, we are referring this matter to your agency for further action. We request that all the future correspondence regarding this matter be sent to your office with a copy sent to this office. Please see the enclosed report for review.

If you have any questions, please contact Ms. Abigail Flores of this office at (626) 458-3561, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

AF:my\P:\sec\Rong 510588

cc: The Forum (Marc Little), Earth Tech, Inc. (David Simon) file

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

DONALD L. WOLFE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-1
009620-038886

February 1, 2007

Mr. Marc Little
Forum Enterprises
3900 West Manchester Boulevard
Inglewood, CA 90305-2200

Dear Mr. Little:

HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT
CLOSURE/SITE ASSESSMENT REPORT MITIGATION REFERRAL
CLOSURE APPLICATION NO. A400401
FACILITY LOCATED AT 3900 WEST MANCHESTER BOULEVARD, INGLEWOOD (2E)

This office has reviewed the closure report dated March 18, 2004, and the Limited Soil and Groundwater Sampling report dated May 25, 2004, for the subject facility. Based on the report, there is significant soil and groundwater contamination at the site.

Pursuant to Section 25297(b) of the California Health and Safety Code, we are referring this mater to the California Regional Water Quality Control Board (CRWQCB). For further information regarding the CRWQCB's requirements, please contact Mr. Yue Rong at 320 West 4th Street, Suite 200, Los Angeles, California 90013-2343, (213) 576-6620.

Any further site assessment/remedial action plans are subject to the direction and approval of the CRWQCB. Please submit all future correspondence to the CRWQCB with a copy to this office.

If you have any questions, please contact Ms. Abigail Flores of this office at (626) 458-3561, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

AF:my
P:\sec\Little C510585

cc: California Regional Water Quality Control Board, Los Angeles Region (Yue Rong)
Earth Tech, Inc. (David Simon)

earth tech

engineering and technology for the planet.

LIMITED SOIL AND GROUNDWATER SAMPLING REPORT

Great Western Forum
3900 West Manchester Boulevard
Inglewood, CA

Prepared for:

Washington Mutual Bank
535 Anton Boulevard, 7th Floor
Costa Mesa, CA 92626

and

Forum Enterprises Incorporated
3900 Manchester Boulevard
Inglewood, CA 90305

Prepared by:

Earth Tech, Inc.
300 Oceangate, Suite 700
Long Beach, CA 90802
(562) 951-2000

Earth Tech Project No. 76930-01

May 25, 2004

Prepared by:

DAVID SIMON
No. 05171
Expires 06/05

David L. Simon, R.E.A.
Registered Environmental Assessor No. 05171

Prepared under the supervision of:

fo / Anthony Lizzi
Registered Geologist No. 7328

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 BACKGROUND

The Great Western Forum (Property) is a sports and entertainment arena located on a square-shaped, approximately 29-acre parcel (Figures 1 and 2). The onsite structure was constructed in 1967. The total floor area of the arena is approximately 285,484 square feet with a seating capacity of 16,000-18,000. Approximately 95% of the property is covered with the building or paved with concrete and asphalt for vehicle parking and access with the remainder for landscaping.

Earth Tech conducted a Phase I Environmental Site Assessment (ESA) of the Great Western Forum in February 2004. The Phase I ESA included the following conclusions:

- Historical Sports Arena UST: A 1,000-gallon gasoline underground storage tank (UST) was removed in 1986. The tank or piping had leaked, causing soil impact beneath the UST. The impacted soils were remediated, and a no further action letter was obtained from the Los Angeles County Department of Public Works (LACDPW) in February 1989.

- Current Sports Arena UST: A 1,000-gallon gasoline UST is located at the east side of the cooling tower area, south of the arena building. The UST is a permitted, dual-walled, continually monitored tank. According to the site contact, the tank is scheduled for removal and closure in the near future.

- Historical Gasoline Station: A gasoline station was located at the southwest corner of the Property between 1967 and 1981. No records regarding UST registration, facility closure, or environmental sampling was found for this former gasoline station.

- A former gas station (currently a convenience store) located at 601 South Prairie Avenue across the street to the southwest of, and downgradient from, the subject property is known to have impacted the subsurface with petroleum hydrocarbons. Earth Tech's file review indicates that apparently no active remediation has occurred at this site since the release was reported.

Following completion of the Phase I ESA, Earth Tech was provided with reports indicating that soil and groundwater sampling had been conducted in the area of the former gas station (third bullet above) in 1999 and 2000. A discussion of these reports is included in Section 4.3.

Following production of the Phase I ESA report, the current Sports Area UST (second bullet above) was removed. Earth Tech received a copy of the UST Removal report on May 24, 2004. A discussion of this removal report is included in Section 4.4.

The following scope of work has been designed to evaluate the potential for residual soil and groundwater contamination from the former gasoline service station located at the southwest corner of the Property, at the request of Washington Mutual Bank (Appendix A).

On April 28 through May 4, 2004 a Phase II subsurface investigation was conducted by Earth Tech and consisted of advancing four hollow-stem auger boreholes. J&H Drilling advanced boreholes for soil sample and/or groundwater collection purposes.

1.2 SCOPE OF WORK

The scope of work of this investigation included the following:

1) Prepare a site-specific health & safety plan.
2) Select four borehole locations (ET-1 through ET-4) based upon the historical gas station configuration and previous sampling results.
3) Contact Underground Service Alert to mark subsurface utilities.
4) Use a hollow stem auger rig to drill soil boreholes to a minimum of 50 feet below ground surface (BGS). The boring will be terminated at a depth 20 feet below the last detected contaminant or at a maximum depth of 170 feet BGS or until groundwater is encountered at each location.
5) Collect soil samples at five-foot intervals to the total depth of the boring at each location.
6) Backfill the boreholes with hydrated bentonite, and finish the surface with concrete or asphalt, as appropriate.
7) Analyze selected soil samples for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015 and for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by EPA Method 8021B in an on-site mobile laboratory. Five samples from each boring location to be analyzed will be selected based upon field screening results. One sample from each boring location will be analyzed for total lead by EPA Method 6010B used a fixed laboratory.
8) Collect grab groundwater samples from the boring locations where groundwater is encountered (up to four samples) and representative water samples from the four existing monitoring wells on the subject property (if accessible).
9) Analyze groundwater samples for TPHg by EPA Method 8015 and for Volatile Organic Compounds (VOCs) by EPA Method 8260B at an off-site laboratory.
10) Prepare a report summarizing field activities and results of soil and groundwater sample analysis.

2.0 SITE INVESTIGATION

2.1 SITE WALK

Prior to drilling, Earth Tech performed a site walkthrough to mark the location of the proposed boreholes. Spectrum Geophysics investigated the proposed boring locations in order to identify the location of potential underground utilities. No utilities were identified that conflicted with the proposed drilling locations.

2.2 SUBSURFACE INVESTIGATION

On April 28 through May 4, Earth Tech drilled four hollow stem auger boreholes (ET-1 through ET-4, as described in Table 3-1, and shown on Figure 3.

TABLE 3-1
Borehole Schedule

BOREHOLE	LOCATION	TOTAL DEPTH (Feet BGS)	COMMENTS
ET-1	Approximately 20' east of previous boring BH-4	76.5	Soil samples recovered at 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, and 75 feet bgs.
ET-2	Approximately 20' southwest boring ET-2a	11.5	Soil sample recovered at 10 feet bgs. Rig breakdown forced pullout at 11.5 feet bgs. Hole abandoned.
ET-2a	Approximately 20' south of previous boring BH-4	141.5	Soil samples recovered at 10, 20, 30, 40, 50, 60, 70, 80, 90, 105, 110, 115, 120, 125,130, 135, and 140 feet bgs.
ET-3	Approximately 20' west of previous boring BH-4	136.5	Soil samples recovered at 20, 30, 40, 50, 60, 70, 80, 100, 110, 120, 130, and 135 feet bgs.
ET-4	Approximately 20' north of previous boring BH-4	113	Soil samples recovered at 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110 feet bgs.

Boring ET-2 was initiated following an equipment breakdown during the drilling of borehole ET-2a. Following equipment repairs, drilling at borehole ET-2 was terminated at 11.5 feet BGS and drilling at borehole ET-2a continued.

2.3 SOIL BOREHOLE INSTALLATION AND SOIL SAMPLE COLLECTION

The boreholes were drilled using a CME-75 hollow stem auger rig operated by J&H Drilling located in Anaheim, California.

Soil samples were collected from the depths indicated above in 2-inch diameter brass sleeves. Groundwater was encountered in Borehole ET-2a at 140 feet BGS, however, a grab groundwater sample was not retrieved due to operator error.

Soil samples for chemical analysis were collected from boreholes using a California split-spoon sampler. Split-spoon sampling followed the American Society for Testing Materials (ASTM, 1990) "Standard Method for Penetration Test and Split-Barrel Sampling of Soils" (ASTM D1586). However, the penetration tests were not performed, and the sampler had an O.D. of 2.5 inches. Samples for lithologic characterization were collected and logged at a maximum of 5-foot intervals.

The sampler was lined with four 2-inch-diameter by 6-inch long brass sleeves. The sampler was driven into the undisturbed formation with a slide hammer a total distance of 18-inches ahead of the auger bit. The sampler was then withdrawn from the augers and disassembled.

The first tube was sealed with Teflon-lined plastic caps, labeled and immediately submitted to the onsite mobile laboratory to be archived or immediately analyzed.

Soil from the second sleeve was placed in a Ziploc bag and exposed to the sun for a minimum of five minutes. The headspace volatiles in the bag were then measured with a photo-ionization device (PID), and the readings recorded on the borehole log.

Soil from the second sleeve was also used for soil classification and logging using the Unified Soil Classification System (USCS). Soil descriptions are included in the borehole logs included in Appendix B.

Following completion of the soil sampling, each borehole was backfilled with bentonite grout and capped with asphalt.

2.4 GROUNDWATER WELL SAMPLE COLLECTION

Groundwater was collected from three of the four onsite wells (MW A, MW B and MW C). The fourth well was located greater than ¼ mile from the former gasoline station; therefore due to the time constraints of the project, it was not sampled.

Groundwater was sampled by purging three well volumes from each well, and then collecting a groundwater sample. Groundwater was decanted from the bailer into 1-liter amber (TPH) and 40-mL VOA jars (VOCs), which were subsequently labeled and given to the onsite mobile laboratory for analysis.

2.5 LABORATORY ANALYSIS

2.5.1 Soil Sample Analysis

Selected soil samples collected from the boreholes were submitted to an on-site mobile laboratory operated by Jones Environmental, a California certified hazardous materials testing laboratory, for analysis following COC procedures.

Selected soil samples from each borehole were analyzed for TPHg by EPA Method 8015m, and for methyl tertiary butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B.

Additionally, one sample from each borehole was analyzed for Total Lead by EPA Method 6010B.

2.5.2 Water Sample Analysis

Groundwater samples were analyzed for TPHg by EPA Method 8015m, and for methyl tertiary butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B.

3.0 SUBSURFACE CONDITIONS

3.1 SITE GEOLOGY

Soils encountered during this preliminary investigation generally consisted of layers of sand and silt from just below the surface to a total depth of 141.5 feet BGS. Appendix B contains copies of borehole logs.

According to an assessment report prepared by California Environmental in May 2000, soils in the area of the former gas station were reported to consist of sandy clay at a depth of 5 feet BGS, silty sand with clay at 10 feet BGS, silty sand from 15 to 30 feet BGS, silty sand with gravel from 50 to 100 feet BGS, a gravel layer at 115 feet BGS, and sand from 125 to 170 feet BGS.

3.2 HYDROGEOLOGY

The existing monitoring well (MW A) located at the southwest corner of the Forum property was sampled and depth to groundwater was measured at 138.37 feet BGS.

The existing monitoring well (MW B) located at the northwest corner of the Forum property was sampled and depth to groundwater was measured at 162.25 feet BGS.

The existing monitoring well (MW C) located south of the Forum building, east of the truck ramp was sampled and depth to groundwater was measured at 137.11 feet BGS.

Grab groundwater samples were not collected from the other borings due to mechanical problems (ET-1) or due to greater than twenty feet of soil samples with no detectable contamination (ET-3 and ET-4).

Although groundwater was encountered at a depth of 140 feet in borehole ET-2a, a grab groundwater sample was not collected due to field personnel oversight.

Although groundwater depth was measured at the three of the four onsite monitoring wells, since the elevation of the well casings is not known, a site-specific gradient could not be calculated.

Based on local topography, groundwater is anticipated to be predominantly in a west-southwest direction.

TABLE 4-1

SUMMARY OF ANALYTICAL DATA FOR SOIL SAMPLES
Great Western Forum, Inglewood, California

Sample ID	TPHg mg/Kg	MTBE mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes mg/Kg
Boring ET4						
ET4-20'	**1.2**	ND<0.005	ND<0.005	**0.009**	**0.007**	**0.034**
ET4-30'	**1.7**	ND<0.005	**0.010**	**0.052**	**0.018**	**0.096**
ET4-40'	**6.2**	ND<0.005	**0.060**	**0.21**	**0.085**	**0.36**
ET4-50'	**5.0**	ND<0.005	**0.054**	**0.18**	**0.073**	**0.30**
ET4-60'	ND<0.5	ND<0.005	**0.009**	**0.008**	**0.007**	**0.013**
ET4-70'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET4-80'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET4-90'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET4-100'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET4-110'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005

Notes:
ND - Not detected, detection limit listed after < symbol.
mg/kg: Milligrams per kilogram or parts per million (ppm)
TPHg – Total Petroleum Hydrocarbons as gasoline
MTBE – Methyl Tertiary Butyl Ether

Lead was detected in sample ET1-50' at a concentration of 0.52 mg/kg, in ET2a-40' at a concentration of 4.1 mg/kg, in ET3-50' at 5.1 mg/kg and in ET4-40' at 1.3 mg/kg.

4.2 GROUNDWATER SAMPLE ANALYSIS RESULTS

The following table summarizes the results of the laboratory analysis of the groundwater samples.

TABLE 4-2

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
Great Western Forum, Inglewood, California

Sample ID	TPH-G (μg/L)	MTBE (μg/L)	Benzene (μg/L)	Toluene (μg/L)	Ethyl-benzene (μg/L)	Xylenes (μg/L)	PCE (μg/L)
Monitoring Wells							
MW A	ND<0.1	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.7
MW B	ND<0.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW C	ND<0.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1
Regulatory Standards							
MCL	N/A	13	1.0	150	700	1,750	5.0

Notes:
Other VOCs were not detected (see Appendix C)
ND - Not detected, detection limit listed after < symbol.
μg/L: Micrograms per liter
PCE - Tetrachloroethene
MCL – Maximum Contaminant Level

4.0 FINDINGS

4.1 SOIL SAMPLE ANALYSIS RESULTS

The following table summarizes the results of the laboratory analysis of the soil samples collected from boreholes ET-1 through ET-4 and ET-2A.

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
Great Western Forum, Inglewood, California

Sample ID	TPHg (mg/Kg)	MTBE (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
Boring ET1						
ET1-20'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET1-30'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET1-40'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET1-50'	ND<0.5	ND<0.005	**0.007**	ND<0.005	**0.006**	**0.011**
ET1-60'	ND<0.5	ND<0.005	ND<0.005	**0.010**	ND<0.005	**0.014**
ET1-70'	ND<0.5	ND<0.005	ND<0.005	**0.005**	ND<0.005	**0.007**
ET1-75'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
Boring ET2						
ET2-10'	**910**	ND<0.005	ND<0.005	**0.24**	**1.5**	**17**
Boring ET2a						
ET2a-30'	**6.0**	ND<0.005	ND<0.005	**0.17**	**0.060**	**0.34**
ET2a-40'	**3,500**	ND<0.005	**9,400**	**9,100**	**5,900**	**227,000**
ET2a-60'	**4.5**	ND<0.005	**0.14**	**0.094**	**0.12**	**0.32**
ET2a-70'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET2a-80'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET2a-105'	ND<0.5	ND<0.005	**0.009**	**0.021**	**0.017**	**0.057**
ET2a-120'	ND<0.5	ND<0.005	ND<0.005	**0.011**	**0.009**	**0.032**
ET2a-125'	ND<0.5	ND<0.005	ND<0.005	**0.008**	**0.005**	**0.021**
ET2a-130'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	**0.010**
ET2a-135'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	**0.007**
ET2a-140'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	**0.006**
Boring ET3						
ET3-20'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-30'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-40'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-50'	**2.2**	ND<0.005	**0.056**	**0.084**	**0.049**	**0.16**
ET3-60'	ND<0.5	ND<0.005	ND<0.005	**0.006**	ND<0.005	**0.007**
ET3-70'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-80'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-90'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-100'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-110'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-120'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-130'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ET3-135'	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005

4.3 PREVIOUS ENVIRONMENTAL INVESTIGATION REPORTS

Earth Tech reviewed a report titled "Phase II Environmental Site Assessment Report, Former Service Station, Great Western Forum, 590 South Prairie Avenue, Inglewood, California", prepared by SCS Engineers (SCS) and dated August 5, 1999.

- This report indicates that a geophysical survey was conducted by SCS in July 1999 in the area of the former service station at the southwest corner of the Great Western Forum property. No indication of underground storage tanks was found.
- At the same time, SCS conducted a soil vapor survey in ten locations throughout this area. Petroleum hydrocarbons at a concentration of 550 parts per million were detected in one sample at a depth of 15 feet below ground surface (bgs).
- SCS drilled eight soil borings in this area to depths up to 100 feet bgs. Concentrations of petroleum hydrocarbons as gasoline up to 29,270 mg/kg were detected in the soil. BTEX was also detected in the soil samples, with concentrations of benzene up to 199.5 mg/kg detected. No MTBE was detected in any of the soil samples analyzed. The highest concentrations of gasoline were detected in soil collected from 15 to 45 feet bgs.
- SCS concluded that remediation of the soil would be required and should be conducted under the oversight of an appropriate regulatory agency.

Earth Tech reviewed a report titled "Preliminary Environmental Site Assessment – Phase I Update, Scoping Pre-Demolition Asbestos Sampling; Lead Sampling; Soil and Groundwater Sampling, The Great Western Forum, 3900 Manchester Boulevard and 590 South Prairie Avenue, Inglewood, California", prepared by California Environmental and dated May 2000.

- California Environmental drilled soil borings to depth ranging from 50 to 190 feet bgs.
- Four of the borings were converted to groundwater monitoring wells. The monitoring wells were located at the southwest, northwest and northeast corners of the Great Western Forum property and just to the south of the existing UST located east of the truck ramp.
- Groundwater was encountered at depths of 140 to 166 feet bgs.
- Petroleum hydrocarbons and BTEX were detected only in soil samples collected from the boring located at the southwest corner of the Great Western Forum property (the location of the former gas station).
    - TPH was detected at a depth of 50 feet bgs at a concentration of 980 mg/kg.
    - BTEX was also detected in this sample (Benzene at <0.5 mg/kg, Toluene at 16 mg/kg, Ethylbenzene at 24 mg/kg, and Xylenes at 120 mg/kg). Xylenes were detected in the 30-foot bgs sample from this boring at a concentration of 6 mg/kg. Toluene and Xylenes were also detected in the 100-foot bgs sample from this boring at concentrations of 0.009 and 0.01 mg/kg, respectively.
    - MTBE was detected in the 50-foot sample at a concentration of <1 mg/kg.
    - A groundwater sample collected from the monitoring well in this area (MW A) was found to contain TPH (75 μg/l), Benzene (0.9 μg/l), Toluene (4.6 μg/l), Ethylbenzene (1.4 μg/l), and Xylenes (8.4 μg/l).

    - Xylenes were detected in a sample from one of the other monitoring wells at a concentration of 1 μg/kg.

- California Environmental concluded that the soil at the southwest corner of the subject property was impacted with gasoline from the former gasoline station. The gasoline plume extended to at least 80 feet bgs and the lateral extent had not been completely defined.
- California Environmental indicated that additional assessment of the soil and groundwater would be required.

4.4 UST REMOVAL REPORT

Earth Tech reviewed a report titled "Soil Sampling Related to the Removal of an Underground Storage Tank, Great Western Forum, 3900 Manchester Boulevard, Inglewood, California", prepared by Advanced GeoEnvironmental, Inc. and dated March 18, 2004 (Appendix D).

This report indicates that a 1,000-gallon UST was removed from the area to the east of the truck ramp to the Forum building on February 25, 2004. Following removal of the UST, soil samples were collected from beneath each end of the former UST and from beneath the removed dispenser piping.

The soil samples were submitted for analysis for TPHg by EPA Method 8015 and for VOCs and fuel oxygenates by EPA Method 8260B.

No TPHg or VOCs were detected in the soil sample collected from beneath the west end of the UST.

The soil sample collected from beneath the east end of the UST was found to contain TPHg at a concentration of 0.80 milligrams per kilogram (mg/kg), benzene at 0.005 mg/kg, toluene at 0.017 mg/kg, xylenes at 0.010 mg/kg and MTBE at 0.66 mg/kg. MTBE was the only compound detected in the sample collected from under the removed fuel dispenser line at a concentration of 0.006 mg/kg.

The report was reportedly submitted to the LACDPW for review.

5.0 CONCLUSIONS

Concentrations of TPHg and/or BTEX were identified in all of the soil borings (ET-1 through ET-4). The concentrations of TPHg and BTEX were greatest in boring ET-2a at a depth of 40 feet bgs and Boring ET-2 at a depth of 10 feet bgs. No MTBE concentrations were detected in any of the soil samples analyzed. Lead concentrations were comparable to background levels. The depths where the greatest impacts were detected were similar to the results of California Environmental's 2000 sampling. However, concentrations of gasoline and BTEX encountered during Earth Tech's sampling exceeded the maximum concentrations found by California Environmental.

Soil Sampling

Based upon the LUFT Manual (Leaking Underground Fuel Tank Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, LARWQCB, Revised October 1989) concentrations of TPH as gasoline exceeding 1,000 ppm, benzene exceeding 1 ppm, and toluene, ethylbenzene and xylenes concentrations exceeding 50 ppm represent a potential threat to groundwater and further site assessment and probable remedial action will be required for site closure.

All of these levels were exceeded in sample ET2a-40 at 40 feet BGS.

Groundwater Sampling

No petroleum hydrocarbons or BTEX were detected in the groundwater samples collected. Concentrations of MTBE and PCE detected were below the MCLs.

UST Removal

Sampling upon removal of the UST indicates a release of fuel hydrocarbons from the UST and the associated dispenser. In Earth Tech's opinion, due to the detected levels of MTBE in the soil, the Los Angeles County Department of Public Works, Environmental Programs Division (LACDPW) will likely require further assessment of this release and may require remediation of impacted soil.

6.0 RECOMMENDATIONS

Based on the levels of contaminants identified at the Property and evaluation using the LUFT manual, there is a potential risk to the groundwater presented by the residual hydrocarbon contamination, apparently caused by the historical gasoline station.

Earth Tech recommends that this and any historical reports be submitted to the LACDPW, and further assessment and remediation be conducted under their oversight.

Earth Tech recommends that assessment and possible remediation in the area of the recently removed UST be conducted according to the recommendations of the LACDPW.

7.0 LIMITATIONS

Subsurface sampling investigations are, by nature, limited. There is a potential that excavation at the site will unearth previously undiscovered conditions, which could negatively impact excavation activities (i.e. previously undiscovered chemical contamination, underground tanks, etc.).

Representatives, Warranties and Covenants

EARTH TECH makes no warranty, either express or implied, as to its findings, opinions, recommendations, specifications, or professional advice except that these were promulgated after being prepared in accordance with generally accepted standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature.

The information contained in this report has received appropriate technical review and approval. The conclusions and recommendations presented represent professional judgments and are based upon the findings from the investigation identified in the report and the interpretation of such data based on our experience and background. This acknowledgment is made in lieu of all warranties, either expressed or implied.

Scope of Investigation

The scope of this investigation is limited to the scope of work as specified Earth Tech's proposal (attached as Appendix A).

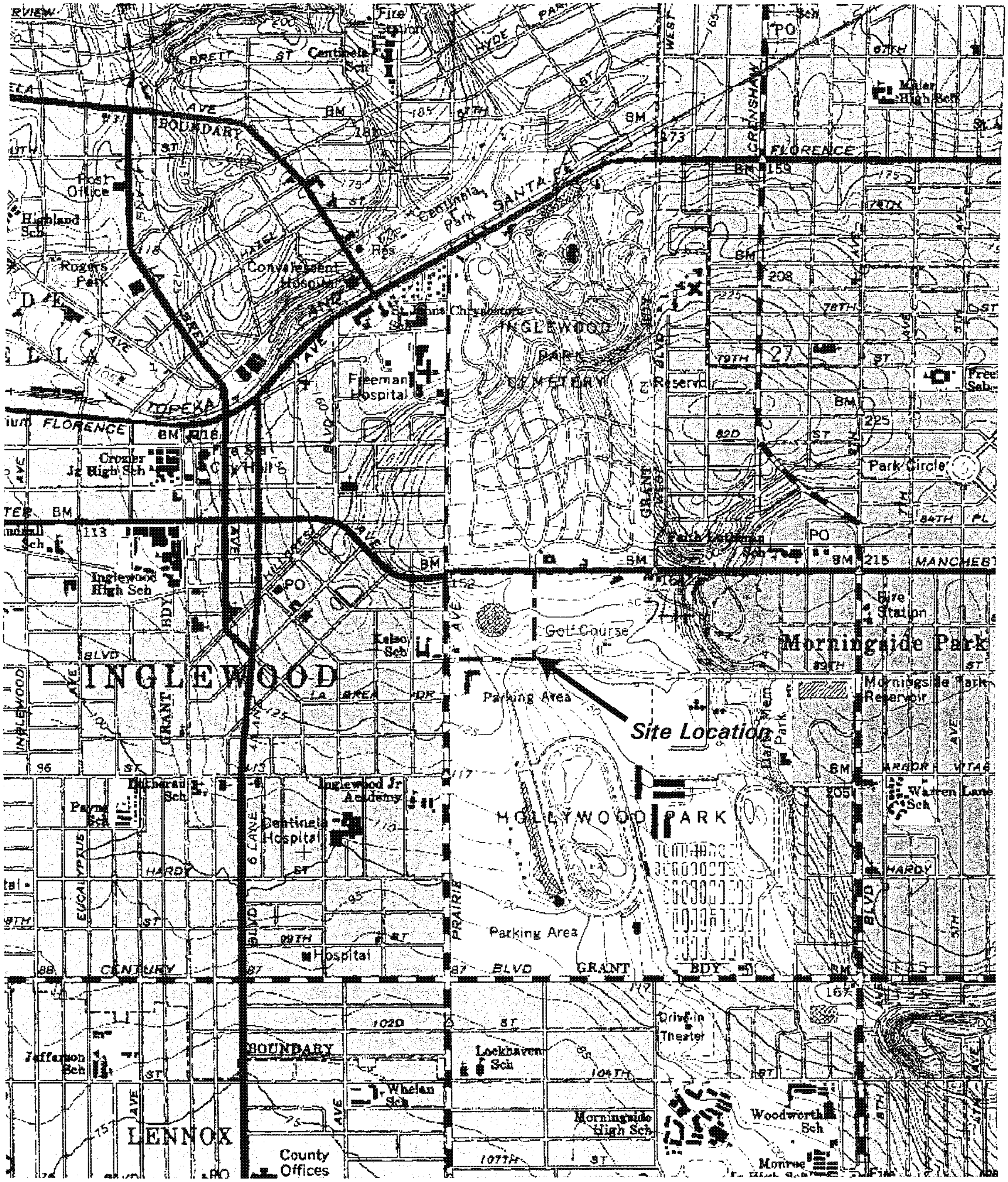
Limitations on Reuse

All project documents prepared or furnished to Client may be based on information outside Consultant's control. Consultant does not warrant, expressed or implied, the accuracy thereof. All documentation furnished to the Client is intended for the benefit of the Client and is not intended or represented to be suited for reuse by the Client or others. Any reuse without the specific written consent of the Consultant for the specific purposes intended will be at user's sole risk and without liability and legal exposure to Consultant. Client agrees to indemnify and hold Consultant harmless from any and all liabilities, losses, costs, or expenses suffered by Consultant in connection with Client's unauthorized reuse of project documents.

Bank Reliance

Washington Mutual Bank may rely on the information, findings, conclusions, and recommendations provided in this report.

FIGURES



Project No. 74705

3900 W. Manchester Blvd.

Site Vicinity Map

Figure 1

North

Scale 1:24000

Source: USGS Topographic Map, Inglewood, CA Quadrangle.

[redacted] AMF
SIIR

9620-38886

THE FORUM

"...since we are surrounded by so great a cloud of witnesses... let us run with endurance the race that is set before us"
Hebrews 12:1 (NIV)

September 3, 2004

Los Angeles County Department of Public Works
Environmental Programs Division
900 South Fremont Avenue, 3rd Floor Annex
Alhambra, California 91803

RECEIVED
SEP 0 8 2004
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

To Whom It May Concern:

Forum Enterprises conducted Phase I and II Environmental Site Assessments (ESAs) at the Great Western Forum property in Inglewood, California, as part of due diligence in order to obtain financing.

The Phase I ESA identified an historical Atlantic Richfield gas station, at 590 South Prairie Avenue, formerly located at the southwest corner of the Great Western Forum property. Soil and groundwater samples collected during the subsequent Phase II ESA identified the presence of soil and groundwater impacts at the site.

C509211

These documents appear to indicate the release of chemicals from the past use of the site as well as potentially from nearby sites. No evidence has been found to indicate that any agencies have been notified of the results of historical environmental assessment at the site.

Copies of these reports are being forwarded to your agency for evaluation and recommendations.

Forum Enterprises is seeking a response from the responsible agency that is going to take the lead for this project regarding guidance/oversight of further assessment and/or remediation at the site.

Forum Enterprises can be reached at the following address:

Forum Enterprises
3900 West Manchester Boulevard
Inglewood, CA 90305
Attn.: Mr. Marc Little
(310) 330-8000

A 400401

Building Upon The Legacy of Champions

Earth Tech conducted the environmental assessments for Forum Enterprises at this property. Mr. Simon is the main point of contact at Earth Tech for this matter.

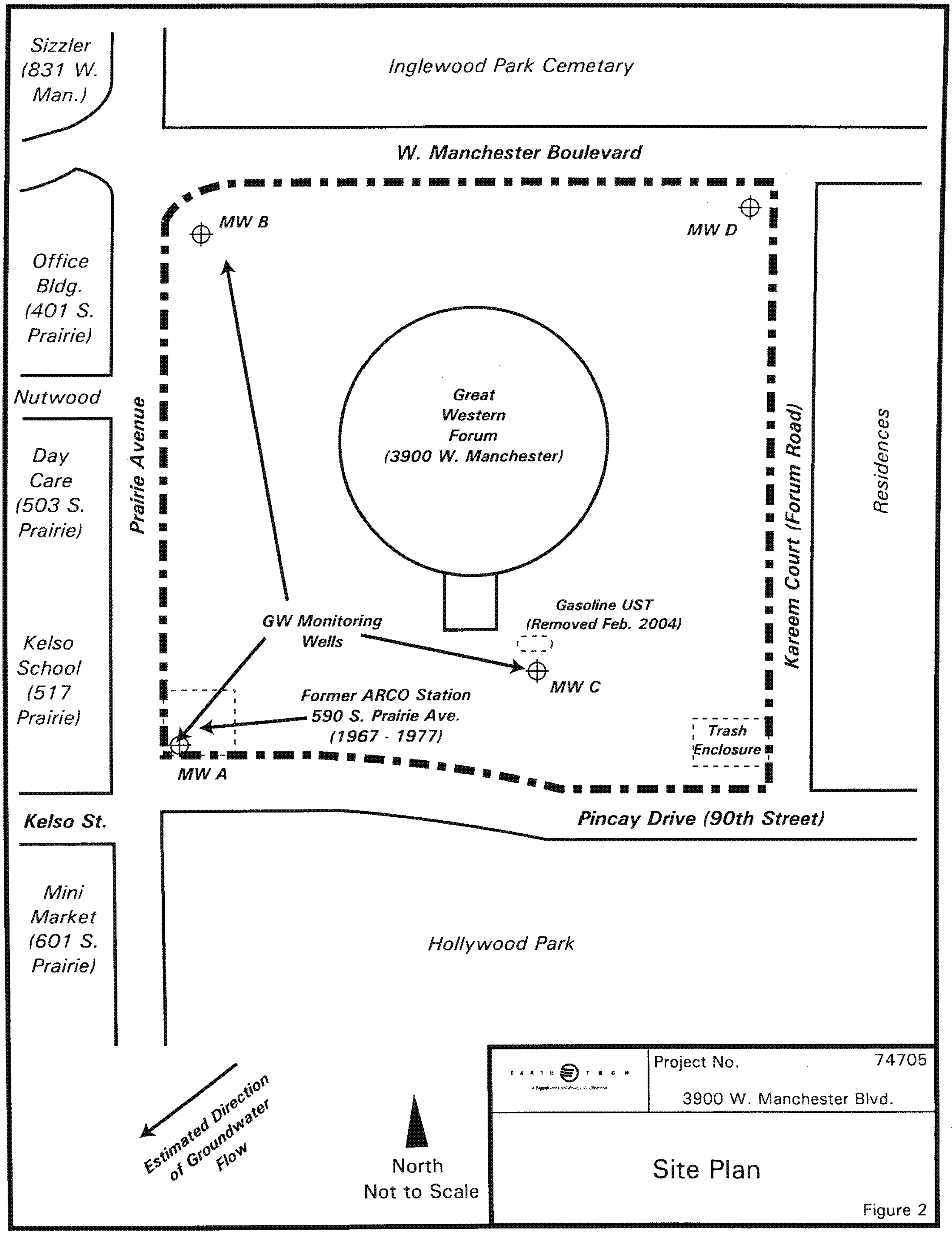
Mr. David Simon
Earth Tech, Inc.
300 Oceangate, Suite 700
Long Beach, CA 90802
(562) 951-2046
david.simon@earthtech.com

Thank you for your prompt attention to this matter.

Very truly yours,

Forum Enterprises, Inc.

Marc T. Little, Esq.
Chief Operating Officer

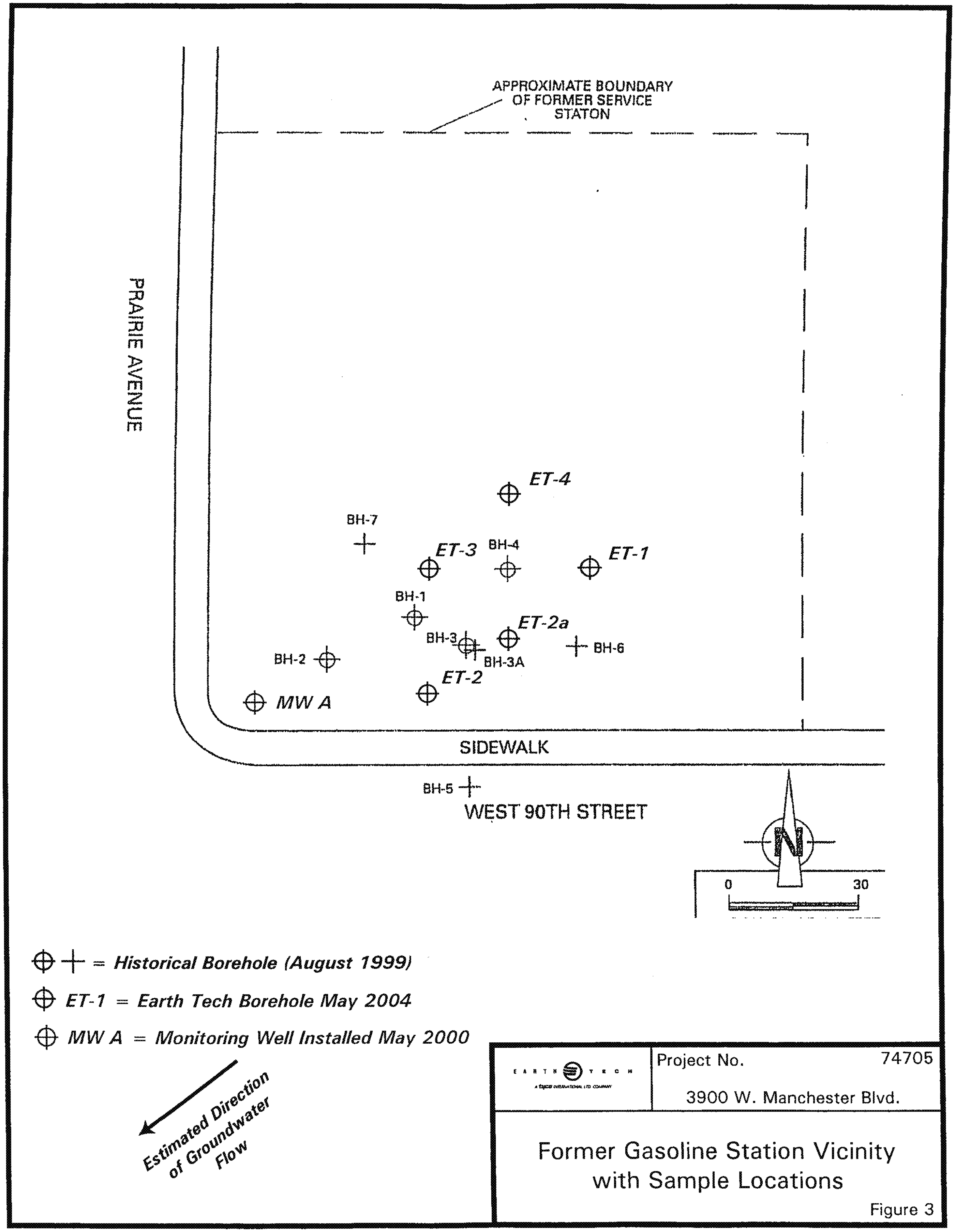


Project No. 74705

3900 W. Manchester Blvd.

Site Plan

Figure 2



Project No. 74705

3900 W. Manchester Blvd.

Former Gasoline Station Vicinity
with Sample Locations

Figure 3

EARTH TECH

Borehole Log

Project Name:	Forum Enterprise	Project Number:	76930-01	**Borehole Number:**	**ET-1**
Borehole Location:	Prairie & Pincay Dr - Former 90th St, SW corner of parking lot *Northing:*	*Easting:*		Sheet	*1* of *3*
Drilling Agency:	J&H Drilling Co. Inc.	Driller:	Clint Jefferson		
Drilling Equipment:	BK-81 modified	Date Started:	4/28/2004	Total Depth (ft bgs):	76.5
Drilling Method:	Hollow Stem Auger	Number of Samples:		Date Finished: 4/30/2004	Depth to Bedrock (ft bgs): NE
Drilling Fluid:	None	Borehole Diameter (in): 8		Depth to Water (feet): *Drilling:* NE	*Static:* NA
Completion Information:	Backfilled with bentonite	Elevation (feet MSL):	*Ground:*	*Top of Casing:*	
		Logged By:	R. Lopez	Checked By:	

Depth (feet)	Samples					Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
										AF	Asphalt	hand augered first 5'
											10" base	
										SM	SILTY SAND; yellowish brown (10YR); 70% fine, poorly graded sand; 30% silt; loose; dry; no odor	
5										SC	CLAYEY SAND; hard	
10										SP	grading to SAND; yellowish brown; loose; trace silt	
										SM	grading to SILTY SAND	
15												
										ML	SILT; yellowish brown; non plastic; dry; dense; easilty crumbs; no odor	
20		◇		100	0821		0/0	8021 8015				
										SP	SAND; yellowish brown; 70% fine sand; 30% medium sand; trace sitl; loose; dry; no odor	
25		◇		100	0828		0/0	hold				
30												

E A R T H T E C H

Borehole Log
(Continuation Sheet)

Project Name: Forum Enterprise	Project Number: 76930-01	Borehole Number:	ET-1
Borehole Location: Prairie & Pincay Dr - Former 90th St, SW corner of parking lot		Sheet 2 of 3	

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
		◇	28 50 to 6	100	0833		0/0	8015 8021			grading to 97% fine sand; 3% silt	4-28-04 4-29-04
35		◇	18 23 33	100	0730		0/0	hold		SM	SILTY SAND; brown; 70% fine sand; 30% silt; dry; loose; no odor	
40		◇	16 19 26	80	0750		0/0	8015 8021			grading to 80% sand; 20% silt	
										ML	SILT; dark brown; 100% silt; non plastic; dry; no odor	
45		◇	16 27 29	100	0800		1.1/0.0	hold				
										SP	SAND; light brown; rounded; clean; dry; loose; no odor	
50		◇	24 40 50 for 3"	100	0810		2.0/0.0	8015 8021				4-29-04 4-30-04
										ML	SILT; brown; 100% silt; non plastic; dry; brittle; dense	
55		◇	13 21 27	67	0707		0.8/0.0	hold				
										SM	SILTY SAND; light brown to brown; 60% fine sand; poorly graded; 40% silt; dense; dry; no odor	
60		◇	24 30 50 to 6	100	0717		0/0	8021 8015				
										SP	SAND; light brown; 100% sand; clean; dense; dry;	
65												

EAFB_Bore(SB)\Prairie & Pincay Dr - Former 90th St, SW corner of parking lot\Forum Enterprise\76930-01

E A R T H T E C H

Borehole Log
(Continuation Sheet)

Project Name: Forum Enterprise	Project Number: 76930-01	**Borehole Number:** **ET-1**
Borehole Location: Prairie & Pincay Dr - Former 90th St, SW corner of parking lot		Sheet 3 of 3

	Samples					**Field Analysis**			**Log**			
Depth (feet)	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	**Lithologic Description**	**Remarks**
		◇	24 50 for 6"		0727		1.1/0.0	hold			no odor	
										SM	SILTY SAND; yellowish brown; 70% sand; poorly graded; 30% silt; dense; dry; no odor	
70		◇	29 49 for 3"		0733		0.2/0.0	8021 8015				
75		◇	26 39 50 for 3"		0744		0.3/0.0	8021 8015				
											Total Depth = 76.5 feet	

Borehole Log

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:** ET-2	
Borehole Location: Prairie/Pincay Dr - SW of ET1	*Northing:*	*Easting:*	Sheet *1* of *1*
Drilling Agency: J&H Drilling Co. Inc.	Driller: Clint Jefferson		
Drilling Equipment: CME 75	Date Started: 4/30/2004	Total Depth (ft bgs): 11.5	
Drilling Method: Hollow Stem Auger	Number of Samples:	Date Finished: 4/30/2004	Depth to Bedrock (ft bgs): NE
Drilling Fluid: None	Borehole Diameter (in): 8	Depth to Water (feet): *Drilling:* NE	*Static:* NA
Completion Information: Backfilled with bentonite	Elevation (feet MSL) : *Ground:*	*Top of Casing:*	
	Logged By: R. Lopez	Checked By:	

Depth (feet)	Samples					Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
									■	AF	2" Asphalt	Hand auger first 5'
											10" base	
									▨	CLs	SANDY CLAY; dark brown; slightly cohesive; damp; slgith petroleum hydrocarbon odor	
5									▨		increasing petroleum odor	
10		◇	5 8 12	100	0942		34/0.0	hold	░	SP	SAND; dark brown; poorly graded; clean; dry; dense; very strong petroleum odor	
											Total Depth = 11.5 feet	
15												Will step out to SW - 20' due south of ET-3
20												
25												
30												

EARTH TECH

Borehole Log

Project Name:	Great Western Forum	Project Number:	76930-01	**Borehole Number:**	**ET-2a**
Borehole Location:	Prairie/Pincay	*Northing:*	*Easting:*	Sheet	*1* of 5
Drilling Agency:	J&H Drilling Co. Inc.	Driller:	Clint Jefferson		
Drilling Equipment:	CME 75	Date Started:	4/30/2004	Total Depth (ft bgs):	141.5
Drilling Method:	Hollow Stem Auger	Number of Samples:			
		Date Finished:	4/30/2004	Depth to Bedrock (ft bgs):	NE
Drilling Fluid:	Water	Borehole Diameter (in):	8		
		Depth to Water (feet):	*Drilling:* 140.00	*Static:*	NA
Completion Information:	Backfilled with bentonite	Elevation (feet MSL) :	*Ground:*	*Top of Casing:*	
		Logged By:	R. Lopez	Checked By:	

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
										AF	2.5" Asphalt	Hand auger first 5'
											10" base	
										SM	SILTY SAND; dry; no odor	
5												
10		◇	8 8 10		0952		142/0.0	hold		SP	SAND; light to yellowish brown; 100% fine sand; clean; trace silt; dry; dense; strong petroleum odor	
15												
										SM	SILTY SAND; yellowish brown; 70% very fine sand; 30% silt; dry; dense; strong petroleum odor	
20		◇	12 14 16		1002		2000/0	hold				
25												
30												

EAFB_Bore(SB)\Prairie/Pincay\Great Western Forum\76930-01

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:** ET-2a
Borehole Location: Prairie/Pincay		Sheet 2 of 5

Depth (feet)	**Samples**					**Field Analysis**			**Log**		**Lithologic Description**	**Remarks**
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
		◇	14 15 23	100	1025		>2000	8021 8015		SM	Same as above	
35												
40												
45												
										SP	SAND; light brown; 100% fine sand; clean; dry; dense; moderate petroleum odor	
50		◇	18 23 27		1036		>2000	hold				
55												
										ML	SILT; yellowish brown; 100% low plasticity silt; trace fine sand; firm; dry; moderate odor	
60		◇	20 22 36				65/0.0	8021 8015		ML	Same as above	
										SM	SILTY SAND; yellowish brown; 80% fine sand;	
65												

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:** ET-2a
Borehole Location: Prairie/Pincay		Sheet 3 of 5

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
											20% silt; dense; dry; moderate odor	
70			15 27 31		1110		17.0/0.0	8021 8015				
75												
										SP	SAND; 100% fine sand; clean; dense; dry; moderate petroleum odor	
80			25 50 for 3"		1155		12.5/0.0	8021 8015				
85												
90			50 for 3"	10	1217						90-91.5 (pulverized rock in shoe); no sample	
95												
100												

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:**	ET-2a
Borehole Location: Prairie/Pincay		Sheet 4 of 5	

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
											missed sample - miscommunication with driller; will collect @ 105 and every 5 feet then on	
105			18 21 30		1240		0.5/0.0	8021 8015		ML	SILT; dark brown; non plastic; dry; firm; no odor gravel (pulverized rock) in sleeve	
										SP	SAND; light brown; 60% fine sand; 30% medium sand; 10% silt; dense; dry; no odor	
110			33 50 for. 6"		1250		15.0/0.0	hold				
										SW	SAND; light brown; well graded; 50% coarse sand; 30% mdeium sand; 20% fine sand; dense; dry; no odor	
115			30 50 for 3"		1300		0.9/0.0	hold				
120			32 50 for 3"		1310		1.2/0.0	8015 8021			grading to 40% coarse sand; 405 medium sand; 20% fine sand	
125			29 50 for 6"		1320		1.1/0.0	8015 8021		SP	SAND; light brown; poorly graded; 60% fine sand; 405 medium sand; clean	
130			41 50 for 3"		1340		0.5/0.0	8015 8021				
135												

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:**	ET-2a
Borehole Location: Prairie/Pincay		Sheet 5 of 5	

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
		◇	29 32 38		1350			8015 8021			color change to yellowish brown; 100% very fine to fine sand; clean; dense; dry; no odor	
140		◇			1403			8015 8021		▽ MLs	SANDY SILT; 70% silt; 30% very fine sand; micaceous; saturated; no odor	
											Total Depth = 141.5 feet	

EARTH TECH

Borehole Log

Project Name: Great Western Forum		Project Number: 76930-01		**Borehole Number:** ET-3	
Borehole Location: Prairie/Pincay	*Northing:*	*Easting:*		Sheet *1* of *5*	
Drilling Agency: J&H Drilling Co. Inc.		Driller: Clint Jefferson			
Drilling Equipment: BK-81		Date Started: 5/3/2004		Total Depth (ft bgs): 136.5	
Drilling Method: Hollow Stem Auger	Number of Samples:	Date Finished: 5/30/2004		Depth to Bedrock (ft bgs): NE	
Drilling Fluid: Water	Borehole Diameter (in): 8	Depth to Water (feet): *Drilling:* NE		*Static:* NA	
Completion Information: Backfilled with bentonite		Elevation (feet MSL) : *Ground:*		*Top of Casing:*	
		Logged By: R. Lopez		Checked By:	

Depth (feet)	Samples					Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
										AF	2" Asphalt 10" base	Hand auger first 5'
										SM	SILTY SAND; light to yellowish brown; 70% fine, poorly graded sand; 30% silt; cohesive; slightly moist; no odor	
5										MLs	SANDY SILTS; yellowish brown; 70% silt; 30% fine, poorly graded sand;firm; dry; no odor	
10												
15												
20		◇	8 12 15	100	0800		0/0					
												very tight drilling begining at 24'
25												
30												

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:**	ET-3
Borehole Location: Prairie/Pincay		Sheet 2 of 5	

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
		◇	16 18 29	100	0810		0/0			SM	SILTY SAND; yellowish brown;	
35												very tight drilling
40		◇	21 22 40	100	0822		0/0			ML	SILT; brown; 100% non plastic silt; cohesive; firm; dry; no odor	add 5 gal of water to auger
45										SP	SAND; dark brown to gray; 100% fine, poorly graded sand; clean; dry; very dense; no odor	
50		◇	17 21 33	100	0833		0.6/0.0			ML	CLAYEY SILT; dark brown to gray; slightly plastic to non plastic; dry; firm; very slight petroleum odor	
55												
60		◇	9 19 34	100	0843		0/0			SP-SM	SAND with SILT; light brown; fine poorly graded sand; interbedded silt; firm; dry; no odor	
65												

EAFB_Bore[SB]\Prairie/Pincay\Great Western Forum\76930-01

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:**	ET-3
Borehole Location: Prairie/Pincay			Sheet 3 of 5

Depth (feet)	Samples					Field Analysis			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
												add water
70			30 50 for 5"	67	0855		0/0			SM	SILTY SAND; brown; 70% fine, poorly graded sand; 30% silt; dense; dry; no odor	
75												
										SW	SAND; well graded; 50% coarse sand; 30% medium sand; 20% fine sand; angular to subrounded; trace subrounded gravel; dry; dense	
80			29 27 60 for 4"	67			0/0					
85												
												add water
90			32 50 for 5"	100	0940		0/0				grading to GRAVELLY SAND; 30% gravel; 70% sand	
95												
100												

EAFB_Bore(SB)\Prairie/Pincay\Great Western Forum\76930-01

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:** ET-3	
Borehole Location: Prairie/Pincay			Sheet 4 of 5

Depth (feet)	Samples					Field Analysis			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
		◇	23 50 for 3"	100	0955		0/0			SW	well graded SAND	
												add water
105												very tight
110		◇	30 36 50 for 3"	100	1012		0/0					
												add water
115												
120		◇	22 50 for 3"	66			0/0					
												add water
125												
130		◇	32 40 50 for 3"	67			0/0				Interbedded poorly graded SAND	
135												

EAFB_Bore[SB]\Prairie/Pincay\Great Western Forum\76930-01

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum	Project Number: 76930-01	**Borehole Number:**	**ET-3**
Borehole Location: Prairie/Pincay		Sheet 5 of 5	

	Samples					**Field Analysis**			**Log**			
Depth (feet)	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	**Lithologic Description**	**Remarks**
		◇	32 40 41	100			0/0		░	SP	SAND; dark yellowish brown; fine, poorly graded sand; trace silt; non plastic; moist; oxidation staining; no odor	
											Total Depth = 136.5 feet	

Borehole Log

Project Name: Great Western Forum
Project Number: 76930-01
Borehole Number: **ET-4**
Borehole Location: Prairie/Pincay
Northing:
Easting:
Sheet *1* of *4*
Drilling Agency: J&H Drilling Co. Inc.
Driller: Clint Jefferson
Drilling Equipment: CME 75
Date Started: 5/4/2004
Total Depth (ft bgs): 113.0
Drilling Method: Hollow Stem Auger
Number of Samples:
Date Finished: 5/4/2004
Depth to Bedrock (ft bgs): NE
Drilling Fluid: None
Borehole Diameter (in): 8
Depth to Water (feet): *Drilling:* NE *Static:* NA
Completion Information: Backfilled with bentonite
Elevation (feet MSL) : *Ground:* *Top of Casing:*
Logged By: R. Lopez
Checked By:

Depth (feet)	Samples					Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
0												Hand auger first 5'
5										SM	SILTY SAND	
10										SP	poorly graded SAND	
15												
20		◇	9 12 22	100	0732		9.0/0.0	8021 8015		MLs	SANDY SILT; yellowish brown; 80% silt; 20% fine, poorly graded sand; oxidation staining; dry; loose	
25		◇	10 16 21	100	0740		8.2/0.0	hold		SM	SILTY SAND; brownish gray; 80% fine, poorly graded sand; 20% silt; dry; dense; strong petroleum odor	
30												

E A R T H T E C H

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum

Project Number: 76930-01

Borehole Number: ET-4

Borehole Location: Prairie/Pincay

Sheet 2 of 4

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analysis: FID (ppm) Sample/Background	Field Analysis: PID (ppm) Sample/Background	Field Analysis: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
		◇	13 14 17	100	0747		32/0.0	8021 8015		SM	Same as above	
35		◇	8 14 22	100	0752		13.0/0.0	hold		ML	SILT; yellowish brown to brown; trace fine sand; dense; dry; moderate odor	
												very tight drilling
40		◇	30 50 for 3"	67	0756		18.8/0.0	8021 8015			color change to light brown	
										SM	SILTY SAND; brown; 70% fine, poorly graded sand; 30% silt; oxidation staining; dry; dense; slight petroleum odor	
45		◇	17 16 19	100	0805		39/0.0	hold				
										SP-SM	poorly graded SAND with interbedded SILT; light brown; dense; dry; slight petroleum odor	
50		◇	10 19 20	100	0812		26/0.0	8021 8015				
										ML	SILT; brown; firm; trace fine sand; trace clay; dry; slight odor	
55		◇	10 12 19	100	0817		16.7/0.0	hold				
60		◇	22 50 for 6"	100			3.5/0.0	8021 8015				
65												

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum
Project Number: 76930-01
Borehole Number: ET-4
Borehole Location: Prairie/Pincay
Sheet 3 of 4

	Samples					Field Analysis			Log			
Depth (feet)	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	Lithologic Description	Remarks
			24 50 for 3"	67	0832		3.6/0.0	hold				
70			21 27 50 for 3'	100	0839		2.6/0.0	8021 8015			oxidation staining	
										SP	SAND; yellowish brown; fine, poorly graded sand; oxidation staining; dry; no odor	
75			18 35 50 for 3	100	0843		1.0/0.0	hold				
80			11 15 26	100	0851		0/0	8021 8015				
										SW	well graded SAND interbedded with poorly graded SAND; light brown	
85			29 50 for 3"	100	0859		0.7/0.0	hold			grading to well graded SAND with gravel; light brown; 85% fine to coarse sand; 15% subangular gravel; dry; no odor	
90			40 50 for 3"	100	0907		0/0	8021 8015				
95												
100												

EARTH TECH

Borehole Log
(Continuation Sheet)

Project Name: Great Western Forum
Project Number: 76930-01
Borehole Number: **ET-4**
Borehole Location: Prairie/Pincay
Sheet 4 of 4

	Samples					**Field Analysis**			**Log**			
Depth (feet)	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	**Lithologic Description**	**Remarks**
		◇	21 32 40	100	0917		0/0	8021 8015	░	SW	grading to 40% coarse sand; 40% medium sand; 20% fine sand; dry; dense; no odor	
105									░			
110		◇		100	1025		0/0	8021 8015	░			
											over-drilled to retreive hammer & sampler Total Depth = 113.0 feet	

APPENDIX D

UST REMOVAL SOIL SAMPLING REPORT

Advanced
GeoEnvironmental, Inc.

Soil Sampling Related to the Removal of an Underground Storage Tank

Great Western Forum, 3900 Manchester Boulevard, Inglewood, California

AGE Project No. LA 703D3.1209
18 March 2004

PREPARED FOR:
California Hazardous Services

SUBMITTED TO:
Los Angeles County Department of Public Works –
Environmental Programs Division

PREPARED BY:

Advanced GeoEnvironmental, Inc.
381 Thor Place, Brea, California 92821, Phone (714) 529-0200 • Fax 714) 529-0203
837 Shaw Road, Stockton, California 95215, Phone (209) 467-1006 • Fax (209) 467-1118
2318 Fourth Street, Santa Rosa, California 95404, Phone (707) 570-1418 • Fax (707) 570-1461
395 Del Monte Center, #111, Monterey, California 93940, Phone (800) 511-9300 • Fax (831) 394-5979

Advanced
GeoEnvironmental, Inc.

18 March 2004
AGE Project No. LA 703D3.1209

Mr. Jeff Henley
California Hazardous Services
1431 East Saint Andrew Place
Santa Ana, California 92705

Subject: **Soil Sampling Related to the Removal of an Underground Storage Tank - Great Western Forum, 3900 Manchester Boulevard, Inglewood, California**

Dear Mr. Henley:

In accordance with your request, we have collected and analyzed soil samples related to the removal of one gasoline underground storage tank and associated fuel dispenser at the above referenced address. The enclosed report describes the procedures and findings of this sampling program.

The opportunity to provide this service is greatly appreciated. If you have any questions regarding this matter, please feel free to call our office at (714) 529-0200.

Sincerely,

Advanced **GeoEnvironmental, Inc.**

Mark Slater
Project Geologist

Robert D. Loeffler
Project Geologist
California Registered Geologist No. 6709

Enclosures

cc: (2) addressee
(1) Los Angeles County Department of Public Works – Environmental Programs Division

381 Thor Place, Brea, California 92821
Telephone (714) 529-0200 FAX (714) 529-0203

Soil Sampling Related to the Removal of an Underground Storage Tank
Great Western Forum
3900 Manchester Boulevard, Inglewood, California

1.0. INTRODUCTION

Advanced GeoEnvironmental, Inc. (AGE) was retained by California Hazardous Services (CHS) to collect soil samples related to the removal of a gasoline underground storage tank (UST) and associated fuel dispenser at the above referenced site. The site is located in a commercial area of low topographic relief at an approximate elevation of 150 feet above sea level (Figure 1 - *Location Map*, 7.5-Minute Inglewood Quadrangle, USGS Topographic Series, Photorevised 1980).

1.1. DEPTH TO GROUND WATER INFORMATION

According to the County of Los Angeles Department of Public Works – Hydrological Records Section, the depth to ground water in well 1366B located at the intersection of 111th Place and Yukon Avenue, was 160.9 below surface grade (bsg) on 28 March 2001. This well is located approximately 8,800 feet south of the former UST location. The well head elevation is 74 feet above mean sea level. Depth to ground water is assumed to be similar on the subject property. Ground water was not encountered during this sampling event.

1.2. UNDERGROUND STORAGE TANK SYSTEM

The former fueling system consisted of one 1,000-gallon UST manufactured by JOOR of Escondido, California and one dispenser. The UST was double-walled fiberglass/steel composite construction. JOOR's final inspection date, stenciled on the side of the tank, was 19 February 1986. The location of the dispensers, UST and the immediately surrounding features are depicted on Figure 2 - *Site Plan*.

2.0. PROCEDURES

The UST was removed on 25 February 2004. Prior to removal, the tank was triple-rinsed by CHS. Rinseate was transported to Crosby & Overton in Long Beach, California for recycling (Manifest No. 22507240 is attached). The UST was certified as safe to cold cut by Thomas D. Beck of Harbor Testing Laboratory (Tank Certification Report attached) and was subsequently transported to Ecology Auto Parts in Santa Fe Springs, California for disposal (Certification of Destruction attached).

CHS had unroofed the UST, exposed the piping and removed the dispenser prior to AGE's arrival on 25 February 2004. The fuel dispenser had been mounted on top of an existing concrete pad approximately 10 feet west of the UST. Product piping from the dispenser to the UST ran on top of the slab for a distance of approximately two feet to a planter located between the dispenser and the UST. The piping entered the soil through a 90° elbow and was routed to the turbine. Due to the concrete pad, no sample was taken directly below the dispenser, however, a soil sample (DI1-D2) was obtained approximately two feet below the 90° elbow using a hand auger and bucket. No additional product line or vent samples were obtained because the dispenser was located less than 20 feet from the UST.

Samples from below either end of the UST were obtained from the teeth of a backhoe bucket. Soil was retrieved from the auger and backhoe buckets using one 5- and one 25-gram Encore sampler. The Encore samplers were then put in sealable bags, labeled and placed in a chilled container for subsequent transport to CalTech Environmental Laboratory (CTEL). Soil sampling activities were performed by Mr. Mark Slater of AGE, working under the supervision of Mr. Robert Loeffler, California Registered Geologist No. 6709. Inspector David R. Dolphin of the Los Angeles County Department of Public Works – Environmental Programs Division (LA-DPW) directed soil sampling activities (Closure Permit Supplement attached).

Following field work, the samples were transported under chain-of-custody to CTEL, a state-certified laboratory. The samples was analyzed for total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs, including BTE&X) with fuel oxygenates in accordance with EPA methods 8015-modified for diesel fuel and 8260b, respectively. The age of the UST (2/19/86) indicated that it was installed well after lead was removed from gasoline blending. Based on this, no lead analysis was performed.

3.0. FINDINGS

The soil consisted of predominantly silty sand. No hydrocarbon odors were noted during the sampling procedures.

MtBE was detected in the piping elbow sample next to the dispenser and in the sample from the eastern end of the UST. Low levels of benzene, toluene and ethylbenzene were also detected in the eastern UST sample. TPH-g was detected only in the eastern UST sample. Analytical results are summarized on Table 1. The analytical report (CTEL Project No. CT186-0402165) and chain-of-custody form are attached.

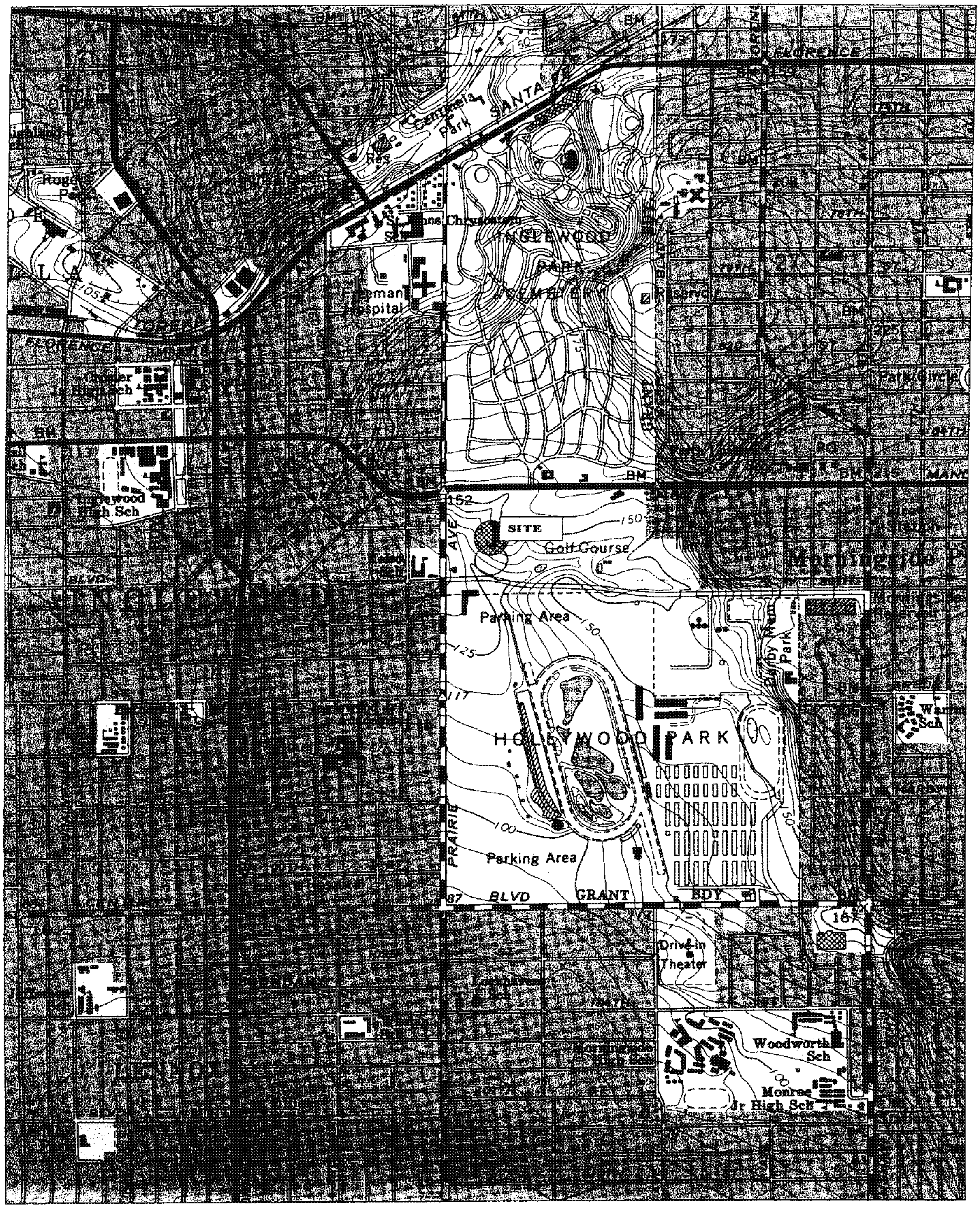
4.0. CONCLUSIONS

Based on field observations and analytical results, there is evidence of a minor unauthorized release of fuel from the dispenser and UST area. This report will be submitted to the LA-DPW for review and directives.

5.0 LIMITATIONS

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. The findings were based mainly upon analytical results provided by independent laboratories. Interpretations of the subsurface conditions at the site for the purpose of this investigation are made from a limited number of available data points (i.e. soil sample) and subsurface conditions may vary away from these data points. No other warranty, expressed or implied, is made as to the professional recommendations contained in this report.

FIGURES



Reference:

7.5-Minute Inglewood Quadrangle
USGS Topographic Series, Photorevised 1981

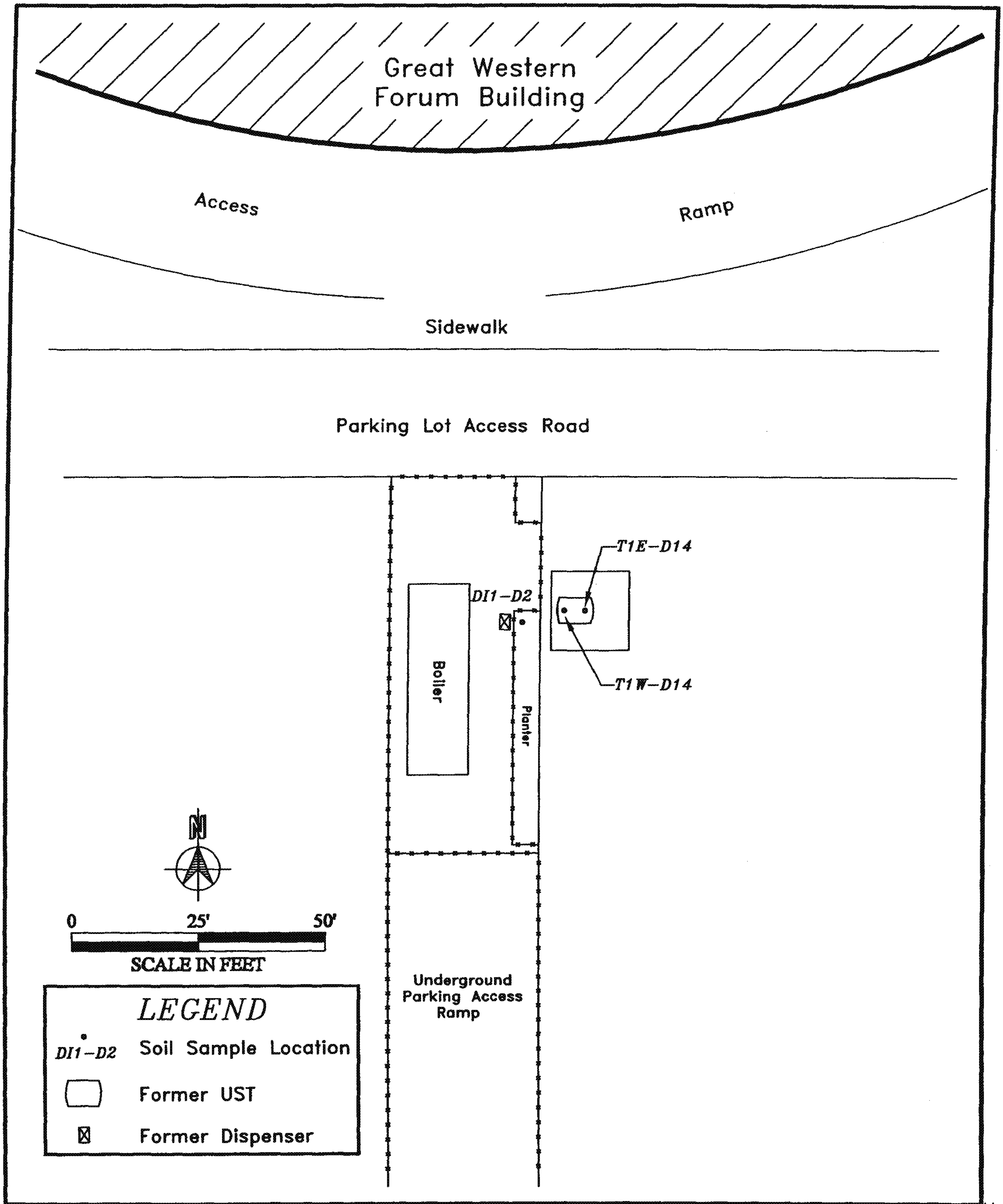
Advanced
GeoEnvironmental, Inc.

FIGURE 1 - LOCATION MAP

Great Western Forum
3900 Manchester Boulevard
Inglewood, California

Project No.:
LA 703D3.1209

Date:
18 March 2004



Advanced
GeoEnvironmental, Inc.

FIGURE 2
SITE PLAN

Great Western Forum
3900 Manchester Boulevard
Inglewood, California

Project No.:
LA 703D3.1209

Date:
18 March 2004

Michael Sean Irwin, AGE

TABLES

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Great Western Forum

3900 Manchester Boulevard, Inglewood California

Sample Number	**TPH-g 8015m (mg/Kg)**	**Volatile Organic Compounds with Fuel Oxygenates – 8260B (mg/Kg)**						
		Benzene	**Toluene**	**Ethyl Benzene**	**Xylenes**	**MTBE**	**Other Fuel Oxygenates**	**Other VOCs**
DI1-D2	<0.1	<0.005	<0.005	<0.005	<0.005	**0.006**	ND	ND
T1W-D14	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	ND	ND
T1E-D14	**0.80**	**0.005**	**0.017**	<0.005	**0.010**	**0.66**	ND	ND

< indicates below stated laboratory detection limit

ND indicated not detected

United Oil #57

Source:

Frey, 2007. *Groundwater Monitoring Well Monitoring and Sampling and Site Status Update, Third Quarter 2007, United El Segundo Station #57, 4520 West Century Boulevard, Inglewood, California, RWQCB ID # R-13682, Global ID #T0603705202,* Frey Environmental, Inc., 19 November 2007.

FREY ENVIRONMENTAL, INC.

Environmental Geologists, Engineers, Assessors

2817 A Lafayette Avenue
Newport Beach, CA 92663
(949) 723-1645
Fax (949) 723-1854
Email: freyinc@freyinc.com

November 19, 2007
284-36

Mr. Michael Yang
California Regional Water Quality Control Board
Los Angeles Region
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND SITE STATUS UPDATE
THIRD QUARTER 2007
UNITED EL SEGUNDO STATION #57
4520 WEST CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA
(RWQCB ID # R-13682, GLOBAL ID #T0603705202)

SITE INFORMATION

Station Number	United El Segundo Station #57	**Primary Consultant**	FREY Environmental, Inc.
Street	4520 W. Century Blvd.	**Contact**	John Duhl
City, State	Inglewood, CA	**Phone**	(949) 723-1645
United El Segundo Contact	Jeff Appel	**Lead Agency**	RWQCB
Phone	(310) 323-3992	**Contact**	Michael Yang
Other Agencies To Receive Copies	UST Cleanup Fund	**Phone**	(213) 576-6600
		Agency File No.	R-13682
		Global ID No.	T0603705202

WORK PERFORMED THIS QUARTER

1. Conducted quarterly monitoring and sampling of wells MW-1 through MW-19 on August 1 and 2, 2007.
2. Continued operation of a soil vapor extraction remediation system at the Site.
3. Continued operation of an air sparging remediation system at the Site.

RESULTS FROM CURRENT MONITORING AND SAMPLING EVENT

Current phase of project	Remediation	
Nature of contamination	Gasoline	
Frequency of monitoring/sampling	Quarterly	
Date of groundwater monitoring	August 1 and 2, 2007	
Wells purged/sampled	MW-1 through MW-19	
Number of wells	19 (10 on-Site and 9 off-Site)	
Purged / Sampled	19/19	
Depth to groundwater range	49.90 (MW-17) to 53.25 (MW-15)	**(ft btoc)**
Groundwater elevation range	36.44 (MW-19) to 41.09 (MW-4)	**(feet)**
Groundwater flow direction and gradient	Northeast / 0.015	**(ft/foot)**
Flow consistent with prev quarters	yes	
TPHg concentration range	ND<100 to 2,600	**(µg/L)**
Well with highest TPHg concentration	MW-2	
TPHd concentration range	ND<100 to 440	**(µg/L)**
Well with highest TPHd concentration	MW-16	
Benzene concentration range	ND<0.50 to 720	**(µg/L)**
Well with highest benzene concentration	MW-2	
MTBE concentration range	ND<2.0 to 10	**(µg/L)**
Well with highest MTBE concentration	MW-1	
TBA concentration range	ND<10 to 88	**(µg/L)**
Well with highest TBA concentration	MW-2	
Liquid phase hydrocarbons (LPH) present	No	
Wells with LPH	None	
Maximum LPH thickness	(n/a)	**(feet)**
Volume of LPH recovered	(n/a)	**(gal)**
Wells / surface water within 2000 feet	None	
Distance / direction from site (nearest)	(n/a)	**(feet)**
Volume of groundwater purged	275	**(gal)**
Disposal & recycling facility	Crosby & Overton	
Current remediation techniques	Vapor Extraction and air sparging	

(µg/L = micrograms per liter)

(ft btoc = feet below top of casing)

Summary of unusual activity	None
Agency directive requirements	None

DISCUSSION OF GROUNDWATER MONITORING WELL MONITORING AND SAMPLING

1. Free Product was not detected in any of the wells monitored and sampled.
2. Concentrations of TPHg, in general, increased slightly since the previous quarter but have decreased significantly from year-ago concentrations.
3. Concentrations of TPHd were detected in 11 of the 19 wells sampled.
4. Benzene concentrations were detected in 9 of the 19 wells sampled. Benzene concentrations have increased since the previous quarter but have decreased significantly from year-ago concentrations.
5. MTBE and/or TBA concentrations were detected in 4 of the 19 wells sampled. No significant changes in MTBE and TBA concentrations were observed since the previous quarter.
6. Groundwater elevations have decreased between 0.4 and 1.5 feet in Site wells since the Second Quarter 2007 monitoring event. A groundwater elevation mound that appears to be due to ongoing soil vapor extraction and air sparging, occurs on the northwestern portion of the Site. The general groundwater flow direction is estimated to be to the northeast.

WORK PROPOSED FOR THE FOURTH QUARTER 2007

1. Conduct quarterly monitoring of existing groundwater monitoring wells.
2. Continue vapor extraction and air sparge remedial activities at the Site.

If you have any questions regarding this report, please contact us at your convenience.

Sincerely,
FREY Environmental, Inc.

REGISTERED ENGINEERING GEOLOGIST
JOSEPH W. FREY
No. 1500
Exp. 8/31/08
STATE OF CALIFORNIA

Joe Frey
Principal Certified
Engineering Geologist
CEG #1500

John Duhl
Project Geologist
PG #7570

Deanna Hoppe
Staff Geologist

ATTACHMENTS

Table 1	Summary of Groundwater Levels and Chemical Analysis Results
Table 2	Summary of Well Monitoring and Free Product Recovery Data
Figure 1	Site Location Map
Figure 2	Site Sketch Showing Groundwater Elevations and Estimated Groundwater Flow Direction on August 1, 2007
Figure 3	Site Sketch Showing TPH Concentrations in Groundwater on August 1 and 2, 2007
Figure 4	Site Sketch Showing Benzene Concentrations in Groundwater on August 1 and 2, 2007
Figure 5	Site Sketch Showing MTBE Concentrations in Groundwater on August 1 and 2, 2007
Figure 6	Site Sketch Showing TBA Concentrations in Groundwater on August 1 and 2, 2007
Appendix A	Groundwater Sampling Procedures
Appendix B	Groundwater Sampling Data Sheets
Appendix C	Laboratory Report
Appendix D	Disposal Documentation

cc: Mr. Jeff Appel (electronic file)
United Oil El Segundo Inc.
17311 South Main Street
Gardena, CA 90248

Mrs. Tai Kang
2109 North Hobart Boulevard
Los Angeles, CA 90027

State Water Resources Control Board
Underground Storage Tank Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

TABLES

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-1	87.00	35-75	09/30/1997	55.56	31.44	ND	30,700	--	5,100	4,300	867	5,800	ND<2	--	--	--	--
			06/30/1998	51.81	35.19	ND	11,000	--	4,970	1,500	544	1,200	ND<25	--	--	--	--
			09/30/1998	50.84	36.16	ND	42,400	--	19,000	2,940	2,380	3,070	--	--	--	--	--
			12/08/1998	50.79	36.21	ND	53,400	--	15,400	3,390	3,100	5,860	ND<50	--	--	--	--
			03/15/1999	50.87	36.13	ND	47,500	--	17,100	2,350	3,710	5,600	--	--	--	--	--
			06/28/1999	51.36	35.64	ND	58,300	--	14,900	640	2,520	1,850	ND<20	--	--	--	--
			09/28/1999	51.65	35.35	ND	43,600	--	11,600	900	2,130	1,080	ND<50	--	--	--	--
			12/06/1999	51.80	35.20	ND	42,800	--	15,200	2,200	2,530	3,030	ND<50	--	--	--	--
			03/20/2000	52.02	34.98	ND	37,700	--	17,200	1,290	3,000	2,000	ND<50	--	--	--	--
			06/14/2000	52.31	34.69	ND	22,500	--	8,840	412	1,240	917	ND<25	--	--	--	--
			08/11/2000	52.41	34.59	ND	21,700	--	7,350	763	1,070	1,270	ND<25	--	--	--	--
			11/10/2000	52.73	34.27	ND	18,700	--	11,300	1,390	1,270	1,660	--	--	--	--	--
			01/23/2001	52.97	34.03	ND	17,000	--	9,300	970	945	1,090	ND<100	ND<100	ND<100	ND<100	ND<500
			04/20/2001	53.06	33.94	ND	12,300	--	8,000	230	1,220	1,210	ND<100	ND<100	ND<100	ND<100	ND<500
			07/19/2001	52.50	34.50	ND	10,000	--	4,030	153	1,050	748	ND<50	ND<50	ND<50	ND<50	ND<250
			11/01/2001	52.87	34.13	ND	23,500	--	6,120	330	1,620	1,810	109	ND<50	ND<50	ND<50	ND<250
			01/29/2002	53.14	33.86	ND	24,700	--	9,250	500	2,320	3,040	210	ND<100	ND<100	ND<100	ND<500
			04/26/2002	53.52	33.48	ND	23,700	--	8,900	200	1,700	1,960	ND<100	ND<100	ND<100	ND<100	ND<500
			07/30/2002	54.02	32.98	ND	24,600	--	5,750	103	1,220	1,450	ND<100	ND<100	ND<100	ND<100	ND<500
	92.19		11/08/2002	54.46	37.73	ND	22,000	--	3,300	210	1,900	2,600	ND<100	ND<100	ND<100	ND<100	ND<500
			02/11/2003	55.03	37.16	ND	24,000	--	6,100	130	1,400	1,630	ND<100	ND<100	ND<100	ND<100	5,300
			05/06/2003	55.27	36.92	ND	27,000	--	8,400	160	1,900	2,390	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/25/2003	55.22	36.97	ND	18,000	--	5,000	64.0	1,300	1,550	ND<100	ND<100	ND<100	ND<100	ND<500
			11/05/2003	55.31	36.88	ND	28,000	--	5,400	78	1,700	2,260	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/19/2004	55.55	36.64	ND	22,000	--	8,000	140	1,700	2,130	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/29/2004	55.79	36.40	ND	34,000	--	7,000	320	2,500	3,480	ND<200	ND<200	ND<200	ND<200	ND<1,000
			08/16/2004	55.86	36.33	ND	18,000	--	6,000	270	1,500	2,020	ND<200	ND<200	ND<200	ND<200	ND<1,000
			10/25/2004	56.06	36.13	ND	52,000	--	19,000	1,200	4,800	6,420	ND<200	ND<200	ND<200	ND<200	ND<1,000
			01/28/2005	56.10	36.09	ND	50,000	--	16,000	1,600	4,700	8,400	250	ND<200	ND<200	ND<200	ND<1,000
			06/01/2005	51.55	40.64	ND	20,000	--	8,900	75	2,500	1,210	220	ND<200	ND<200	ND<200	ND<1,000
			09/23/2005	51.11	41.08	ND	33,000	--	12,000	210	3,000	2,110	260	ND<200	ND<200	ND<200	ND<1,000
			12/21/2005	51.15	41.04	ND	18,000	--	11,000	ND<250	4,200	1,000	ND<1,000	ND<1,000	ND<1,000	ND<1,000	ND<5,000
			03/29/2006	51.33	40.86	ND	20,000	--	7,300	110	2,700	1,620	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/15/2006	50.25	41.94	ND	13,000	--	5,400	190	1,900	560	ND<400	ND<400	ND<400	ND<400	ND<2,000
			07/20/2006	51.26	40.93	ND	11,000	--	3,500	88	1,200	350	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/02/2006	51.55	40.64	ND	5,800	--	1,500	ND<25	470	187	ND<100	ND<100	ND<100	ND<100	ND<500
			02/02/2007	50.76	41.43	ND	2,000	--	87	2.4	7.3	195	65	ND<2.0	26	ND<2.0	250
			04/26/2007	51.35	40.84	ND	ND<100	--	4.3	ND<0.50	ND<0.50	2.3	5.4	ND<2.0	ND<2.0	ND<2.0	13
			08/02/2007	52.68	39.51	ND	1,800	410	310	4.3	130	202	10	ND<2.0	8.8	ND<2.0	18

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feef msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-2	86.71	20-75	09/30/1997	55.55	31.16	ND	35,500	--	4,820	5,980	655	6,500	ND<5	--	--	--	--
			03/30/1998	54.43	32.28	ND	19,000	--	5,950	3,600	627	2,600	25	--	--	--	--
			06/30/1998	51.94	34.77	ND	4,000	--	1,760	380	5	750	ND<2	--	--	--	--
			09/30/1998	50.96	35.75	ND	8,540	--	3,900	1,180	ND<3	1,550	--	--	--	--	--
			12/08/1998	50.82	35.89	ND	6,810	--	2,060	777	64	985	ND<5	--	--	--	--
			03/15/1999	50.85	35.86	ND	11,300	--	4,520	2,860	64	1,740	ND<10	--	--	--	--
			06/28/1999	51.35	35.36	ND	33,400	--	8,600	5,350	112	3,620	ND<10	--	--	--	--
			09/28/1999	51.56	35.15	ND	19,600	--	6,020	2,000	140	1,670	ND<20	--	--	--	--
			12/06/1999	51.80	34.91	ND	9,170	--	3,300	1,050	24	1,200	ND<20	--	--	--	--
			03/20/2000	51.93	34.78	ND	7,500	--	3,320	767	31	1,030	ND<20	--	--	--	--
			06/14/2000	52.29	34.42	ND	9,530	--	2,640	909	224	623	--	--	--	--	--
			08/11/2000	52.42	34.29	ND	20,500	--	5,060	2,330	369	1,680	ND<20	--	--	--	--
			11/10/2000	52.67	34.04	ND	12,600	--	3,760	2,870	424	1,390	--	--	--	--	--
			01/23/2001	52.88	33.83	ND	9,600	--	3,650	7,400	394	1,080	ND<40	ND<40	ND<40	ND<40	ND<200
			04/20/2001	53.05	33.66	ND	5,850	--	2,660	388	304	460	ND<40	ND<40	ND<40	ND<40	ND<200
			07/19/2001	52.60	34.11	ND	5,750	--	1,870	420	292	494	ND<-40	ND<40	ND<40	ND<40	ND<200
			11/01/2001	52.89	33.82	ND	8,640	--	1,940	266	294	68	ND<40	ND<40	ND<40	ND<40	ND<200
			01/29/2002	53.10	33.61	ND	13,200	--	4,580	732	470	1,280	ND<40	ND<40	ND<40	ND<40	ND<200
			04/26/2002	53.35	33.38	0.02	--	--	--	--	--	--	--	--	--	--	--
			07/30/2002	54.63	32.90	1.09	--	--	--	--	--	--	--	--	--	--	--
	91.94		11/08/2002	54.99	37.50	0.73	--	--	--	--	--	--	--	--	--	--	--
			02/11/2003	55.60	36.87	0.70	--	--	--	--	--	--	--	--	--	--	--
			05/06/2003	55.85	36.68	0.78	--	--	--	--	--	--	--	--	--	--	--
			07/25/2003	55.79	36.72	0.76	--	--	--	--	--	--	--	--	--	--	--
			11/05/2003	55.70	36.25	0.01	16,000	--	2,000	5,100	870	5,000	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/19/2004	55.63	36.34	0.04	48,000	--	4,100	5,400	1,900	10,700	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/29/2004	55.85	36.09	ND	130,000	--	9,100	24,000	4,400	22,200	ND<200	ND<200	ND<200	ND<200	ND<1,000
			08/16/2004	56.00	35.94	ND	47,000	--	2,800	2,900	1,300	5,400	ND<80	ND<80	ND<80	ND<80	ND<400
			10/25/2004	56.05	35.91	0.03	98,000	--	16,000	20,000	3,700	20,200	ND<80	ND<80	110	ND<80	600
			01/27/2005	56.41	35.61	0.11	--	--	--	--	--	--	--	--	--	--	--
			06/01/2005	52.10	39.84	ND	64,000	--	14,000	15,000	3,300	17,500	ND<400	ND<400	ND<400	ND<400	ND<2000
			09/23/2005	51.47	40.47	ND	83,000	--	13,000	15,000	3,000	16,700	ND<200	ND<200	ND<200	ND<200	ND<1000
			12/22/2005	51.57	40.37	ND	62,000	--	13,000	12,000	4,000	21,300	ND<1,000	ND<1,000	ND<1,000	ND<1,000	ND<5,000
			03/29/2006	51.58	40.36	ND	48,000	--	14,000	13,000	2,600	13,100	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/15/2006	50.77	41.17	ND	34,000	--	6,800	7,300	1,200	6,400	2,200	ND<1,000	ND<1,000	ND<1,000	ND<5,000
			07/20/2006	51.18	40.76	ND	9,800	--	2,600	900	470	1,980	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/02/2006	51.90	40.04	ND	61,000	--	14,000	6,300	2,300	13,600	150	ND<40	110	ND<40	ND<200
			02/02/2007	49.56	42.38	ND	6,500	--	460	67	8.2	830	27	ND<20	ND<20	ND<20	1,100
			04/26/2007	50.58	41.36	ND	190	--	2.1	2.4	38	88	9.6	ND<2.0	7.8	ND<2.0	260
			08/02/2007	52.78	39.16	ND	2,600	420	720	130	110	760	9.6	ND<2.0	8.9	ND<2.0	88

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-3	87.12	25-75	09/30/1997	56.06	31.06	ND	36,800	--	7,400	5,200	1,200	6,480	--	--	--	--	--
			03/30/1998	54.84	32.28	ND	18,000	--	5,970	1,800	715	2,150	ND<25	--	--	--	--
			06/30/1998	52.40	34.72	ND	31,000	--	10,400	3,170	1,420	7,700	ND<25	--	--	--	--
			09/30/1998	51.43	35.69	ND	17,200	--	6,760	900	860	1,200	--	--	--	--	--
			12/08/1998	51.35	35.77	ND	14,600	--	4,830	253	626	471	ND<20	--	--	--	--
			03/15/1999	51.43	35.69	ND	10,100	--	9,390	238	1,080	150	ND<20	--	--	--	--
			06/28/1999	51.93	35.19	ND	171,000	--	20,600	4,510	4,880	4,140	ND<50	--	--	--	--
			09/28/1999	52.22	34.90	ND	34,300	--	11,400	974	1,110	927	ND<25	--	--	--	--
			12/06/1999	2.40	84.72	ND	15,600	--	6,770	373	697	381	ND<25	--	--	--	--
			03/20/2000	52.57	34.55	ND	20,900	--	11,200	661	1,200	800	ND<25	--	--	--	--
			06/14/2000	52.91	34.21	ND	32,300	--	9,660	1,870	983	1,660	ND<25	--	--	--	--
			08/11/2000	53.02	34.10	ND	30,600	--	8,480	1,470	879	1,790	ND<25	--	--	--	--
			11/10/2000	53.27	33.85	ND	11,200	--	6,100	1,550	617	1,170	--	--	--	--	--
			01/23/2001	53.44	33.68	ND	38,300	--	20,900	5,010	2,280	5,170	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/20/2001	53.65	33.47	ND	12,300	--	5,870	1,290	773	1,570	ND<50	ND<50	ND<50	ND<50	ND<225
			07/19/2001	53.17	33.95	ND	10,500	--	4,460	1,090	565	1,580	ND<100	ND<100	ND<100	ND<100	ND<500
			11/01/2001	53.42	33.70	ND	20,900	--	5,050	1,050	630	1,410	150	ND<100	ND<100	ND<100	ND<500
			01/29/2002	53.69	33.43	ND	15,000	--	6,440	1,190	685	1,810	ND<100	ND<100	ND<100	ND<100	ND<500
			04/26/2002	54.05	33.07	ND	16,400	--	6,630	530	592	1,410	ND<50	ND<50	ND<50	ND<50	ND<250
			07/30/2002	55.61	31.51	ND	9,800	--	3,080	238	320	704	ND<100	ND<100	ND<100	ND<100	ND<500
	92.34		11/08/2002	55.00	37.34	ND	11,000	--	8,100	300	700	1,380	ND<20	ND<20	25	ND<20	ND<100
			02/11/2003	55.54	36.80	ND	12,000	--	4,700	270	680	960	330	ND<200	ND<200	ND<200	6,300
			05/06/2003	55.78	36.56	ND	7,700	--	2,800	140	500	580	ND<10	ND<10	35	ND<10	ND<50
			07/25/2003	55.80	36.54	ND	5,400	--	1,400	60.0	390	427	ND<40	ND<40	ND<40	ND<40	ND<200
			11/05/2003	55.90	36.44	ND	1,500	--	490	15	120	54	ND<20	ND<20	ND<20	ND<20	ND<100
			02/19/2004	56.11	36.23	ND	6,300	--	3,300	44	320	275	13	ND<20	39	100	ND<100
			04/29/2004	56.35	35.99	ND	12,000	--	5,200	310	970	1,310	ND<100	ND<100	ND<100	ND<100	ND<500
			08/16/2004	56.51	35.83	ND	4,300	--	2,400	37	180	259	ND<100	ND<100	ND<100	ND<100	ND<500
			10/25/2004	56.65	35.69	ND	14,000	--	8,900	75	1,500	222	ND<100	ND<100	170	ND<100	ND<500
			01/28/2005	56.75	35.59	ND	10,000	--	8,100	52	960	170	ND<100	ND<100	ND<100	ND<100	ND<500
			06/01/2005	52.08	40.26	ND	26,000	--	10,000	480	1,800	3,430	ND<200	ND<200	ND<200	ND<200	ND<1000
			09/23/2005	51.89	40.45	ND	43,000	--	15,000	2,400	2,100	4,790	ND<200	ND<200	ND<200	ND<200	ND<1000
			12/21/2005	51.95	40.39	ND	37,000	--	16,000	2,300	2,300	6,120	ND<400	ND<400	ND<400	ND<400	ND<2,000
			03/29/2006	52.10	40.24	ND	27,000	--	11,000	720	2,400	4,710	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/15/2006	50.37	41.97	ND	3,400	--	1,300	66	ND<10	360	120	ND<40	ND<40	ND<40	ND<200
			07/20/2006	51.48	40.86	ND	5,600	--	2,100	170	310	474	42	ND<40	ND<40	ND<40	ND<200
			11/02/2006	52.41	39.93	ND	7,000	--	2,500	89	340	650	72	ND<40	45	ND<40	ND<200
			02/02/2007	51.19	41.15	ND	2,700	--	71	6.7	2.1	204	25	ND<2.0	21	ND<2.0	34
			04/26/2007	51.70	40.64	ND	340	--	83	4.7	11	109	13	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	53.20	39.14	ND	1,200	260	300	15	69	221	4.7	ND<2.0	4.6	ND<2.0	ND<10

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Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-4	86.14	35-75	06/28/1999	50.60	35.54	ND	49,700	--	9,890	16,300	848	7,290	ND<20	--	--	--	--
			09/28/1999	50.88	35.26	ND	110,000	--	19,700	29,900	2,930	14,500	ND<50	--	--	--	--
			12/06/1999	51.03	35.11	ND	56,800	--	12,900	17,500	1,860	8,600	ND<50	--	--	--	--
			03/20/2000	51.12	35.02	ND	61,300	--	17,100	24,100	2,960	12,300	--	--	--	--	--
			06/14/2000	51.49	34.65	ND	87,900	--	15,500	21,300	2,610	11,100	ND<50	--	--	--	--
			08/11/2000	51.62	34.52	ND	67,800	--	16,200	19,300	2,600	10,400	ND<25	--	--	--	--
			11/10/2000	51.89	34.25	ND	40,200	--	15,200	14,100	1,710	6,940	--	--	--	--	--
			01/23/2001	52.09	34.05	ND	57,800	--	20,800	14,800	2,430	10,400	ND<290	ND<200	ND<200	ND<200	ND<1,000
			04/20/2001	52.22	33.92	ND	54,800	--	18,600	11,100	3,300	15,800	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/19/2001	51.82	34.32	ND	56,200	--	18,000	13,300	4,550	17,500	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/01/2001	52.20	33.94	ND	73,400	--	17,600	6,600	3,340	15,200	200	ND<200	ND<200	ND<200	ND<1,000
			01/29/2002	52.32	33.82	ND	49,000	--	20,500	3,370	3,110	14,700	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/26/2002	52.42	33.72	ND	59,600	--	18,400	4,000	3,240	12,800	ND<100	ND<100	ND<100	ND<100	ND<500
			07/30/2002	53.25	32.89	ND	57,100	--	14,200	930	2,540	8,530	ND<200	ND<200	ND<200	ND<200	ND<1,000
	91.35		11/08/2002	53.67	37.68	ND	26,000	--	8,100	530	1,800	3,610	ND<20	ND<20	ND<20	ND<20	ND<100
			02/11/2003	54.21	37.14	ND	37,000	--	13,000	590	2,500	4,320	ND<200	ND<200	ND<200	ND<200	20,000
			05/06/2003	54.48	36.87	ND	24,000	--	9,700	260	1,800	2,160	ND<400	ND<400	ND<400	ND<400	ND<2,000
			07/25/2003	54.47	36.88	ND	27,000	--	10,000	190	2,300	2,800	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/05/2003	54.60	36.75	ND	42,000	--	9,500	370	3,100	4,250	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/19/2004	54.84	36.51	ND	37,000	--	19,000	220	3,400	4,490	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/29/2004	55.06	36.29	ND	50,000	--	12,000	290	3,900	6,770	ND<800	ND<800	ND<800	ND<800	ND<4,000
			08/16/2004	55.09	36.26	ND	23,000	--	8,900	120	2,400	2,470	ND<400	ND<400	ND<400	ND<400	ND<2,000
			10/25/2004	55.37	35.98	ND	55,000	--	26,000	470	6,100	9,120	ND<200	ND<200	ND<200	ND<200	ND<1,000
			01/28/2005	55.49	35.86	ND	49,000	--	24,000	170	6,600	6,530	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/01/2005	52.10	39.25	ND	26,000	--	20,000	150	5,600	3,880	ND<400	ND<400	ND<400	ND<400	ND<2,000
			09/23/2005	51.17	40.18	ND	21,000	--	16,000	460	3,500	2,300	ND<200	ND<200	ND<200	ND<200	ND<1,000
			12/21/2005	51.10	40.25	ND	28,000	--	15,000	140	3,400	1,400	ND<400	ND<400	ND<400	ND<400	ND<2,000
			03/29/2006	51.18	40.17	ND	33,000	--	15,000	290	3,400	1,800	76	ND<40	ND<40	ND<40	ND<200
			06/15/2006	48.85	42.50	ND	6,400	--	2,900	85	450	260	7.7	ND<2.0	ND<2.0	ND<2.0	24
			07/20/2006	51.36	39.99	ND	12,000	--	5,200	60	1,000	376	ND<100	ND<100	ND<100	ND<100	ND<500
			11/02/2006	51.40	39.95	ND	6,000	--	2,800	180	550	630	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/02/2007	46.90	44.45	ND	ND<100	--	ND<0.50	0.5	ND<0.50	6.5	ND<2.0	ND<2.0	ND<2.0	ND<2.0	25
			04/26/2007	49.80	41.55	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	50.26	41.09	ND	ND<100	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-5	86.34	35-75	06/28/1999	51.42	34.92	ND	76,600	--	20,600	12,000	2,420	11,800	ND<25	--	--	--	--
			09/28/1999	51.72	34.62	ND	40,900	--	20,500	16,900	2,370	12,000	ND<50	--	--	--	--
			12/06/1999	51.91	34.43	ND	46,800	--	11,900	9,100	1,380	6,920	ND<50	--	--	--	--
			03/20/2000	52.05	34.29	ND	32,100	--	5,700	1,450	4,400	ND<200	--	--	--	--	--
			06/14/2000	52.39	33.95	ND	42,700	--	15,500	4,140	1,410	2,910	--	--	--	--	--
			08/11/2000	52.49	33.85	ND	41,500	--	15,100	4,740	1,460	3,410	--	--	--	--	--
			11/10/2000	52.77	33.57	ND	42,900	--	22,600	6,940	1,830	4,250	--	--	--	--	--
			01/23/2001	52.87	33.47	ND	38,700	--	21,800	5,970	1,750	4,010	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/20/2001	53.14	33.20	ND	35,400	--	21,500	4,460	2,550	4,040	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/19/2001	52.73	33.61	ND	40,300	--	22,500	2,770	3,510	3,720	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/01/2001	52.92	33.42	ND	48,100	--	20,200	4,440	2,730	4,760	ND<200	ND<200	ND<200	ND<200	ND<1,000
			01/29/2002	53.18	33.16	ND	37,500	--	18,700	3,040	1,970	3,400	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/26/2002	53.56	32.78	ND	35,900	--	18,900	935	2,030	2,500	ND<100	ND<100	ND<100	ND<100	ND<500
			07/30/2002	53.92	32.42	ND	64,200	--	14,300	1,660	1,740	2,570	ND<200	ND<200	ND<200	ND<200	ND<1,000
	91.55		11/08/2002	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
			02/11/2003	55.02	36.53	ND	30,000	--	14,000	510	2,200	2,700	ND<200	ND<200	ND<200	ND<200	ND<1,000
			05/06/2003	55.27	36.28	ND	25,000	--	17,000	300	2,000	2,190	ND<400	ND<400	ND<400	ND<400	ND<2,000
			07/25/2003	55.29	36.26	ND	24,000	--	16,000	110	1,900	1,300	ND<400	ND<400	ND<400	ND<400	ND<2,000
			11/05/2003	55.43	36.12	ND	42,000	--	13,000	110	2,500	1,600	ND<400	ND<400	ND<400	ND<400	ND<2,000
			02/19/2004	55.64	35.91	ND	30,000	--	16,000	150	2,100	1,420	ND<400	ND<400	ND<400	ND<400	ND<2,000
			04/29/2004	55.84	35.71	ND	67,000	--	5,900	15,000	2,000	9,800	52,000	ND<400	ND<400	760	6,000
			08/16/2004	55.91	35.64	ND	28,000	--	18,000	ND<250	3,400	1,100	ND<1,000	ND<1,000	ND<1,000	ND<1,000	ND<5,000
			10/25/2004	56.17	35.38	ND	36,000	--	24,000	290	7,000	2,840	ND<400	ND<400	500	ND<400	ND<2,000
			01/28/2005	56.25	35.30	ND	48,000	--	21,000	150	4,000	3,520	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/01/2005	52.21	39.34	ND	14,000	--	3,900	180	1,100	1,660	ND<400	ND<400	ND<400	ND<400	ND<2,000
			09/23/2005	50.95	40.60	ND	16,000	--	5,300	28	1,300	465	ND<100	ND<100	ND<100	ND<100	ND<500
			12/21/2005	51.00	40.55	ND	14,000	--	5,500	ND<50	1,200	350	ND<200	ND<200	ND<200	ND<200	ND<1,000
			03/29/2006	51.10	40.45	ND	10,000	--	4,400	ND<50	1,300	320	ND<200	ND<200	ND<200	ND<200	ND<1,000
			06/15/2006	51.20	40.35	ND	4,800	--	2,300	66	450	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/20/2006	51.21	40.34	ND	6,800	--	2,800	ND<25	650	150	ND<100	ND<100	ND<100	ND<100	ND<500
			11/02/2006	52.40	39.15	ND	2,000	--	840	ND<5.0	200	ND<10	ND<20	ND<20	24	ND<20	ND<100
			02/02/2007	49.85	41.70	ND	320	--	28	2.6	18	66.8	9.4	ND<2.0	10	ND<2.0	98
			04/25/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			08/02/2007	52.24	39.31	ND	220	150	45	0.58	25	3.01	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

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United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-6	80.81	35-75	06/28/1999	49.90	30.91	ND	90,000	--	22,000	19,000	1,640	1,400	ND<25	--	--	--	--
			09/28/1999	49.90	30.91	ND	89,800	--	19,600	13,700	1,840	13,300	ND<50	--	--	--	--
			12/06/1999	50.37	30.44	ND	54,200	--	14,800	8,700	1,350	8,840	ND<50	--	--	--	--
			03/20/2000	50.52	30.29	ND	41,100	--	13,200	7,400	1,570	7,980	--	--	--	--	ND<5.0
			06/14/2000	50.83	29.98	ND	38,700	--	8,100	4,470	1,040	5,510	ND<25	--	--	--	--
			08/11/2000	50.93	29.88	ND	37,100	--	8,250	3,480	1,150	4,360	ND<25	--	--	--	--
			11/10/2000	51.22	29.59	ND	32,200	--	13,200	3,800	1,430	4,510	--	--	--	--	--
			01/23/2001	51.48	29.33	ND	29,900	--	71,400	1,090	1,090	2,840	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/20/2001	51.52	29.29	ND	21,100	--	9,400	795	1,530	3,700	ND<100	ND<100	ND<100	ND<100	ND<500
			07/19/2001	51.01	29.80	ND	20,000	--	6,270	490	1,950	3,400	ND<100	ND<100	ND<100	ND<100	ND<500
			11/01/2001	51.42	29.39	ND	37,600	--	5,850	358	1,320	2,500	ND<100	ND<100	ND<100	ND<100	ND<500
			01/29/2002	52.67	28.14	ND	25,000	--	6,750	285	1,190	2,200	ND<100	ND<100	ND<100	ND<100	ND<500
			04/26/2002	52.04	28.77	ND	29,900	--	7,180	192	1,560	2,470	ND<50	ND<50	ND<50	ND<50	ND<250
			07/30/2002	52.54	28.27	ND	28,200	--	4,200	95	1,040	1,450	ND<100	ND<100	ND<100	ND<100	ND<500
	90.99		11/08/2002	53.00	37.99	ND	22,000	--	4,400	180	1,100	1,630	ND<20	ND<20	21	ND<20	ND<100
			02/11/2003	53.51	37.48	ND	26,000	--	3,000	140	1,200	1,600	ND<40	ND<40	ND<40	ND<40	ND<00
			05/06/2003	53.77	37.22	ND	22,000	--	4,300	100	1,200	1,280	ND<100	ND<100	ND<100	ND<100	600
			07/25/2003	53.73	37.26	ND	13,000	--	4,300	100	1,400	1,587	ND<100	ND<100	ND<100	ND<100	ND<500
			11/05/2003	53.86	37.13	ND	16,000	--	2,600	110	1,700	2,620	ND<100	ND<100	ND<100	ND<100	ND<500
			02/19/2004	54.12	36.87	ND	22,000	--	2,600	61	1,200	1,470	ND<100	ND<100	ND<100	ND<100	ND<500
			04/29/2004	54.36	36.63	ND	27,000	--	970	55	870	1,381	ND<100	ND<100	ND<100	ND<100	ND<500
			08/16/2004	54.43	36.56	ND	21,000	--	1,700	77	990	1,169	ND<20	ND<20	ND<20	ND<20	ND<100
			10/25/2004	54.66	36.33	ND	24,000	--	1,700	70	1,700	2,100	ND<40	ND<40	ND<40	ND<40	ND<200
			01/28/2005	54.75	36.24	ND	24,000	--	960	54	1,600	2,400	ND<40	ND<40	ND<40	ND<40	ND<200
			06/01/2005	51.05	39.94	ND	12,000	--	290	18	1,000	1,858	ND<40	ND<40	ND<40	ND<40	ND<200
			09/23/2005	50.33	40.66	ND	9,100	--	550	17	750	1,031	ND<20	ND<20	ND<20	ND<20	ND<100
			12/21/2005	50.31	40.68	ND	19,000	--	1,000	ND<5.0	1,400	1,500	ND<20	ND<20	ND<20	ND<20	ND<100
			03/29/2006	50.48	40.51	ND	14,000	--	580	16	1,200	1,244	ND<20	ND<20	ND<20	ND<20	ND<100
			06/15/2006	50.39	40.60	ND	10,000	--	490	22	940	795	2.3	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/20/2006	50.43	40.56	ND	14,000	--	600	12	850	805	ND<20	ND<20	ND<20	ND<20	ND<100
			11/02/2006	51.57	39.42	ND	10,000	--	160	ND<10	520	440	ND<40	ND<40	ND<40	ND<40	ND<200
			02/02/2007	49.55	41.44	ND	ND<100	--	0.68	ND<0.50	0.84	4.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	50.20	40.79	ND	ND<100	--	0.72	ND<0.50	1.6	1.1	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	51.75	39.24	ND	1,200	130	18	1.4	20	50.5	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

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Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (μg/L)	TPHd [1] (μg/L)	Benzene [2] (μg/L)	Toluene [2] (μg/L)	Ethyl-benzene [2] (μg/L)	Total Xylenes [2] (μg/L)	MTBE [1] (μg/L)	ETBE [1] (μg/L)	DIPE [1] (μg/L)	TAME [1] (μg/L)	TBA [1] (μg/L)
MW-7	85.56	40-75	07/19/2001	51.92	33.64	ND	1,100	--	167	34	133	294	ND<2	ND<2	ND<2	ND<2	ND<10
			11/01/2001	52.10	33.46	ND	ND<50	--	ND<l	ND<l	ND<l	ND<2	ND<2	ND<2	ND<2	ND<2	24
			01/29/2002	58.28	27.28	ND	207	--	5	30	12	57	ND<2	ND<2	ND<2	ND<2	12
			04/26/2002	52.65	32.91	ND	893	--	293	44	83	181	ND<2	ND<2	ND<2	ND<2	ND<10
			07/30/2002	53.16	32.40	ND	ND<50	--	ND<1	ND<1	ND<l	ND<2	ND<2	ND<2	ND<2	ND<2	ND<10
	90.79		11/08/2002	52.50	38.29	ND	4,200	--	560	26	270	296	ND<20	ND<20	ND<20	ND<20	ND<100
			02/11/2003	54.02	36.77	ND	2,900	--	450	25	210	225	ND<10	ND<10	ND<10	ND<10	ND<50
			05/06/2003	54.35	36.44	ND	ND<100	--	12	ND<05	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			07/25/2003	54.43	36.36	ND	1,600	--	290	15.0	190	202	ND<2	ND<2	ND<2	ND<2	ND<10
			11/05/2003	54.53	36.26	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<2	ND<2	ND<2	13
			02/19/2004	54.75	36.04	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			04/29/2004	54.95	35.84	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<l	ND<2	ND<2	ND<2	ND<2	ND<10
			08/16/2004	54.94	35.85	ND	ND<100	--	0.71	1.7	2.0	8.8	ND<2	ND<2	ND<2	ND<2	ND<10
			10/25/2004	55.96	34.83	ND	ND<100	--	ND<0.5	1.4	ND<0.5	0.75	ND<2	ND<2	ND<2	ND<2	10
			01/27/2005	55.40	35.39	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			06/02/2005	52.35	38.44	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<l	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	51.15	39.64	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<l	ND<2	ND<2	ND<2	ND<2	ND<10
			12/22/2005	51.00	39.79	ND	ND<100	--	1.3	1.8	0.58	2.1	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			03/29/2006	51.07	39.72	ND	ND<100	--	2.5	7.2	3.0	17.3	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	51.27	39.52	ND	ND<100	--	1.9	5.8	0.96	4.5	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/19/2006	51.22	39.57	ND	ND<100	--	3.1	3.6	2.3	7.8	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	52.30	38.49	ND	ND<100	--	3.2	ND<0.50	ND<0.50	2.9	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	51.20	39.59	ND	ND<100	--	ND<2.0	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	51.65	39.14	ND	ND<100	--	0.55	ND<0.50	1.8	1.3	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	52.35	38.44	ND	ND<100	ND<100	ND<0.50	ND<0.50	1.1	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-8	--	40-75	11/01/2001	51.50	--	ND	1,390	--	171	20	892	186	ND<2	ND<2	ND<2	ND<2	31.00
			01/29/2002	51.73	--	ND	282	--	4	13	6	24	ND<2	ND<2	ND<2	ND<2	ND<10
			04/26/2002	52.13	--	ND	994	--	216	46	81	179	ND<2	ND<2	ND<2	ND<2	ND<10
			07/30/2002	52.64	--	ND	1,010	--	194	4	55	68	ND<2	ND<2	ND<2	ND<2	ND<10
	91.43		11/08/2002	53.07	38.36	ND	130	--	1	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	38
			02/11/2003	53.60	37.83	ND	230	--	2	8	8	324	ND<2	ND<2	ND<2	ND<2	ND<10
			05/06/2003	53.83	37.60	ND	290	--	6	10	74	25	ND<2	ND<2	ND<2	ND<2	ND<10
			07/25/2003	53.81	37.62	ND	1,400	--	100	7.4	91.0	107	ND<2	ND<2	ND<2	ND<2	ND<10
			11/05/2003	53.98	37.45	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<2	ND<2	ND<2	ND<10
			02/19/2004	54.23	37.20	ND	ND<100	--	ND<0.5	1.6	0.68	6.0	ND<2	ND<2	ND<2	ND<2	ND<10
			04/29/2004	54.45	36.98	ND	120	--	ND<0.5	4.6	2.0	18.1	ND<2	ND<2	ND<2	ND<2	ND<10
			08/16/2004	54.50	36.93	ND	ND<100	--	ND<0.5	ND<0.5	0.53	2.52	ND<2	ND<2	ND<2	ND<2	ND<10
			10/25/2004	54.76	36.67	ND	ND<100	--	ND<0.5	1.7	0.83	3.6	ND<2	ND<2	ND<2	ND<2	ND<10
			01/27/2005	54.80	36.63	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<2	ND<2	ND<2	ND<10
			06/01/2005	51.31	40.12	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	50.41	41.02	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			12/22/2005	50.40	41.03	ND	ND<100	--	1.5	1.9	0.52	2.2	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			03/29/2006	50.60	40.83	ND	150	--	3.0	11	5.2	28.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	50.69	40.74	ND	ND<100	--	6.7	23	6.2	28.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/20/2006	50.67	40.76	ND	ND<100	--	0.64	0.93	ND<0.50	1.2	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	52.95	38.48	ND	ND<100	--	1.2	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	51.09	40.34	ND	ND<100	--	ND<0.50	0.58	0.74	1.8	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	51.47	39.96	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	52.00	39.43	ND	ND<100	320	ND<0.50	0.73	1.5	1.77	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-9	--	40-75	07/19/2001	50.08	--	ND	13,900	--	720	432	58	2,260	ND<40	ND<40	ND<40	ND<40	ND<200
			11/01/2001	50.48	--	ND	12,200	--	755	62	150	746	ND<20	ND<20	ND<20	ND<20	ND<100
			01/29/2002	50.80	--	ND	6,970	--	379	27	43	260	ND<10	ND<10	ND<10	ND<10	ND<50
			04/26/2002	51.19	--	ND	5,630	--	509	46	121	330	ND<10	ND<10	ND<10	ND<10	ND<50
			07/30/2002	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
	90.45		11/08/2002	52.12	38.33	ND	9,300	--	130	ND<5	19	42	20	20	ND<20	ND<20	ND<100
			02/11/2003	52.63	37.82	ND	4,500	--	130	8	24	62	ND<4	ND<4	ND<4	ND<4	ND<20
			05/06/2003	52.62	37.83	ND	3,000	--	76	4	13	25	ND<4	ND<4	ND<4	ND<4	ND<20
			07/25/2003	53.82	36.63	ND	3,800	--	87.0	2.5	34.0	50.9	ND<2	ND<2	ND<2	ND<2	55.0
			11/05/2003	52.99	37.46	ND	2,400	--	35	ND<0.5	11	9.5	ND<2	ND<2	ND<2	ND<2	100
			02/19/2004	53.22	37.23	ND	2,000	--	36	11	15	49	ND<2	ND<2	ND<2	ND<2	120
			04/29/2004	53.47	36.98	ND	980	--	19	ND<0.5	8.7	ND<1	ND<2	ND<2	ND<2	ND<2	58
			08/16/2004	53.52	36.93	ND	960	--	13	1.2	8.2	9.6	ND<2	ND<2	ND<2	ND<2	32
			10/25/2004	53.79	36.66	ND	1,500	--	18	2.7	14	8.4	ND<2	ND<2	ND<2	ND<2	58
			01/27/2005	53.80	36.65	ND	1,200	--	10	ND<0.5	7.1	1.1	ND<2	ND<2	ND<2	ND<2	38
			06/01/2005	49.95	40.50	ND	470	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	49.27	41.18	ND	370	--	0.90	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	28
			12/22/2005	49.30	41.15	ND	880	--	20	18	11	31.9	ND<2.0	ND<2.0	ND<2.0	ND<2.0	38
			03/29/2006	49.53	40.92	ND	310	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	49.66	40.79	ND	880	--	2.6	2.9	3.1	7.1	ND<2.0	ND<2.0	ND<2.0	ND<2.0	65
			07/20/2006	49.49	40.96	ND	490	--	1.6	1.2	2.2	4.7	ND<2.0	ND<2.0	ND<2.0	ND<2.0	39
			11/01/2006	50.75	39.70	ND	270	--	3.8	1.5	1.2	4.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	50.11	40.34	ND	670	--	0.69	ND<0.5	0.71	1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	21
			04/25/2007	50.35	40.10	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	50.98	39.47	ND	280	180	ND<0.50	1.6	3.4	3.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-10	85.75	40-75	07/19/2001	51.09	34.66	ND	3,450	--	96	17	ND<10	60	ND<20	ND<20	ND<20	ND<20	ND<100
			11/01/2001	51.53	34.22	ND	6,130	--	144	178	609	142	ND<2	ND<2	ND<2	12	ND<10
			01/29/2002	51.61	34.14	ND	2,530	--	19	25	11	45	ND<10	ND<10	ND<10	ND<10	ND<50
			04/26/2002	53.06	32.69	ND	3,190	--	202	38	62	146	11	ND<2	ND<2	ND<2	ND<10
			07/30/2002	52.60	33.15	ND	2,380	--	10	3	23	11	ND<4	ND<4	ND<4	ND<4	ND<20
	90.93		11/08/2002	53.03	37.90	ND	1,900	--	190	ND<0.5	170	212	ND<2	ND<2	ND<2	ND<2	14
			02/11/2003	53.53	37.40	ND	1,300	--	8	10	10	26	ND<2	ND<2	ND<2	ND<2	ND<10
			05/06/2003	53.67	37.26	ND	1,300	--	6	3	1	5	ND<2	ND<2	2	ND<2	ND<10
			07/25/2003	53.78	37.15	ND	2,800	--	230	9.5	180	155	ND<2	ND<2	ND<2	ND<2	ND<10
			11/05/2003	53.98	36.95	ND	600	--	0.94	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<2	ND<2	ND<2	ND<10
			02/19/2004	54.20	36.73	ND	250	--	0.66	1.1	0.55	4.0	ND<2	ND<2	ND<2	ND<2	ND<10
			04/29/2004	54.45	36.48	ND	770	--	0.76	3.1	1.6	14.2	ND<2	ND<2	ND<2	ND<2	ND<10
			08/16/2004	54.47	36.46	ND	150	--	0.73	1.4	1.3	5.8	ND<2	ND<2	ND<2	ND<2	ND<10
			10/25/2004	54.78	36.15	ND	260	--	0.71	1.3	0.55	2.4	ND<2	ND<2	ND<2	ND<2	ND<10
			01/27/2005	54.92	36.01	ND	200	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			06/01/2005	50.75	40.18	ND	1,900	--	4.3	ND<0.5	2.2	3.3	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	50.61	40.32	ND	410	--	0.57	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			12/22/2005	50.55	40.38	ND	190	--	3.1	3.7	1.5	6.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			03/29/2006	50.65	40.28	ND	240	--	0.70	1.9	1.2	5.7	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	50.78	40.15	ND	220	--	4.0	8.8	2.3	10.7	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/20/2006	50.62	40.31	ND	240	--	1.9	1.8	1.2	2.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	51.86	39.07	ND	ND<100	--	1.3	0.52	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	50.93	40.00	ND	ND<100	--	ND<0.50	ND<0.50	1.3	2.23	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	51.25	39.68	ND	ND<100	--	ND<0.50	0.51	1.3	0.70	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	51.86	39.07	ND	ND<100	210	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

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United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-11	86.35	40-75	07/19/2001	51.59	34.76	ND	49,000	--	15,400	1,070	3,440	7,440	ND<100	ND<100	ND<100	ND<100	ND<500
			11/01/2001	52.02	34.33	ND	54,700	--	18,700	314	3,250	7,400	ND<200	ND<200	ND<200	ND<200	ND<1,000
			01/29/2002	52.20	34.15	ND	44,500	--	21,500	195	2,740	4,430	ND<200	200	ND<200	ND<200	ND<1,000
			04/26/2002	52.56	33.79	ND	61,500	--	28,600	148	3,780	3,900	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/30/2002	53.09	33.26	ND	31,500	--	15,600	ND<100	2,400	2,300	ND<200	ND<200	ND<200	ND<200	ND<1,000
	91.44		11/08/2002	53.54	37.90	ND	44,000	--	16,000	50	2,500	2,048	ND<40	ND<40	400	ND<40	530
			02/11/2003	54.04	37.40	ND	47,000	--	15,000	65	2,500	1,965	ND<100	ND<100	ND<100	ND<100	ND<500
			05/06/2003	54.29	37.15	ND	32,000	--	18,000	ND<100	2,300	1,400	ND<400	ND<400	ND<400	ND<400	ND<2,000
			07/25/2003	53.82	37.62	ND	46,000	--	16,000	ND<100	2,900	1,800	ND<400	ND<400	ND<400	ND<400	ND<2,000
			11/05/2003	54.40	37.04	ND	39,000	--	15,000	ND<100	3,300	1,500	ND<400	ND<400	ND<400	ND<400	ND<2,000
			02/19/2004	54.65	36.79	ND	17,000	--	9,200	ND<100	1,200	390	ND<400	ND<400	ND<400	ND<400	ND<2,000
			04/29/2004	54.92	36.52	ND	31,000	--	8,700	ND<50	2,300	940	ND<200	ND<200	ND<200	ND<200	ND<1,000
			08/16/2004	55.02	36.42	ND	22,000	--	8,700	64	2,200	590	ND<200	ND<200	ND<200	ND<200	ND<1,000
			10/25/2004	55.26	36.18	ND	36,000	--	19,000	96	4,400	1,500	ND<200	ND<200	ND<200	ND<200	ND<1,000
			01/28/2005	55.33	36.11	ND	34,000	--	14,000	ND<50	3,600	1,300	ND<200	ND<200	ND<200	ND<200	ND<1,000
			06/02/2005	51.70	39.74	ND	29,000	--	12,000	63	3,300	1,700	ND<200	ND<200	ND<200	ND<200	ND<1,000
			09/23/2005	50.88	40.56	ND	21,000	--	6,600	ND<50	2,200	930	ND<200	ND<200	ND<200	ND<200	ND<1,000
			12/21/2005	50.86	40.58	ND	28,000	--	7,800	ND<50	3,100	590	ND<200	ND<200	ND<200	ND<200	ND<1,000
			03/29/2006	50.97	40.47	ND	18,000	--	4,100	ND<100	2,300	1,000	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/15/2006	48.99	42.45	ND	12,000	--	3,900	150	1,800	840	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/19/2006	49.64	41.80	ND	14,000	--	4,800	ND<50	2,100	820	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/02/2006	50.70	40.74	ND	8,100	--	1,900	ND<25	1,100	380	ND<100	ND<100	ND<100	ND<100	ND<500
			02/02/2006	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
			04/25/2007	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
			08/02/2007	51.88	39.56	ND	ND<100	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-12	86.22	40-75	07/19/2001	52.66	33.56	ND	26,000	--	11,900	185	1,560	464	ND<100	ND<100	ND<100	ND<100	ND<500
			11/01/2001	52.90	33.32	ND	10,900	--	3,800	40	68	43	ND<40	ND<40	ND<40	ND<40	ND<200
			01/29/2002	53.09	33.13	ND	7,450	--	2,620	170	262	304	ND<40	ND<40	ND<40	ND<40	2,000
			04/26/2002	53.48	32.74	ND	14,100	--	5,280	960	588	298	ND<40	ND<40	ND<40	ND<40	ND<200
			07/30/2002	53.98	32.24	ND	125	--	14	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<2	ND<10
	91.43		11/08/2002	54.35	37.08	ND	16,000	--	6,600	54	900	363	6.6	ND<2	24	ND<2	95
			02/11/2003	54.90	36.53	ND	17,000	--	7,200	72	880	290	ND<200	ND<200	ND<200	ND<200	ND<1,000
			05/06/2003	55.19	36.24	ND	17,000	--	7,200	51	780	230	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/25/2003	55.83	35.60	ND	3,000	--	450	17.0	260	253	ND<10	ND<10	ND<10	ND<10	ND<50
			11/05/2003	55.38	36.05	ND	6,600	--	5,400	21	930	55	ND<20	ND<20	22	ND<20	ND<100
			02/19/2004	55.56	35.87	ND	8,800	--	7,900	ND<50	950	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			04/29/2004	55.75	35.68	ND	330	--	20	ND<0.5	1.3	ND<1	ND<2	ND<2	14	ND<2	48
			08/16/2004	55.80	35.63	ND	2,500	--	3,300	8.7	470	18.4	6.6	ND<2	32	ND<2	120
			10/25/2004	56.06	35.37	ND	5,000	--	3,800	30	660	53	ND<100	ND<100	ND<100	ND<100	ND<500
			01/28/2005	56.15	35.28	ND	160	--	4.8	ND<0.5	ND<0.5	2.14	ND<2	ND<2	9.6	ND<2	ND<10
			06/02/2005	52.37	39.06	ND	550	--	3.4	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	7.5	ND<2	55
			09/23/2005	51.80	39.63	ND	11,000	--	7,500	52	860	134	9.7	ND<2	49	ND<2	120
			12/21/2005	51.79	39.64	ND	13,000	--	7,200	ND<50	1,100	1,200	ND<200	ND<200	ND<200	ND<200	ND<1,000
			03/29/2006	51.89	39.54	ND	10,000	--	5,600	ND<50	1,200	1,400	ND<200	ND<200	ND<200	ND<200	ND<1,000
			06/15/2006	51.92	39.51	ND	11,000	--	6,400	76	860	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/19/2006	52.14	39.29	ND	7,600	--	7,700	ND<50	1,200	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			11/02/2006	52.30	39.13	ND	9,800	--	5,600	ND<50	1,000	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/02/2007	50.76	40.67	ND	ND<100	--	1.3	ND<0.50	ND<0.50	ND<1.0	2.3	ND<2.0	3.5	ND<2.0	130
			04/26/2007	51.57	39.86	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	53.00	38.43	ND	ND<100	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

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Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-13	87.00	40-75	07/19/2001	53.14	33.86	ND	19,100	--	7,280	860	93	4,670	ND<50	ND<50	ND<50	ND<50	ND<250
			11/01/2001	53.42	33.58	ND	9,420	--	3,000	1,380	298	280	ND<.50	ND<50	ND<50	ND<50	ND<250
			01/29/2002	53.68	33.32	ND	14,000	--	7,780	224	220	494	ND<40	ND<40	ND<40	ND<40	ND<200
			04/26/2002	54.02	32.98	ND	14,300	--	6,070	150	266	492	ND<40	ND<40	ND<40	ND<40	ND<200
			07/30/2002	54.55	32.45	ND	22,100	--	6,520	245	500	833	ND<100	ND<100	ND<100	ND<100	ND<500
	92.23		11/08/2002	55.00	37.23	ND	29,000	--	5,700	94	740	870	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/11/2003	55.53	36.70	ND	17,000	--	7,300	98	780	560	ND<200	ND<200	ND<200	ND<200	ND<7,000
			05/06/2003	55.85	36.38	ND	5,100	--	3,200	60	470	290	ND<200	ND<200	ND<200	ND<200	ND<1,000
			07/25/2003	55.83	36.40	ND	4,200	--	1,100	20.0	300	180	ND<40	ND<40	ND<40	ND<40	ND<200
			11/05/2003	55.92	36.31	ND	3,400	--	1,800	30	500	80	ND<40	ND<40	ND<40	ND<40	ND<200
			02/19/2004	56.11	36.12	ND	5,200	--	3,800	51	540	121	ND<40	ND<40	ND<40	ND<40	ND<200
			04/29/2004	56.39	35.84	ND	10,000	--	2,900	89	810	191	ND<100	ND<100	ND<100	ND<100	ND<500
			08/16/2004	56.40	35.83	ND	5,700	--	1,800	32	450	79	ND<40	ND<40	ND<40	ND<40	ND<200
			10/25/2004	56.64	35.59	ND	15,000	--	14,000	96	2,700	289	ND<40	ND<40	100	ND<40	ND<200
			01/28/2005	56.70	35.53	ND	8,900	--	3,900	110	820	ND<100	ND<200	ND<200	ND<200	ND<200	ND<1,000
			06/02/2005	52.08	40.15	ND	16,000	--	3,200	480	740	2,370	ND<100	ND<100	ND<100	ND<100	ND<500
			09/23/2005	51.70	40.53	ND	5,000	--	2,300	36	330	299	ND<40	ND<40	ND<40	ND<40	ND<200
			12/21/2005	51.85	40.38	ND	4,900	--	1,600	12	240	82	ND<40	ND<40	ND<40	ND<40	ND<200
			03/29/2006	52.07	40.16	ND	5,700	--	2,300	26	440	192	ND<40	ND<40	ND<40	120	ND<200
			06/14/2006	52.20	40.03	ND	3,400	--	1,500	40	160	180	ND<100	ND<100	ND<100	ND<100	ND<500
			07/19/2006	52.14	40.09	ND	2,300	--	1,100	ND<25	120	50	ND<100	ND<100	ND<100	ND<100	ND<500
			11/02/2006	52.44	39.79	ND	1,200	--	690	15	87	32	ND<40	ND<40	ND<40	ND<40	ND<200
			02/02/2007	52.50	39.73	ND	ND<100	--	1.1	ND<0.50	0.55	8.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/26/2007	53.05	39.18	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	52.30	39.93	ND	ND<100	180	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-14	90.01	45-70	01/27/2005	53.67	36.34	ND	110	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	36
			06/02/2005	49.78	40.23	ND	130	--	0.68	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	49.10	40.91	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	15
			12/22/2005	49.15	40.86	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	21
			03/29/2006	49.40	40.61	ND	ND<100	--	1.6	2	0.90	4.7	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	49.53	40.48	ND	ND<100	--	1.5	2.8	0.61	3.03	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/19/2006	49.48	40.53	ND	ND<100	--	ND<0.50	ND<0.50	ND<2.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	50.61	39.40	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	50.01	40.00	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	50.27	39.74	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	50.87	39.14	ND	ND<100	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW-15	90.34	45-70	01/27/2005	56.28	34.06	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			06/02/2005	53.25	37.09	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	52.06	38.28	ND	ND<100	--	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10
			12/22/2005	51.95	38.39	ND	ND<100	--	0.52	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			03/29/2006	51.98	38.36	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	52.13	38.21	ND	ND<100	--	1.2	1.1	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/19/2006	52.18	38.16	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	53.29	37.05	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	52.48	37.86	ND	ND<100	--	0.51	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	52.77	37.57	ND	ND<100	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	53.25	37.09	ND	ND<100	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-16	88.74	45-70	01/27/2005	54.75	33.99	ND	9,600	--	220	12	170	194.1	ND<2	ND<2	ND<2	ND<2	36
			06/02/2005	51.95	36.79	ND	6,600	--	520	11	330	214.1	ND<2	ND<2	ND<2	ND<2	ND<10
			09/22/2005	50.41	38.33	ND	3,200	--	200	5.2	190	173.1	ND<10	ND<10	ND<10	ND<10	ND<50
			12/22/2005	50.35	38.39	ND	4,300	--	110	ND<2.5	120	84	ND<10	ND<10	ND<10	ND<10	ND<50
			03/29/2006	50.49	38.25	ND	2,200	--	98	1.9	97	47	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/14/2006	50.64	38.10	ND	3,600	--	100	5.6	100	32.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	33
			07/19/2006	51.22	37.52	ND	2,400	--	98	ND<0.50	87	35	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	51.80	36.94	ND	2,100	--	130	1.8	80	11	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	50.84	37.90	ND	2,800	--	56	0.95	34	7.2	ND<2.0	ND<2.0	ND<2.0	ND<2.0	44
			04/25/2007	51.18	37.56	ND	410	--	91	1.7	68	6.8	ND<2.0	ND<2.0	ND<2.0	ND<2.0	16
			08/01/2007	51.76	36.98	ND	1,400	440	43	ND<0.50	22	19	ND<2.0	ND<2.0	ND<2.0	ND<2.0	20
MW-17	87.29	45-70	01/27/2005	52.77	34.52	ND	770	--	7.8	1.5	44	24.8	ND<2	ND<2	ND<2	ND<2	38
			06/02/2005	48.80	38.49	ND	ND<100	--	1.0	ND<0.5	ND<0.5	ND<1	ND<2	ND<2	ND<2	ND<2	14
			09/22/2005	48.15	39.14	ND	660	--	5.6	4.1	39	41.4	ND<2	ND<2	ND<2	ND<2	ND<10
			12/22/2005	48.25	39.04	ND	610	--	5.3	3.0	41	40.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	13
			03/29/2006	48.49	38.80	ND	530	--	5.6	2.8	41	39.7	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			06/15/2006	48.66	38.63	ND	1,000	--	9.2	7.2	40	40.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			07/19/2006	48.68	38.61	ND	500	--	6.3	2.5	32	29.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			11/01/2006	49.81	37.48	ND	680	--	11	12	32	26.3	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			02/01/2007	49.07	38.22	ND	520	--	4.1	1.3	23	15.8	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/25/2007	49.20	38.09	ND	610	--	6.3	2.4	40	19.4	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	49.90	37.39	ND	760	ND<100	2.9	ND<0.50	29	3.97	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
MW-18	91.15	45-70	01/28/2005	55.65	35.50	ND	45,000	--	11,000	6,600	4,000	12,600	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/02/2005	51.91	39.24	ND	55,000	--	19,000	11,000	3,600	11,600	ND<200	ND<200	ND<200	ND<200	ND<1,000
			09/23/2005	51.05	40.10	ND	50,000	--	20,000	2,500	3,600	4,310	ND<200	ND<200	ND<200	ND<200	ND<1,000
			12/21/2005	50.99	40.16	ND	49,000	--	18,000	1,300	3,200	2,600	ND<1,000	ND<1,000	ND<1,000	ND<1,000	ND<5,000
			03/29/2006	51.07	40.08	ND	35,000	--	16,000	910	3,000	2,000	ND<400	ND<400	ND<400	ND<400	ND<2,000
			06/14/2006	49.40	41.75	ND	40,000	--	17,000	2,800	3,800	3,260	ND<400	ND<400	ND<400	ND<400	ND<2,000
			07/19/2006	50.30	40.85	ND	36,000	--	14,000	2,000	3,800	3,090	ND<400	ND<400	ND<400	ND<400	ND<2,000
			11/02/2006	51.22	39.93	ND	37,000	--	15,000	1,100	3,900	3,080	ND<200	ND<200	ND<200	ND<200	ND<1,000
			02/02/2007	48.40	42.75	ND	ND<100	--	1.2	1.8	0.88	19.8	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			04/26/2007	50.32	40.83	ND	ND<100	--	ND<0.50	ND<0.50	1.7	3.6	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/02/2007	51.69	39.46	ND	100	ND<100	1.1	ND<0.50	4.0	8.9	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

Table 1
Summary of Groundwater Levels and Chemical Analysis Results
United Station #57
4520 West Century Boulevard
Inglewood, California

Well No.	Well Elevation (feet msl)	Screen Interval (feet bgs)	Date Sampled	Depth to Groundwater (feet-btoc)	Groundwater Elevation [3] (feet msl)	Free Product Thickness (feet)	TPHg [1] (µg/L)	TPHd [1] (µg/L)	Benzene [2] (µg/L)	Toluene [2] (µg/L)	Ethyl-benzene [2] (µg/L)	Total Xylenes [2] (µg/L)	MTBE [1] (µg/L)	ETBE [1] (µg/L)	DIPE [1] (µg/L)	TAME [1] (µg/L)	TBA [1] (µg/L)
MW19	88.71	45-70	04/25/2007	51.76	36.95	ND	ND<100	--	1.8	1.1	0.77	0.80	2.2	ND<2.0	ND<2.0	ND<2.0	ND<10
			08/01/2007	52.27	36.44	ND	110	ND<100	0.63	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10

Notes:

[1] Analyzed for total petroleum hydrocarbons as gasoline (TPHg) or as diesel (TPHd) in general accordance with EPA method 8015M.

[2] Analyzed for BTEX in general accordance with EPA method 8260B.

[3] Groundwater elevation corrected for free product (specific gravity of gasoline relative to water = 0.75 gm/cc).

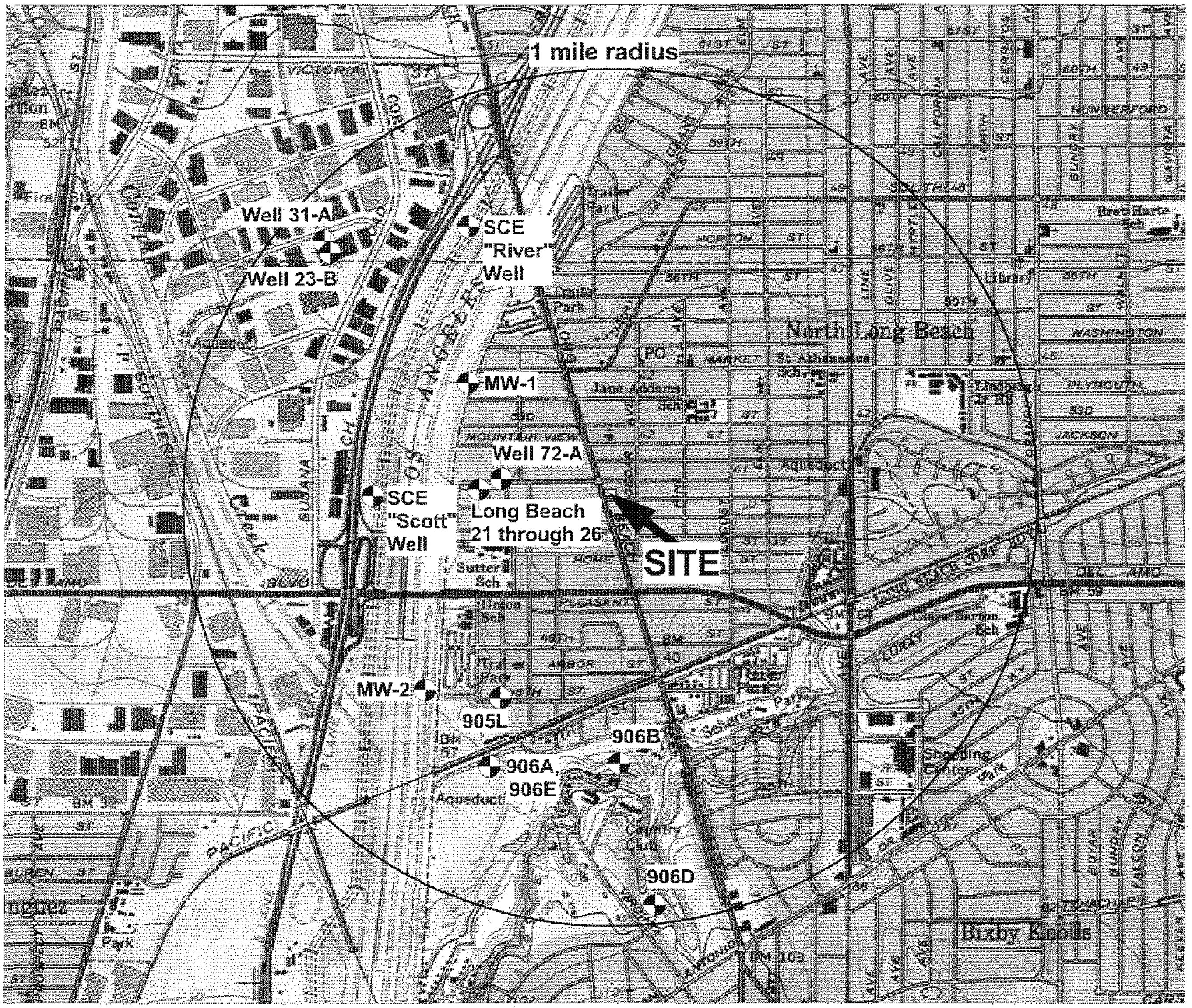
feet msl feet above mean sea level

feet bgs feet below ground surface

-- = not analyzed or not measured

ND = not detected or not detected at the laboratory reporting limit

FIGURES



EXPLANATION

● MW-1 Production Well Location and Designation

NORTH

0 1/2 1

SCALE IN MILES

UNITED SERVICE STATION # 41
5170 LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA

Client: **UNITED EL SEGUNDO, INC.** Project No.: **284-35**

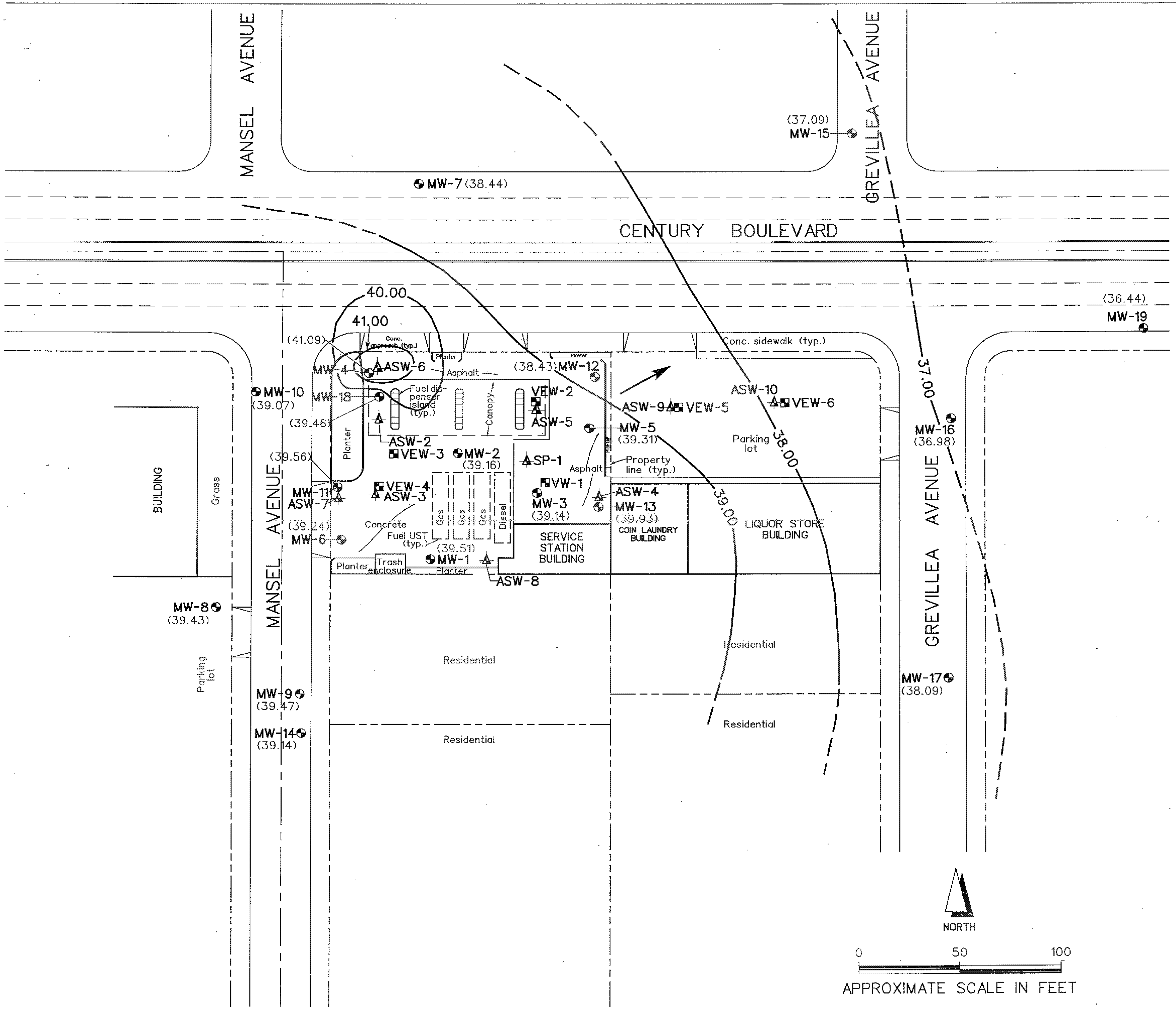
FREY ENVIRONMENTAL, INC.

NOTE:

1) All locations and dimensions are approximate.
2) Base map from USGS 7.5 minute, California topographic quadrangle, printed from Topo®.

SITE LOCATION MAP

Date: **AUGUST 2006** Figure: **1**



EXPLANATION

▲ SP-1	AIR SPARGE WELL LOCATION (Atlas)
▲ ASW-2	AIR SPARGE WELL LOCATION (FREY)
▨ VW-1	VAPOR EXTRACTION WELL LOCATION (Atlas)
▨ VEW-2	VAPOR EXTRACTION WELL LOCATION (FREY)
● MW-1	GROUNDWATER MONITORING WELL LOCATION (Atlas)
(39.51)	With groundwater elevation in feet MSL on August 1, 2007
39.00	CONTOUR OF EQUAL GROUNDWATER ELEVATION (in feet MSL on August 1, 2007)
→	ESTIMATED DIRECTION OF GROUNDWATER FLOW

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Atlas Environmental Engineering, Inc., drawing no. U57SYSF1, figure 19, titled "Site Plan", dated 10/25/2001.
3) Well locations MW-14 through MW-18, ASW-2, and VEW-2 were surveyed by RdM Surveying Inc on 12/03/2004. Well locations ASW-3 through ASW-10 and VEW-4 through VEW-6 were surveyed by RdM on 04/19/2006. Well location MW19 was surveyed on 05/01/2007 by RdM.

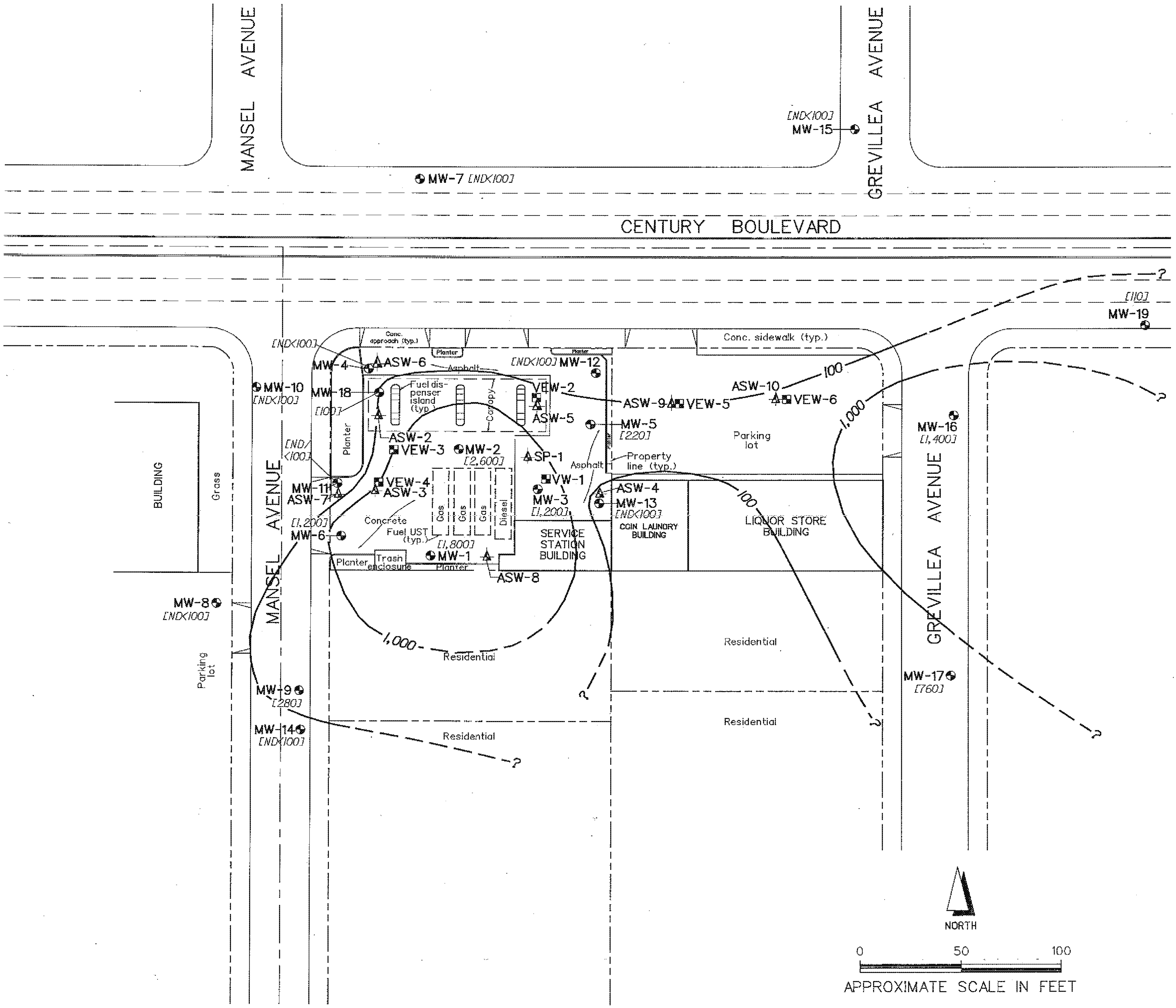
UNITED SERVICE STATION # 57
4520 W. CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA

Client: UNITED EL SEGUNDO, INC. Project No.: 284-36

FREY ENVIRONMENTAL, INC.

SITE SKETCH
SHOWING GROUNDWATER ELEVATIONS AND
ESTIMATED GROUNDWATER FLOW DIRECTION
ON AUGUST 1, 2007

Date: OCTOBER 2007 Figure 2



EXPLANATION

▲	SP-1	AIR SPARGE WELL LOCATION (Atlas)
▲	ASW-2	AIR SPARGE WELL LOCATION (FREY)
▨	VW-1	VAPOR EXTRACTION WELL LOCATION (Atlas)
▨	VEW-2	VAPOR EXTRACTION WELL LOCATION (FREY)
●	MW-1	GROUNDWATER MONITORING WELL LOCATION (Atlas)
	[1,800]	With TPH-G concentration in groundwater (in μg/l, on August 1 and 2, 2007; ND=not detected above laboratory detection limit)
	1,000	CONTOUR OF EQUAL TPH-G CONCENTRATION IN GROUNDWATER (in μg/l, on August 1 and 2, 2007)

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Atlas Environmental Engineering, Inc., drawing no. U57SYSF1, figure 19, titled "Site Plan", dated 10/25/2001.
3) Well locations MW-14 through MW-18, ASW-2, and VEW-2 were surveyed by RdM Surveying Inc on 12/03/2004. Well locations ASW-3 through ASW-10 and VEW-4 through VEW-6 were surveyed by RdM on 04/19/2006. Well location MW19 was surveyed on 05/01/2007 by RdM.

UNITED SERVICE STATION # 57
4520 W. CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA

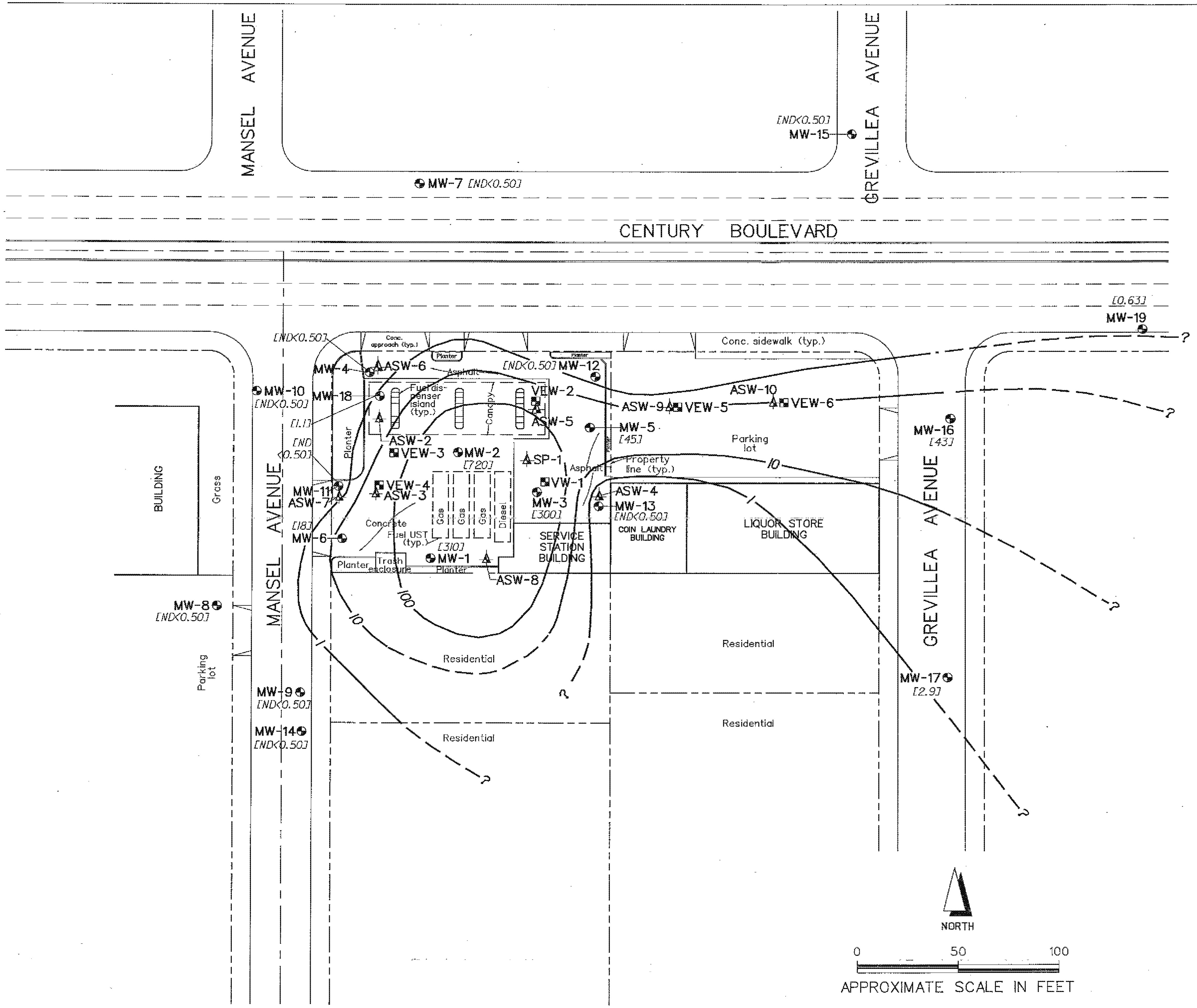
Client: UNITED EL SEGUNDO, INC. Project No.: 284-36

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
TPH-G CONCENTRATIONS IN GROUNDWATER
ON AUGUST 1 AND 2, 2007

Date: OCTOBER 2007 Figure 3

284-36/28436-50.dgn



EXPLANATION

SP-1	AIR SPARGE WELL LOCATION (Atlas)
ASW-2	AIR SPARGE WELL LOCATION (FREY)
VW-1	VAPOR EXTRACTION WELL LOCATION (Atlas)
VEW-2	VAPOR EXTRACTION WELL LOCATION (FREY)
MW-1	GROUNDWATER MONITORING WELL LOCATION (Atlas)
[310]	With benzene concentration in groundwater (in µg/l, on August 1 and 2, 2007; ND=not detected above laboratory detection limit)
100	CONTOUR OF EQUAL BENZENE CONCENTRATION IN GROUNDWATER (in µg/l, on August 1 and 2, 2007)

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Atlas Environmental Engineering, Inc., drawing no. U57SYSF1, figure 19, titled "Site Plan", dated 10/25/2001.
3) Well locations MW-14 through MW-18, ASW-2, and VEW-2 were surveyed by RdM Surveying Inc on 12/03/2004. Well locations ASW-3 through ASW-10 and VEW-4 through VEW-6 were surveyed by RdM on 04/19/2006. Well location MW19 was surveyed on 05/01/2007 by RdM.

UNITED SERVICE STATION # 57
4520 W. CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA

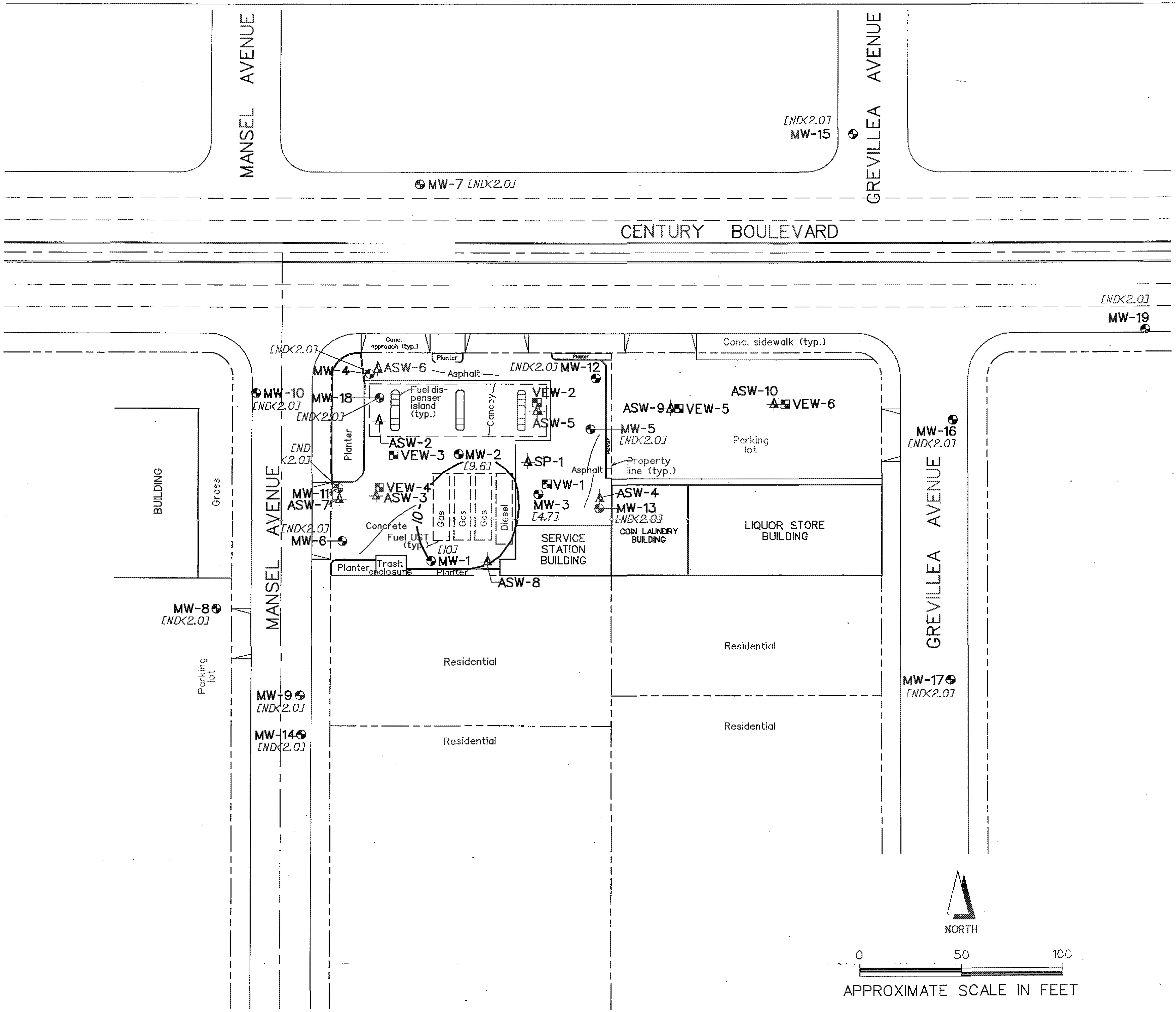
Client: UNITED EL SEGUNDO, INC. Project No.: 284-36

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
BENZENE CONCENTRATIONS IN GROUNDWATER
ON AUGUST 1 AND 2, 2007

Date: OCTOBER 2007 Figure 4

284-36/28436-50.dgn



EXPLANATION

SP-1	AIR SPARGE WELL LOCATION (Atlas)
ASW-2	AIR SPARGE WELL LOCATION (FREY)
VW-1	VAPOR EXTRACTION WELL LOCATION (Atlas)
VEW-2	VAPOR EXTRACTION WELL LOCATION (FREY)
MW-1	GROUNDWATER MONITORING WELL LOCATION (Atlas)
[10]	With MTBE concentration in groundwater (in µg/l, on August 1 and 2, 2007; ND=not detected above laboratory detection limit)
10	CONTOUR OF EQUAL MTBE CONCENTRATION IN GROUNDWATER (in µg/l, on August 1 and 2, 2007)

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Atlas Environmental Engineering, Inc., drawing no. U57SYSF1, figure 19, titled "Site Plan", dated 10/25/2001.
3) Well locations MW-14 through MW-18, ASW-2, and VEW-2 were surveyed by RdM Surveying Inc on 12/03/2004. Well locations ASW-3 through ASW-10 and VEW-4 through VEW-6 were surveyed by RdM on 04/19/2006. Well location MW19 was surveyed on 05/01/2007 by RdM.

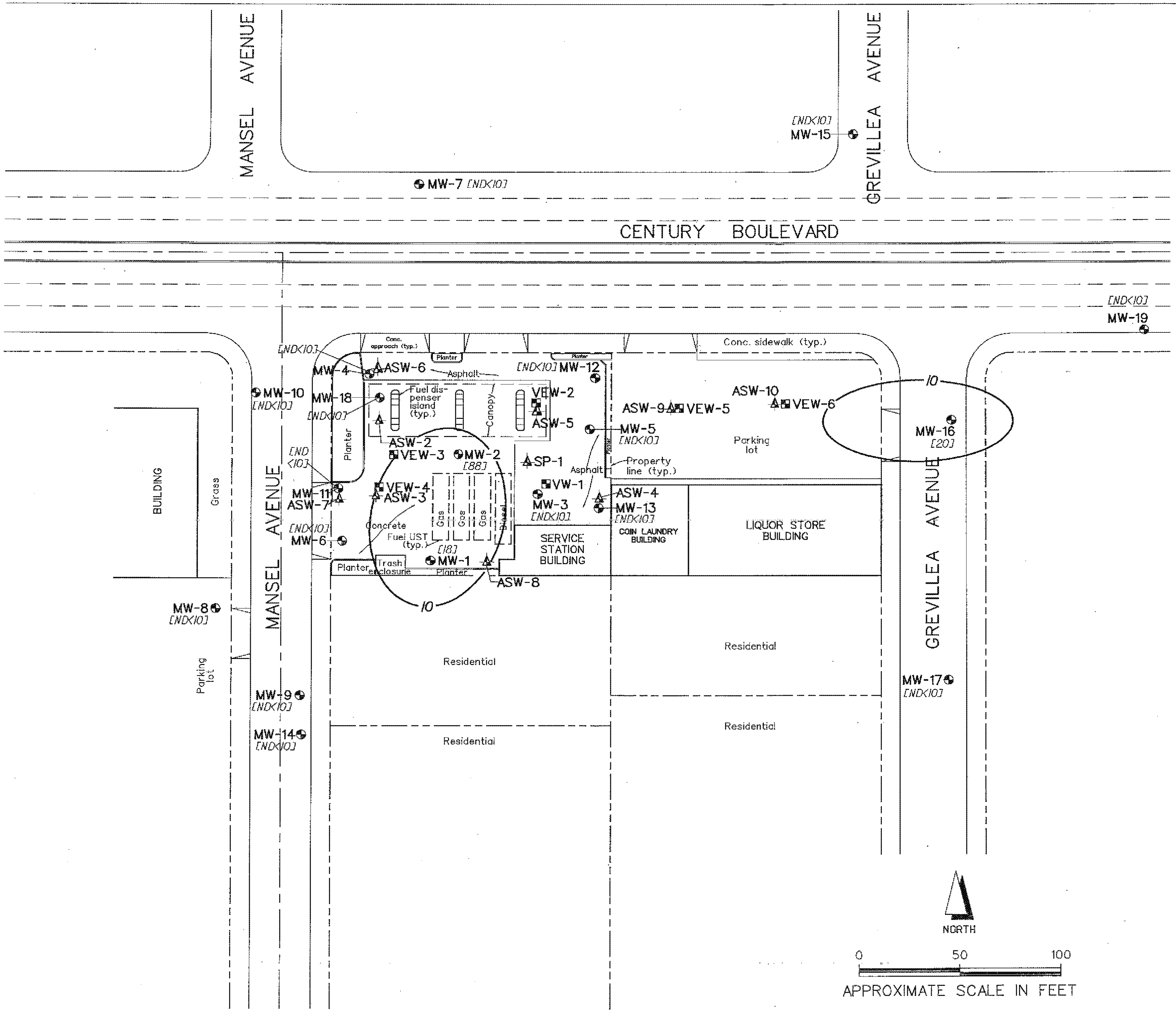
UNITED SERVICE STATION # 57
4520 W. CENTURY BOULEVARD
INGLEWOOD, CALIFORNIA

Client: UNITED EL SEGUNDO, INC. Project No.: 284-36

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING
MTBE CONCENTRATIONS IN GROUNDWATER
ON AUGUST 1 AND 2, 2007

Date: OCTOBER 2007 Figure 5



EXPLANATION

▲ SP-1	AIR SPARGE WELL LOCATION (Atlas)
▲ ASW-2	AIR SPARGE WELL LOCATION (FREY)
▨ VW-1	VAPOR EXTRACTION WELL LOCATION (Atlas)
▨ VEW-2	VAPOR EXTRACTION WELL LOCATION (FREY)
⊕ MW-1	GROUNDWATER MONITORING WELL LOCATION (Atlas)
[18]	With TBA concentration in groundwater (in µg/l, on August 1 and 2, 2007; ND=not detected above laboratory detection limit)
10	CONTOUR OF EQUAL TBA CONCENTRATION IN GROUNDWATER (in µg/l, on August 1 and 2, 2007)

NOTES:

1) All locations and dimensions are approximate.
2) Base map from drawing by Atlas Environmental Engineering, Inc., drawing no. U57SYSF1, figure 19, titled "Site Plan", dated 10/25/2001.
3) Well locations MW-14 through MW-18, ASW-2, and VEW-2 were surveyed by RdM Surveying Inc on 12/03/2004. Well locations ASW-3 through ASW-10 and VEW-4 through VEW-6 were surveyed by RdM on 04/19/2006. Well location MW19 was surveyed on 05/01/2007 by RdM.

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SITE SKETCH SHOWING
TBA CONCENTRATIONS IN GROUNDWATER
ON AUGUST 1 AND 2, 2007

Date: OCTOBER 2007 Figure 6

Former Inglewood Manufactured Gas Site

Source:

HydroSolutions, 1992. *Preliminary Endangerment Assessment, Former Inglewood Manufactured Gas Plant, 700 Warren Lane, Inglewood, California,* HydroSolutions of California, Inc., 13 May 1992.

PRELIMINARY ENDANGERMENT ASSESSMENT
FORMER INGLEWOOD
MANUFACTURED GAS PLANT
700 WARREN LANE
INGLEWOOD, CALIFORNIA

Prepared for:
Southern California Gas Company
555 West Fifth Street
Los Angeles, California 90013

Prepared by:
HydroSolutions of California, Inc.
11470 Sunrise Gold Circle, Suite 4
Rancho Cordova, California 95742

RRSP: 92269-01-02

May 13, 1992

excavation activities. Nonvolatile PAH compounds may adhere to dust or particulate matter that could become airborne if sufficiently disturbed or inadequate precautions are taken. The annual prevailing winds are from the west-southwest at eight miles per hour.

Releases to air of hazardous substances/wastes are unlikely under existing site conditions. In the presently unanticipated event that construction activities expose subsurface soils, it is possible that such releases could occur for a limited time if inadequate precautions are taken to prevent these. Such potential releases would be in the form of PAHs adsorbed onto soil particles that may become airborne. Soils data available to date indicate that evaporative emissions of volatile substances would be unlikely.

4.0 SAMPLING ACTIVITIES AND REQUIREMENTS

4.1 Past Sampling Activities

No records regarding past sampling activities have been found by HSCI.

4.2 PEA Sampling Activities

Included in this PEA are the results of a limited field soil sampling program conducted on the Site April 23, 24 and 27, 1992. The field program was designed to evaluate possible presence of chemicals associated with past activities. Soils were analyzed for PAHs, acidic soil condition, metals, total petroleum hydrocarbons (TPH) and cyanide in the shallowmost 10-15 feet of sediment. Specific details regarding the implementation of this work is described in the workplan (Table 4 and Appendix D). Generally, soil samples were collected from just beneath the grass (root zone), five, ten and fifteen foot depth intervals.

Figure 2 illustrates the locations of each of the boring and sampling points.

4.2.1 Sample Plan Preparation

An initial subsurface investigation was conducted to fulfill the Department of Toxic Substances Control, formally DHS, requirements for the PEA report for the Site. The objectives of the PEA field activity are:

- to determine if a release or a threatened release of hazardous substances exists at the Site;

- to initially assess the relative threat to public health and the environment posed by a release or threatened release at the Site;

- to determine if an emergency removal action is needed at the Site in order to protect public health and the environment from any immediate hazard posed by a release or threatened release; and

- to determine what further action(s), if any, need to be taken at the Site.

The workplan was prepared to comply with the "Interim Guidance for Preparation of a Preliminary Endangerment Assessment Report" (Department of Health Services, June 22, 1990). A copy of the workplan and health & safety plan are included in Appendix D.

4.2.2 Sample Collection and Analyses

On April 23 and 24, HSCI implemented the above mentioned sampling plan. A total of 18 borings, including near surface samples and a background location were completed.

Selected borings were drilled in areas which former MPG structures were located. Sanborn maps from 1912 and 1923 were utilized for identification of these locations. Borings, B-12 and B-16, are located in the area of the former purifiers and generator room. Boring B-11 is located topographically down-gradient of the off-site former oil vault location and adjacent the former workshop. Borings B-8, B-13 and B-14 are located in the vicinity of the former gas holder.

Boring, B-6, and sample location B-3 (near surface sample) were located adjacent the sand box for the purpose of addressing conditions existing near the childrens' play area.

Borings, B-2, B-5, B-7, B-9, B-10, B-13 and B-16 were located in a manner that provided a consistent distribution of sampling points across the Site. Buildings, fence lines, trees and subsurface structures influenced the ultimate position of these borings and sampling points.

Lastly, boring, B-1, was located in an area off-site and up-gradient (based on topographic slope indicated on the U.S.G.S. Inglewood quadrangle) and is considered a background sample.

No sample collection or analysis deviations from the sampling plan were undertaken with exception of three additional hand augered borings (B-15, B-17 and B-18). These borings were completed to provide information regarding the lateral extent of black colored sediment observed in borings B-13 and B-14. The locations of the additional borings are shown on the boring location map (figure 2).

4.3 Evaluation of Sample Results

HSCI's soil investigation included the collection and analysis of soil samples for PAHs, metals, total petroleum hydrocarbons, BTEX, selected pesticides and pH. The presence of PAHs in subsurface soil were detected within a limited area located at B-13, B-14 and B-15. Concentrations of PAHs in boring B-13 and B-15 were detected at the five foot depth and levels of PAHs in boring B-14 were detected at the three foot depth. No PAHs were detected at the ten foot depth in B-13 or B-14. No sample was collected from the ten foot depth of boring B-15. PAHs were identified in two of the near surface samples B-8 (1.26 mg/kg) and B-11 (2.42 mg/kg).

No concentrations of BTEX were detected in soil samples and qualitative organic headspace measurements of each soil sample did not indicate the presence of significant organic vapors (1-6 ppm).

Total petroleum hydrocarbons were detected in one soil sample collected from B-14 (3 foot depth) and was measured at 35 mg/kg. Approximately 11 mg/kg TPH was detected from a soil sample collected from the background boring (B-1).

One near surface sample collected from boring B-14 contained detectable levels of Edrin and 4,4'-DDE. The concentration of Edrin was detected to be 0.0319 mg/kg. Concentration of 4,4'-DDE was detected to be 0.0248 mg/kg. No detectable levels of these compounds were reported at the five foot depth.

Concentrations of metals were detected below the screening values in most of the soil samples with exception of arsenic, cadmium and chromium which were detected slightly above the screening values (4.46, 1.30 and 2.18 factors for 5 year child, respectively).

Lastly, cyanide was detected in only one sample located at the three foot depth in boring, B-14. This concentration was 0.4 mg/kg, below the ingestion screening value for soil.

Based on laboratory comments, QA/QC procedures, objectives, and results, as well as laboratory QA/QC (duplicate, reagent, spikes, method spikes, and surrogate spike) report that data has met the specified acceptance criteria for quantitative data. Laboratory quality assurance data are included in Appendix B. Chain-of-custody forms are included in Appendix C.

Tables 5, 6, 7, 8 and 9 list results of the analytes tested by the laboratory. Appendices A and B include geologic logs and chemical analysis reports.

5.0 HUMAN HEALTH AND ENVIRONMENTAL THREAT ASSESSMENT

5.1 Screening Values

Provided in Table 9 is a comparison of human health screening values with maximum contaminant levels observed in soils collected during the field program conducted April 23 and 24 and 27, 1992. Screening values were taken from the DHS, June 1990 interim guidance document for preparation of PEAs. A summary of the calculations supporting the screening level appraisal tests is also included in Table 9. Although copper was detected in concentrations up to 38.4 mg/kg, no test result was generated. This is due to no screening value for this analyte.

Chemicals most commonly associated with former gas plant site residues are polycyclic aromatics hydrocarbons (PAHs). PAHs were found in concentrations which exceeded chronic and 5-year (child) screening values for soils at borings, B-8, B-11, B-13, B-14 and B-15. In addition, arsenic, cadmium and chromium (total) levels exceeded the 5 year (child) screening value in several borings.

5.2 Characteristics of the Hazardous Substances/Wastes

Very little specific information has been found which would show types and quantities of wastes generated at this site. However, records of general oil-gas manufacturing practices and wastes do exist from which assumptions can be made concerning the possible hazardous substances that may remain on the site. Specific contaminants found in concentrations exceeding the screening values were PAHs, arsenic, cadmium and chromium.

Typical contaminants caused by oil-gas operations are oil, tars, iron and iron compounds, sulfur and sulfur compounds, aromatic hydrocarbons, and acidic soil. Some characteristics of these contaminants are listed in Table 3.

Table 1. Ownership History of Inglewood Gas Plant Property

GRANTOR	GRANTEE	TRANSFER DATE	RECORDING DATE	PROPERTY TRANSFERRED	REMARKS
Inglewood Domestic Water Company	Inglewood Gas Company	12/31/09	01/03/10	Lot 27	
Inglewood Domestic Water Company	Inglewood Gas Company	04/12/10	06/02/10	A portion of Lot 22, south of Lot 27	Refer to the deed for an exact description of this property.
Inglewood Gas Company	Los Angeles Gas and Electric Company	03/19/12	03/21/12	Personal property located on all of above	Deed refers to the existence of a gas plant on this property
Inglewood Gas Company	Inglewood Water Company *	03/23/12	03/30/12	Lot 27 AND A portion of Lot 22, south of Lot 27	Quitclaim
Inglewood Gas Company	Inglewood Water Company	03/23/12	04/11/12	Lot 27 AND A portion of Lot 22, south of Lot 27	Quitclaim
Inglewood Water Company	City of Inglewood (current owner)	12/23/19	01/28/20	Lot 27 AND A portion of Lot 22, south of Lot 27	

NOTES: * Formerly Inglewood Domestic Water Company. All property located in Tract 641 located in the County of Los Angeles, California, as recorded in Book 15, Page 183 of maps in the Office of the Recorder of Los Angeles County, California. *Based on data received from The Gas Company.*

Table 2. Weight of Materials Into and Out of Five Oil–Gas Generator Plants

–?Revised

Items	Potrero	San Jose	Santa Barbara Gas Company	Southern California Gas Company	Los Angeles Gas and Electric Corporation
WEIGHT OF MATERIALS INTO GENERATOR					
Make Period					
Make oil	50.48	51.03	58.51	57.94	59.06
Steam	24.80	23.50	14.20	12.20	10.50
Steam (purge)	6.40	3.50	2.00	7.60	6.00
Combustion Products	3.30	5.30	5.40	5.30	3.80
Totals	84.98	83.33	80.11	83.04	79.36
Blast Period					
Air	112.00	44.00	88.00	48.00	78.00
Steam	1.50	1.20	0.80	0.80	0.90
Totals	113.50	45.20	88.80	48.80	78.90
Heat Period					
Air	97.00	129.00	140.00	118.00	153.00
Oil	6.88	7.30	8.08	6.23	6.07
Steam	5.90	5.00	4.00	2.70	3.00
Totals	109.78	141.30	152.08	126.93	162.07
Totals of all materials in	308.26	269.83	320.99	258.77	320.33
WEIGHT OF MATERIALS OUT OF GENERATOR					
Make Period					
Purified gas	35.77	37.06	29.77	31.80	33.25
Lampblack	12.00	13.00	22.00	19.60	21.70 — *
Tar	4.00	4.50	2.50	1.50	1.50
Water vapor	22.00	17.60	12.80	14.70	9.00
Totals	74.17	72.16	67.07	67.60	65.45
Blast Period					
Stack gases	112.00	42.00	86.00	48.00	77.00
Water vapor	1.50	1.20	0.80	0.80	0.90
Totals	113.50	43.20	86.80	48.80	77.90
Heat Period					
Stack gases	94.00	122.20	129.60	114.00	149.40
Water vapor	13.05	12.33	11.18	7.83	10.35
Totals	107.05	134.53	140.78	121.83	159.75
Totals of all materials out	294.72	249.89	294.65	238.23	303.10
Differences (including carbon deposited on bricks, H_2S, napthalene, and losses)	13.54	19.94	26.34	20.54	17.23
Percent differences	4.4	7.3	8.2	7.9	5.4

NOTES: Weight in pounds. *From Harkins, Scott M. et al, "U.S. Production of Manufactured Gases: Assessment of Past Disposal Practices" dated 1987.*

Table 3. Characteristics of Hazardous Substances/Wastes/By-Products

Hazardous Substance/Waste	Important Characteristics Affecting Human and Environmental Exposure	Human Exposure Routes	Dispersion Mechanisms	California MCL 1
Polycylic aromatic hydrocarbons (e.g. napthalene, benzo(a)pyrene)2	Harmful to aquatic life in low concentrations (napthalene); some **carcinogenic** in animals See Table 8	Inhalation, ingestion, direct contact	Ground water	None defined
Light aromatic hyrocarbons (e.g. benzene, toluene, xylenes)	High aquatic toxicity, low to moderate soil mobilities; carcinogenic (benzene)	Inhalation, ingestion direct contact	Soil disturbance, ground water	1 ug/L (benzene)
Sulfur and sulfur compounds (e.g. hydrogen sulfide, sulfuric acid)		Inhalation, ingestion	Soil disturbance, ground water	500 mg/L (sulfate)
Iron oxides and other iron compounds	Low soil mobiities, may have acid generating potential, spent oxides are putophoric (i.e. have a tendency to self-heat and spontaneously combust when exposed to heat)	Inhalation, ingestion	Soil disturbance, ground water	300 ug/L (iron)
Carbon (lampblack) 3	Immobile and insoluble in subsurface soil, may present dust hazard if exposed	Inhalation, ingestion, direct contact	Soil disturbance, ground water	None defined

NOTES: 1 Maximum Contaminant Level (MCL) as specified by the California Department of Toxic Substance Control. These ground water quality action levels are at least as stringent as U.S. Environmental Protection Agency MCLs.

2 See Table 8 for a complete list and concentrations of PAH compounds found on-site.

3 While carbon is not hazardous to humans or the environment, lampblack may include some of the hazardous substances (especially PAHs) listed above.

From Ecology and Environment, Inc. Revision 4.0 "Preliminary Endangerment Assessment, Anaheim, California Former Manufactured Gas Plant Site" dated 11/1/91. (After Harkins, 1987; U.S. EPA, "Drinking Water Standards and Health Advisory Table," 1989; U.S. Department of Transportation, "CHRIS Hazardous Chemical Data," 1984. Sittig, 1985.)

Table 4. Lithologic Descriptions of Near Surface Grab Samples

Boring	Lithologic Descriptions
B-3	SILTY SAND (SW), slightly moist, medium brown, light brown, very fine to course grained, some three-inch diameter gravel, subangular to subrounded, some organics (roots), no unusual odor.
B-4	CLAYEY SILT (ML), moist, medium brown, clayey, roots, some round gravels (3-4mm), no unusual odor.
B-7	SILTY CLAY (CL), moist, red-brown, purple-brown, some dark brown rectangular nodules, silty, some very fine sand, roots, no unusual odor.
B-9	SILT (ML), moist, medium brown, some dark brown, some clay, some medium to coarse grained sand, roots, no unusual odor.

NOTES: Soil samples were collected from two to six inches beneath the ground surface. All samples were located from grassy areas on the site.

Table 5. Summary of Analytical Results for Polycyclic Aromatic Hydrocarbons (PAH) in Soils

PARAMETER	B-1-NS	B-1-5	B-1-10	B-2-NS	B-2-5	B-3	B-4	B-5-NS	B-5-5	B-6-NS	B-6-5	B-6-20	B-7	B-8-NS	B-8-5	B-9	B-10-NS	B-10-5	B-11-NS	B-11-5	B-11-10	B-12-NS	B-12-5	B-13-NS EPA METHOD 8270	B-13-5 EPA METHOD 8270	B-13-10	B-14-3 EPA METHOD 8270	B-14-10 EPA METHOD 8270	B-15-NS	B-15-5	B-17-NS	B-18-5
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.95	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	0.03	ND	ND
Benzo[a]anthracene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	15.7	ND	ND	0.24	ND	ND
Benzo[a]pyrene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17	ND	ND	ND	ND	0.36	ND	ND	ND	ND	ND	ND	ND	23.4	ND	ND	0.38	ND	ND
Benzo[b]fluoranthene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	0.29	ND	ND	ND	ND	ND	ND	ND	22.6	ND	ND	0.17	ND	ND
Benzo[k]fluoranthene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	12.7	ND	ND	0.14	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	0.27	ND	ND	ND	ND	ND	ND	ND	17.1	ND	ND	0.37	ND	ND
Chrysene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	ND	0.35	ND	ND	ND	ND	ND	0.23	ND	13.5	ND	ND	0.27	ND	ND
Dibenzo[a,h]anthracene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	1.06	ND	ND	0.03	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27	ND	ND	ND	ND	0.17	ND	ND	ND	ND	ND	0.30	ND	23.0	ND	ND	0.51	ND	ND
Indeno[1,2,3-cd]pyrene *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	ND	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	12.4	ND	ND	0.31	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	12.6	ND	ND	0.18	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27	ND	ND	ND	ND	0.26	ND	ND	ND	ND	ND	0.42	ND	31.7	ND	ND	0.73	ND	ND
2-Methylnapthalene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ND	ND	---	0.24	ND	---	---	---	---
Total PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND	2.42	ND	ND	ND	ND	ND	0.95	ND	196.73	ND	ND	3.36	ND	ND
Total Carcinogenic PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	0.23	ND	101.41	ND	ND	1.51	ND	ND

NOTES: ND = not detected. * = carcinogenic chemical. --- = not analyzed. Results in mg/kg (ppm). Soil samples analyzed by Calscience Environmental Laboratories, Inc. Parameters analyzed by EPA Method 8310 unless otherwise noted.

Table 6. Summary of Analytical Results for pH in Soils

SAMPLE	pH
B-1-NS	7.41
B-1-5	7.48
B-1-10	7.93
B-2-NS	7.58
B-2-5	7.35
B-3	7.90
B-4	7.02
B-6-NS	7.74
B-6-5	7.88
B-6-10	7.24
B-6-15	7.05
B-6-20	7.72
B-7	7.57
B-9	7.84
B-10-NS	7.81
B-11-NS	8.17
B-11-5	8.27
B-11-10	8.10
B-14-NS	6.57
B-14-5	7.76
B-14-10	8.42
B-14-3	8.00
B-18-5	7.59
MEAN	7.67
STANDARD DEVIATION	0.43
MINIMUM	6.57
MAXIMUM	8.42

NOTE: pH analyzed by EPA Method 9045. Soil samples analyzed by Calscience Environmental Laboratories,Inc.

Table 7. Summary of Analytical Results for Petroleum Hydrocarbons in Soils

SAMPLE	TPH
B-1-NS	11
B-1-5	ND
B-1-10	ND
B-5-NS	ND
B-3	ND
B-4	ND
B-5-5	ND
B-6-NS	ND
B-6-5	ND
B-6-20	ND
B-7	ND
B-8-NS	ND
B-8-5	ND
B-9	ND
B-10-NS	ND
B-10-5	ND
B-11-NS	ND
B-11-5	ND
B-11-10	ND
B-12-NS	ND
B-12-5	ND
B-13-NS	ND BTEX ND
B-13-5	ND BTEX ND
B-13-10	ND
B-14-NS	ND BTEX ND
B-14-3	35
B-14-5	ND BTEX ND
B-14-10	ND
B-15-NS	ND
B-15-5	ND
B-18-5	ND

NOTE: ND = Not detected. BTEX ND denotes samples analyzed for Benzene, Toluene Ethylbenzene and Xylene. Soil samples analyzed by Calscience Environmental Laboratories, Inc. Results in mg/kg (ppm). TPH analyzed bye EPA Method 8015m. BTEX analyzed by EPA Method 8020.

Table 8. Summary of Analytical Results for Metals and Cyanide in Soils

PARAMETER	BACKGROUND B-1-NS BORING	B-2-NS	B-5-NS	B-3	B-4	B-6-NS	B-6-20	B-7	B-8-NS	B-9	B-10-NS	B-11-NS	B-11-5	B-12-NS	B-12-5	B-13-NS	B-13-5	B-13-10	B-13-15	B-14-NS	B-14-3	B-15-NS	B-16-NS	B-17-NS	B-18-5
Antimony	ND	ND	---	---	---	ND	---	---	---	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	---	---	---	---
Arsenic	ND	1.60	ND	2.40	1.77	ND	ND	8.92	ND	5.05	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	ND	---	2.55	ND
Beryllium	ND	ND	---	---	---	ND	---	---	---	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	---	---	---	---
Cadmium	1.25	2.25	---	---	---	1.20	---	---	---	---	---	1.05	0.60	ND	---	1.50	0.80	1.05	ND	2.60	0.85	---	---	---	---
Chromium-Total	4.75	21.8	---	---	---	4.05	---	---	---	---	---	3.85	2.80	5.35	---	6.05	3.45	3.55	1.70	17.7	4.35	---	---	---	---
Copper	28.7	38.4	---	---	---	10.5	---	---	---	---	---	6.05	5.90	13.1	---	18.7	4.95	6.85	2.25	34.4	23.7	---	---	---	---
Lead	35.0	118	12.5*	26.7*	53.3*	22.1	ND*	47.0*	ND*	19.1*	6.25*	5.80	ND	38.7	---	20.4	3.45	1.00	1.05	134	12.9	4.69*	---	22.5*	ND*
Mercury	ND	ND	---	---	---	ND	---	---	---	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	---	---	---	---
Nickel	4.70	7.60	---	---	---	4.00	---	---	---	---	---	4.30	2.40	3.90	---	5.00	3.35	4.70	1.70	7.15	4.25	---	---	---	---
Selenium	1.78	1.60	---	---	---	0.92	---	---	---	---	---	1.17	0.93	0.80	---	0.86	0.80	1.48	1.11	0.80	0.80	---	---	---	---
Silver	ND	ND	---	---	---	ND	---	---	---	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	---	---	---	---
Thallium	ND	ND	---	---	---	ND	---	---	---	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	---	---	---	---
Zinc	50.9	136	---	---	---	37.7	---	---	---	---	---	10.6	10.7	62.1	---	72.2	14.5	11.8	6.15	129	19.5	---	---	---	---
Cyanide	---	---	---	---	ND	---	ND	---	---	ND	ND	ND	---	ND	ND	ND	ND	ND	---	---	0.4	---	ND	---	---

NOTES: ND = not detected. --- = not analyzed. * = analyzed by EPA Method 7420. Results in mg/kg. Soil samples analyzed by Calscience Environmental Laboratories, Inc. Arsenic analyzed by EPA Method 7060. Mercury analyzed by EPA Method 7471. Selenium analzyed by EPA Method 7740. Cyanide analyzed by EPA Method 9010. All other parameters analyzed by EPA Method 6010.

Table 9. Summary of Screening Test Results, Including Data and Screening Values

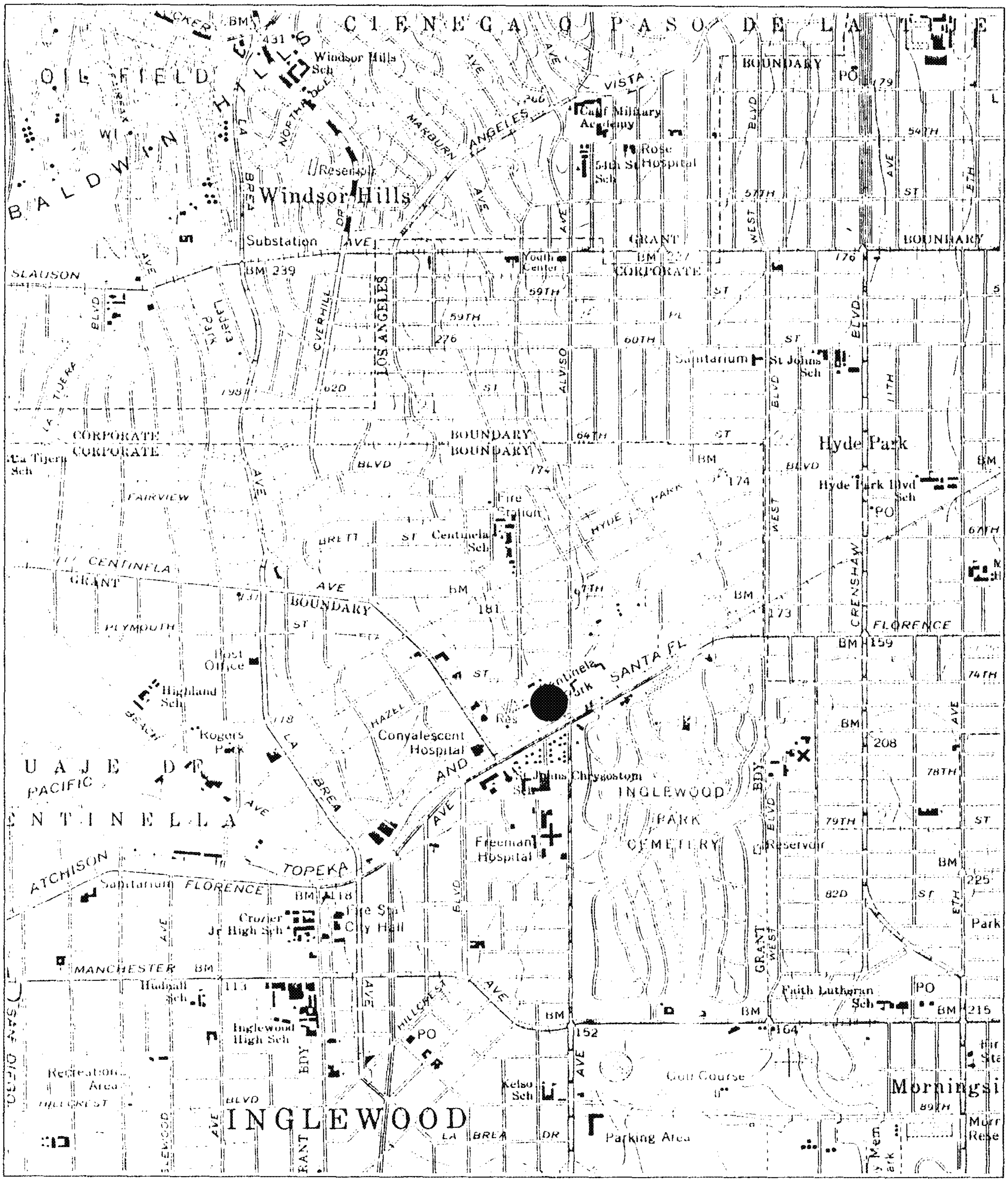
Parameter	Maximum Concentration in Soil	Soil Ingestion Screening Values		Test 1 $\left(\frac{C_{soil}}{\text{Screening Level}_{soil}}\right)$		Screening Test Results[2]	
		Chronic	5 year (child)	Chronic	5 year (child)	C	5yr
Arsenic	8.92	1000	2	0.0089	4.46	P	F
Cadmium	2.6	1000	2	0.0026	1.30	P	F
Chromium, total[1]	21.8	7000	10	0.0031	2.18	P	F
Copper[3]	38.4	---	---	---	---	---	---
Cyanide	0.4	20000	40	0.00002	0.01	P	P
Lead	134	2000	500	0.07	0.27	P	P
Nickel	7.6	20000	40	0.00038	0.19	P	P
Selenium	1.78	4000	7	0.00045	0.25	P	P
Zinc	136	200000	400	0.00068	0.34	P	P
Napthalene	2.71	500000	900	0.0000054	0.003	P	P
PAHs	196.49	0.1	.0002	1965	982450	F	F
4,4'-DDE	0.0248	4	.007	0.0062	3.54	P	F
Endrin	0.0319	400	.7	0.00008	0.05	P	P
		Test 3 Values and Results		1965	982463	Test 3 Fails	

NOTES: [1] Chromium, total utilizes screening values for Chromium VI.

[2] P=Pass, F=Fail, C=Chronic, 5yr=5 year (child).

[3] No screening values were available for copper.

Concentrations are in mg/kg (ppm).



● SUBJECT PROPERTY

Reproduced from USGS 7.5 Minute Series V895 (topographic)

Title:

SUBJECT PROPERTY LOCATION MAP

Project No.: 92269-01

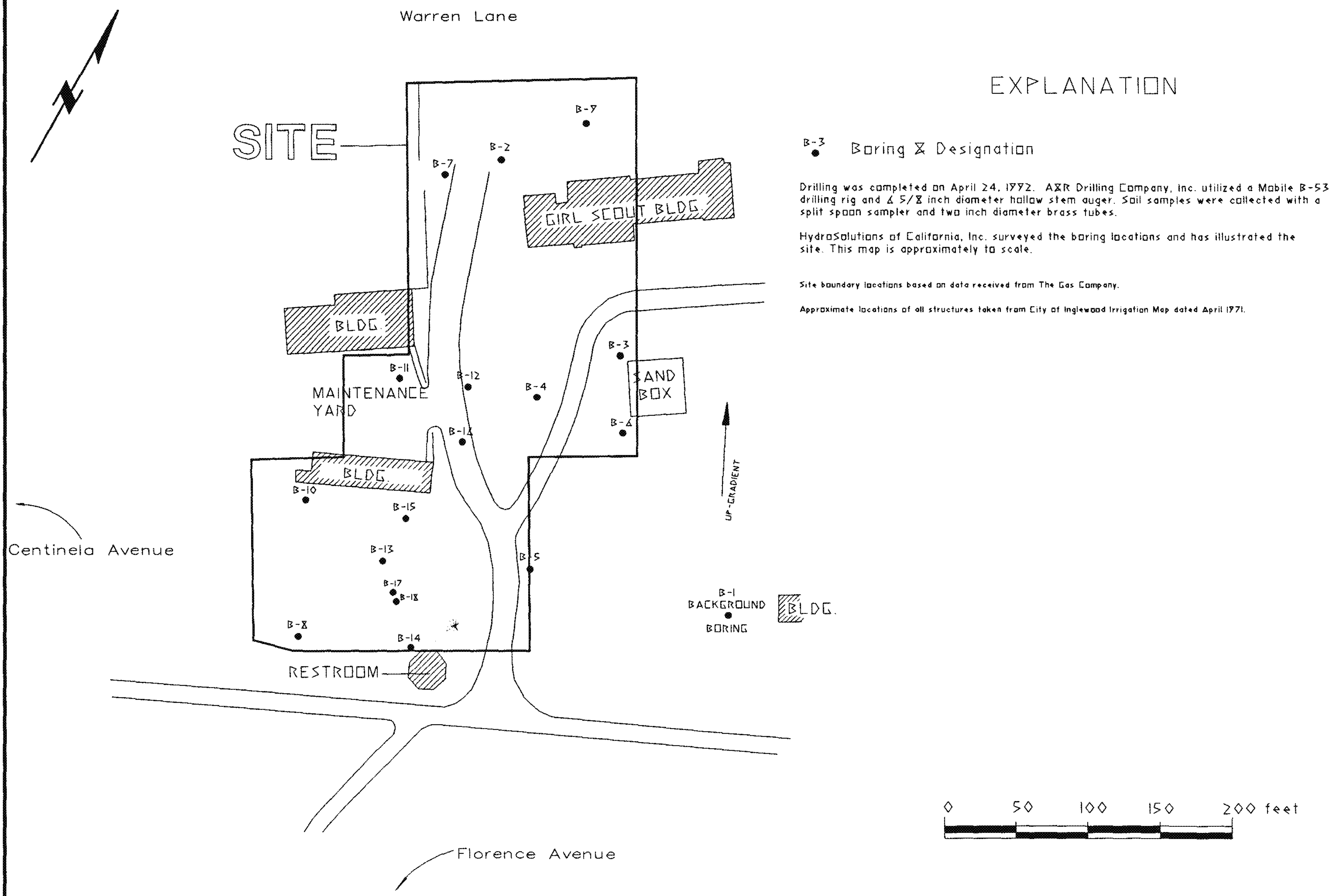
FIGURE 1

HydroSolutions of California, Inc.
11470 Sunrise Gold Circle, Suite 4
Rancho Cordova, California 95742
(916) 852-0188

Site:
FORMER INGLEWOOD TOWNE GAS SITE
INGLEWOOD, CALIFORNIA

Scale: 1 inch=2,000 feet

Date: 04-21-92



EXPLANATION

B-3 ● Boring & Designation

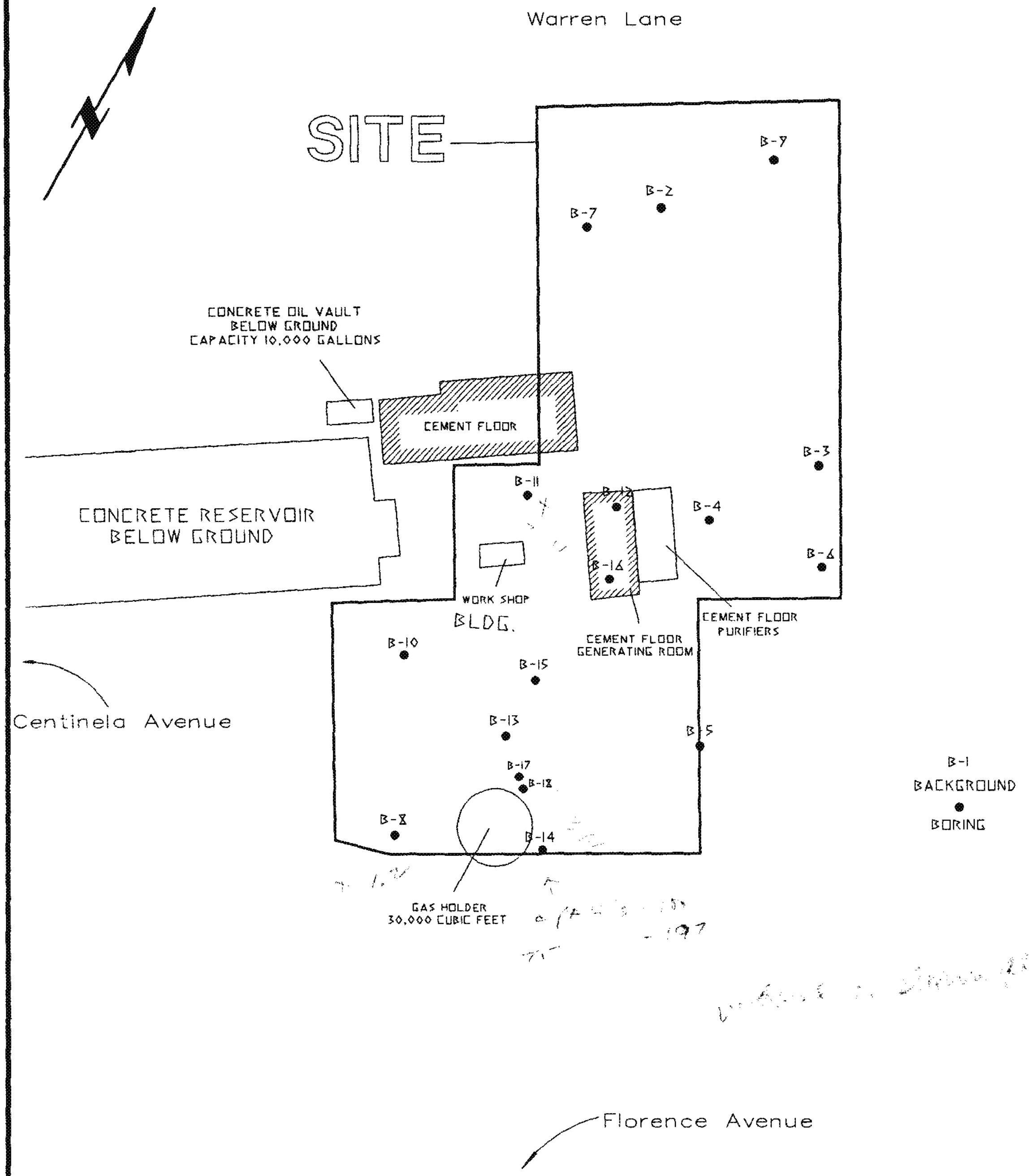
Drilling was completed on April 24, 1992. A&R Drilling Company, Inc. utilized a Mobile B-53 drilling rig and 6 5/8 inch diameter hollow stem auger. Soil samples were collected with a split spoon sampler and two inch diameter brass tubes.

HydroSolutions of California, Inc. surveyed the boring locations and has illustrated the site. This map is approximately to scale.

Site boundary locations based on data received from The Gas Company.

Approximate locations of all structures taken from City of Inglewood Irrigation Map dated April 1971.

HydroSolutions of California, Inc. 11470 Sunrise Gold Circle, Suite 4 Rancho Cordova, California 95742 (916) 852-0188	Title **BORING LOCATION MAP**	Project Number 92269-01	FIGURE 2
	Site INGLEWOOD MANUFACTURED GAS PLANT 700 WARREN LANE INGLEWOOD, CALIFORNIA	Date prepared 04-29-92 Scale AS SHOWN	



EXPLANATION

● B-3 Boring & Designation

HydroSolutions of California, Inc. surveyed the boring locations and has illustrated the site. This map is approximately to scale.

Site boundary locations based on data received from The Gas Company.

Approximate locations of all structures taken from Sanborn Fire Insurance Map dated 1912 and City of Inglewood Irrigation Map dated April 1971. Structure locations correlated using footprint of reservoir as depicted on City of Inglewood Irrigation Map.

HydroSolutions of California, Inc.

11470 Sunrise Gold Circle, Suite 4
Rancho Cordova, California 95742
(916) 852-0188

Title
MANUFACTURED GAS PLANT STRUCTURES LOCATION MAP

Site
INGLEWOOD MANUFACTURED GAS PLANT
700 WARREN LANE
INGLEWOOD, CALIFORNIA

Project Number
92269-01

Date prepared
04-29-92

Scale
AS SHOWN

FIGURE
3

Tosco 76 #2900

Source:

SECOR, 2007. *Additional Soil Assessment Report for ConocoPhillips Company 76 Station No. 2900, 9830 South Crenshaw Boulevard, Inglewood, California, LACDPW File No. 010107-024650,* SECOR, 23 March 2007.

SECOR

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RVI
SIIR

10107-24650

Corr #318237

March 23, 2007

Ms. Rani Iyer
County of Los Angeles Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, California 91802-1460

Subject: Request for Project Transfer to the Los Angeles Regional Water Quality Control Board
76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California
LACDPW File No. 010107-024650

RECEIVED
APR 02 2007
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS

Dear Ms. Iyer:

On behalf of ConocoPhillips Company, SECOR International Incorporated (SECOR) is requesting that the case file for the referenced site be transferred to the Los Angeles Regional Water Quality Control Board (LARWQCB) based on the conclusions and recommendations in SECOR's March 23, 2007 *Additional Soil Assessment Report*, enclosed. During the additional assessment activities, groundwater was encountered at approximately 110 feet below ground surface and grab groundwater samples were collected for analytical testing. A summary of the analytical testing results is included as Table 2 in the enclosed report.

If you have any questions or require additional information regarding this letter, this site, or the enclosed report, please contact Jason Komes at 714-230-0316.

Sincerely,
SECOR International Incorporated

Jason C. Komes
Project Scientist

Kelly C. Brown, PG 6714
Principal Geologist

KELLY C. BROWN
NO. 6714
exp. 10/[illegible]/07

Encl.

cc: Mr. Karl Bewley, ConocoPhillips Company (electronic copy)

C462927

ADDITIONAL SOIL ASSESSMENT REPORT FOR

CONOCOPHILLIPS COMPANY

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California
LACDPW File No. 010107-024650

March 23, 2007
14CP.01148.02.1222

Prepared by:

Angela Wagner
Project Geologist

Reviewed By:

Jason C. Komes
Project Manager

Approved by:

Kelly C. Brown, PG 6714
Principal Geologist

KELLY C. BROWN
NO. 6714
exp. 1/31/07

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1.0 INTRODUCTION

On behalf of ConocoPhillips Company (COP), SECOR International Incorporated (SECOR) is pleased to present this Additional Soil Assessment Report summarizing the findings of subsurface investigation activities conducted at 76 Station No. 2900 located at 9830 South Crenshaw Boulevard, Inglewood, California (Figure 1). The purpose of this additional investigation was to further evaluate the vertical and lateral extent of petroleum hydrocarbon impact in the vicinity of the southwestern fuel dispenser and southwest of the underground storage tanks (USTs). This investigation was conducted in accordance with SECOR's September 16, 2005 *Work Plan for Additional Soil Assessment* (work plan). A copy of the work plan was submitted to the Los Angeles County Department of Public Works (LACDPW) for review and approval. Since a response to the work plan was not received from LACDPW, SECOR submitted *Notification of Work Plan Implementation Under Title 23 "60 Day Rule"* dated February 9, 2006. A copy of SECOR's work plan and the February 9, 2006 correspondence are included as Appendix A.

The scope of work completed during the assessment included the advancement of four soil borings (B-11 through B-14) to a maximum depth of 111.5 feet below ground surface (bgs). Groundwater was encountered during drilling activities and grab groundwater samples were collected from each boring.

This report summarizes site description, regional and site geology and hydrogeology, sensitive receptors, site background, scope of work, findings, conclusions, and limitations.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION

The site is located on the northeast corner of the intersection of Century Boulevard and Crenshaw Boulevard in Inglewood, California. The site is an active 76 service station consisting of three gasoline USTs and four fuel dispenser islands. The site layout is shown on Figure 2.

2.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located within the Coastal Plain of Los Angeles on the western edge of the Rosecrans Hills Physiographic Region. The area near the station is underlain by upper Pleistocene marine and continental deposits of the Lakewood Formation to approximately 240 feet below ground surface (bgs) (Poland and others, 1959). The formation consists of fine grained sediments of flood plain and stream channel deposits that contain discontinuous permeable zones. The San Pedro Formation of marine origin underlies the Lakewood Formation (CDWR, 1988).

The site is located within the Newport-Inglewood Structural Zone adjacent to the Potrero Fault, and is approximately ½ - mile east of the Inglewood Fault. The Potrero Fault is expressed at the surface as an escarpment along the western side of the Rosecrans Hills, and has not shown normal and right lateral displacement. The Potrero Fault does act as a barrier to ground-water flow in aquifers affected by the fault (CDWR 1988). The Potrero Oil Field is located approximately ½ - mile north of the station along the Potrero Fault (Poland and others, 1959).

2.3 SITE GEOLOGY AND HYDROGEOLOGY

The station is located in the West Coast Ground Water Basin, which is bounded on the north by Ballona Gap, on the south by the Palos Verdes Hills and Dominguez and Alamitos Gaps, and on the west by the Pacific Ocean. The Gage aquifer of the Lakewood Formation occurs at a depth of approximately 150 feet and has a maximum thickness of approximately 90 feet in this area. Deposits of the aquifer vary from fine to medium grained sand with variable amounts of gravel, sandy silt, and clay (CDWR 1988).

According to the County of Los Angeles Department of Public Works Hydrology/Water Conservation Records Unit, groundwater was measured at a depth of 137.0 feet below ground surface in October 1990 within municipal observation well #1364J located approximately 0.8 of a mile north of the station within the northeastern portion of Hollywood Park racetrack property. Municipal observation well #1364J was reportedly destroyed in October 1991. Based on a topographic map of the area, the local direction of ground-water flow appears to be to the southwest (USGS, 1981).

2.4 PREVIOUS INVESTIGATIONS

In April and July 1992, Environmental Science & Engineering, Inc. (ESE), drilled a total of six borings at the site. The borings were drilled down to approximately 50 feet bgs. Total petroleum hydrocarbons reported as gasoline (TPHg) were reported at concentrations ranging from 6 milligrams per kilogram (mg/kg) to 19,140 mg/kg in analyzed soil samples. Benzene concentrations ranged from 0.02 mg/kg to 9 mg/kg. Toluene concentrations ranged from 0.009 mg/kg to 540 mg/kg. Ethylbenzene concentrations ranged from 0.07 mg/kg to 460 mg/kg. Total xylenes concentrations ranged from 0.8 mg/kg to 2,570 mg/kg. Organic lead was not reported in any of the analyzed soil samples.

In September 1997, England & Associates (EA) performed a soil gas survey at the site. Seven soil vapor samples, one adjacent to each fuel dispenser and three adjacent to the USTs, were collected at the site. Soil vapor samples were collected at depths of approximately 3 feet bgs from each dispenser location and approximately 15 feet bgs from each UST location. Elevated concentrations of TPHg, benzene, toluene, ethylbenzene, xylenes (collectively BTEX) and methyl tert-butyl ether (MTBE) were reported in the soil vapor sample collected from the southeastern dispenser. Concentrations of TPHg and BTEX were also reported in the samples collected from the northwestern and southwestern fuel dispensers. Low concentrations of toluene and xylenes were reported in the soil vapor sample collected west of the USTs.

In November, 1998, TAIT Environmental Management, Inc. provided oversight during the removal and replacement of the fuel dispensers, product piping and UST sumps and turbines. Low concentrations of TPHg, toluene, xylenes and MTBE were reported in the soil sample collected beneath the northwestern dispenser. Concentrations of TPHg, BTEX and MTBE were reported in the soil sample collected beneath the product piping joint near the southeastern fuel dispenser. Based on the results, CPC requested no further action in a letter dated March 16, 1999.

In a letter dated October 6, 2004, LACDPW requested additional information, including vertical and lateral assessment of the extent of contamination beneath the fuel dispensers and product piping, before the site could be considered for closure.

In March 2005, ten soil borings (SB-1 through SB-10) were advanced near the dispenser islands (SB-1 through SB-6) and USTs (SB-7 through SB-10) to depths ranging between 50 and 60 feet bgs using a direct-push drilling rig. Petroleum hydrocarbons were reported in soil samples collected from borings SB-1, SB-2, SB-3 and SB-6 through SB-10. As a result, 25 feet of 'clean' soils (or five consecutive soil samples with petroleum hydrocarbons reported as nondetect) were not obtained in the eight borings. To obtain 25 feet of clean soils, borings SB-1, SB-2, SB-3 and SB-6 through SB-10 were completed to depths ranging between 85 and 110 feet bgs using a hollow stem auger drilling rig. Based on the findings of the investigation, SECOR recommended additional assessment southwest of boring SB-3 and southwest of boring SB-9.

3.0 SCOPE OF WORK

3.1 PRE-FIELD ACTIVITIES

Pre-field activities were conducted with safety as a foremost concern and according to ConocoPhillips Company Drilling Safety Handbook.

3.1.1 Health and Safety Plan

Prior to conducting field activities at the site, SECOR prepared a site-specific Health and Safety Plan (HASP) for the proposed soil boring location marking, utility clearance, hollow-stem auger drilling, and soil and groundwater sampling activities. The HASP was prepared in accordance with federal regulations (29 CFR 1910.120) designed to protect SECOR's workers and subcontractors during well installation activities. SECOR personnel, as well as on-site subcontractors or other personnel, were required to familiarize themselves with and sign the HASP in an attempt to minimize safety hazards. The HASP identified the specific chemical compounds which are typical for gasoline stations and presented the chemical properties and a task-specific health and safety risk analysis.

3.1.2 Utility Location and Hole Clearance

Prior to drilling at the site, SECOR marked the proposed boring locations and notified Underground Service Alert-South (USA), a California State-specific underground utility notification service. USA contacted the owners of the various utilities in the vicinity of the site to mark the locations of their underground utilities. Additionally, SECOR contracted Spectrum Geophysics (Spectrum), a private utility locator, to further assess potential subsurface utilities not identified by USA.

To further ensure that no utilities were damaged during drilling activities, WDC Exploration and Wells (WDC) was on-site on November 6, 2006 and cleared each boring location to approximately five feet bgs using air knife vacuum technology.

3.2 FIELD ACTIVITIES

3.2.1 Monitoring Well Installation and Soil Sampling

From November 7 through 9, 2006, four exploratory soil borings (B-11 through B-14) were advanced at the site by WDC using a CME-75HT drilling rig equipped with 6-inch outer diameter hollow stem augers. Each boring was advanced using to a depth of approximately 111.5 feet bgs. The borehole locations are shown on Figure 2.

During drilling activities, soil samples were collected at approximate five-foot intervals for potential chemical analysis logging purposes. Samples were obtained using a split-spoon sampler sleeved with three 6-inch long brass sleeves. All soil samples collected for chemical analysis were collected and prepared in accordance with EPA Method 5035 using 5 gram EnCore^{TM} samplers. Each soil sample was collected from the bottom sleeve. With the exception of boring B-14, these collected soil samples were immediately delivered to an on-site mobile laboratory for analysis. The mobile laboratory was not on-site during the drilling of boring B-14. As a result, these collected soil samples were placed in an ice-filled cooler for transport to a state-certified. Additionally, each sleeve from which the EnCore^{TM} samples were obtained from boring B-14 was capped on each end with a Teflon sheet followed by a tight fitting plastic cap, sealed with silicon tape, labeled and stored in an ice-filled cooler with the EnCore^{TM} samples. Chain-of-custody forms for sample documentation and laboratory testing are included as Appendix B.

A physical description of observed soil characteristics were recorded on boring logs in accordance with the Unified Soils Classification System (USCS). Due to malfunctioning equipment, soil vapors were not measured with a photoionization detector (PID) during this field investigation. All field work was completed under the supervision of a California Professional Geologist. The boring logs have been included as Appendix C. SECOR's Standard Protocols (SOPs) for drilling and soil sampling are attached as Appendix D.

3.2.2 Grab Groundwater Samples

During drilling, very moist to saturated soils were observed in each boring at approximately 110 feet bgs. Upon reaching 110 feet, the augers were retracted approximately 2 to 3 feet to allow water to fill the borehole. After approximately 60 minutes, a grab groundwater sample was obtained from each borehole using a disposable bailer. The groundwater samples collected from borings B-11, B-12 and B-13 were collected into 40 milliliter (mL) non-preserved glass vials immediately delivered to the on-site mobile laboratory. The groundwater sample collected from boring B-14 was collected into 40 mL non-preserved glass vials and placed into an ice-filled cooler for transport to a stationary laboratory. Chain-of-custody forms for sample documentation and laboratory testing are included as Appendix B. The groundwater samples were collected in accordance with SECOR's SOPs attached as Appendix D.

3.2.3 Waste Handling and Disposal

Soil cuttings and decontamination water generated during drilling activities were contained in labeled Department of Transportation (DOT) 55-gallon steel drums and stored on-site pending receipt of the analytical results. The drums were removed from the site by Filter Recycling Services of Rialto, California, for recycling. Waste disposal documents for soil are provided in Appendix E.

3.2.4 Laboratory Analysis

Collected soil and groundwater samples were relinquished to Jones Environmental Inc. (Jones) of Fullerton, California for chemical analysis. Jones is certified by the State of California Department of Health Services Environmental Laboratory Accreditation Program to perform analyses reported herein. The soil and groundwater samples were analyzed for TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA and ethanol according to EPA Method 8260B. Soil and groundwater sample analytical results are summarized in Tables 1 and 2, respectively. Laboratory results and chain-of-custody documentation are attached as Appendix B.

4.0 FINDINGS

4.1 FIELD INVESTIGATION RESULTS

The following findings were compiled based upon observations and measurements made during the field investigation:

- Encountered soils were predominantly comprised of sands interbedded with silts and clays to approximately 111.5 feet bgs; and
- Very moist to saturated soils were encountered at approximately 110 feet bgs. After approximately 60 minutes one to five feet of groundwater had accumulated in each borehole.

4.2 LABORATORY RESULTS

4.2.1 Soil Samples

Soil sample analytical results for soil samples analyzed from borings B-11 through B-14 are summarized in Table 1. Isoconcentration maps illustrating the distribution of TPHg, benzene and MTBE are attached as Figures 3, 4 and 5, respectively. Additionally, generalized cross-sections (See Figure 2) illustrating the spatial distribution of detected TPH-g, benzene and MTBE in the vadose zone, including the generalized subsurface lithology, are shown on Cross Section A-A' and B-B' as Figures 6 and 7, respectively. Copies of the laboratory report and chain-of-custody documents are in Appendix B. Review of the data indicates the following:

- TPHg was reported at concentrations ranging between 0.2 micrograms per kilogram (ug/kg) and 236 ug/kg in the soil samples collected at depths ranging between 35 and 65 feet bgs from borings B-11, B-12 and B-14. TPHg was not reported at or above laboratory reporting limits in the soil samples analyzed from boring B-13.
- Benzene was reported in samples B-11@40, B-11@50, B-11@55, B-13@ 85 and B-14@45 at concentrations of 6.5 ug/kg, 3.0 ug/kg, 19 ug/kg, 5.0 ug/kg and 67 ug/kg, respectively. Toluene was reported in samples B-11@50, B-11@55, B-12@40, B-12@45, B-14@45 and B-14@50 at concentrations of 9.0 ug/kg, 8.1 ug/kg, 1.0 ug/kg, 3.3 ug/kg, 790 ug/kg and 4.7 ug/kg, respectively. Ethylbenzene was reported at concentrations ranging between 2.2 ug/kg and 932 ug/kg in the soil samples collected at depths ranging between 35 and 65 feet bgs from borings B-11, B-12 and B-14. Xylenes were reported at concentrations ranging between 3.6 ug/kg and 5,700 ug/kg in the soil samples collected at depths ranging between 35 and 65 feet bgs from borings B-11, B-12 and B-14. Toluene, ethylbenzene and xylenes were not reported at or above laboratory reporting limits in the soil samples analyzed from boring B-13.

- MTBE was reported at concentrations ranging between 1.6 ug/kg and 1,300 ug/kg in the soil samples collected at depths ranging between 35 and 95 feet bgs from borings B-11 through B-14. With the exception of 1.6 ug/kg TAME reported in the soil sample collected 35 feet from boring B-14. TBA, DIPE, ETBE, TAME and ethanol were not reported at or above laboratory reporting limits in analyzed soil samples.

4.2.2 Grab Groundwater Samples

Analytical results for grab groundwater samples collected from borings B-11 through B-14 are summarized in Table 2. Review of the data indicates the following:

- TPHg was not reported at or above laboratory reporting limits in the analyzed groundwater samples.

- Xylenes were reported at concentrations of 4.4 micrograms per liter (ug/L) and 4.0 ug/L in the groundwater samples analyzed from borings B-11 and B-12. Benzene, toluene and ethylbenzene were not reported at or above laboratory reporting limits in the samples analyzed from borings B-11 and B-12. BTEX were not reported at or above laboratory reporting limits in the groundwater samples collected from borings B-13 and B-14.

- MTBE was reported at concentrations of 7.7 ug/L, 12 ug/L, 2.2 ug/L and 8.5 ug/L in the groundwater samples collected from B-11, B-12, B-13 and B-14, respectively. TBA, DIPE, ETBE, TAME and ethanol were not reported at or above laboratory reporting limits in the analyzed groundwater samples.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this investigation was to further evaluate the vertical and lateral extent of petroleum hydrocarbon impact in the southwest portion of the site. Based on collected data:

- Low concentrations of petroleum hydrocarbons are present in soils south and southwest of previously completed boring SB-3 and southwest of boring SB-9 between 35 and 90 feet bgs.
- Very moist to saturated soils were encountered at approximately 110 feet bgs in each boring. Approximately 1 to 5 feet of groundwater was observed in each borehole after approximately 60 minutes. Grab groundwater samples were collected.
- Low concentrations of MTBE were reported in grab groundwater samples collected from each boring completed during this investigation.

Based on results of this site assessment, it appears that further investigation, including the installation of groundwater monitoring wells, is necessary to fully evaluate the lateral extent of petroleum hydrocarbon impacted soil and groundwater beneath the southwestern portion of the site.

6.0 STANDARD LIMITATIONS

The conclusions and recommendation contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

SECOR derived the data in this report primarily from visual inspection, examination of records in the public domain, and interviews with individuals having information about the site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the site, analysis of the data, and re-evaluation of the findings, observations, and conclusions in the report. The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of the work. The scope of the work was defined by the request of the client, the time and budgetary constraints imposed by the client, and availability of access to the site.

Because of the limitation stated above, the findings, observations, and conclusions expressed by SECOR in this report are not, nor should not be, considered an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state, or local law or regulations. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported of findings, observations, and conclusions that are based solely upon site conditions in existence at the time of the investigation.

This report reports present professional opinions and finding of a scientific and technical nature. While attempts were made to relate the data and finding to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirement of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local government agencies. Any use of this report constitutes acceptance of the limits of SECOR's liability. SECOR's liability extends only to its client and not to any other parties who may obtain this report. Issues raised by the report should be reviewed by appropriate legal counsel.

The conclusions presented in this report are professional opinion based on data described on this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such. An evaluation of subsurface soil and groundwater conditions was not performed as part of this investigation. No sampling or chemical analyses were performed of assessment of asbestos-containing materials was completed was completed as part of this study unless explicitly stated. This report is based, in part, on unverified information supplied to SECOR by third-party sources. While efforts have been made to substantiate this third-party information, SECOR cannot guarantee its completeness or accuracy.

7.0 REFERENCES

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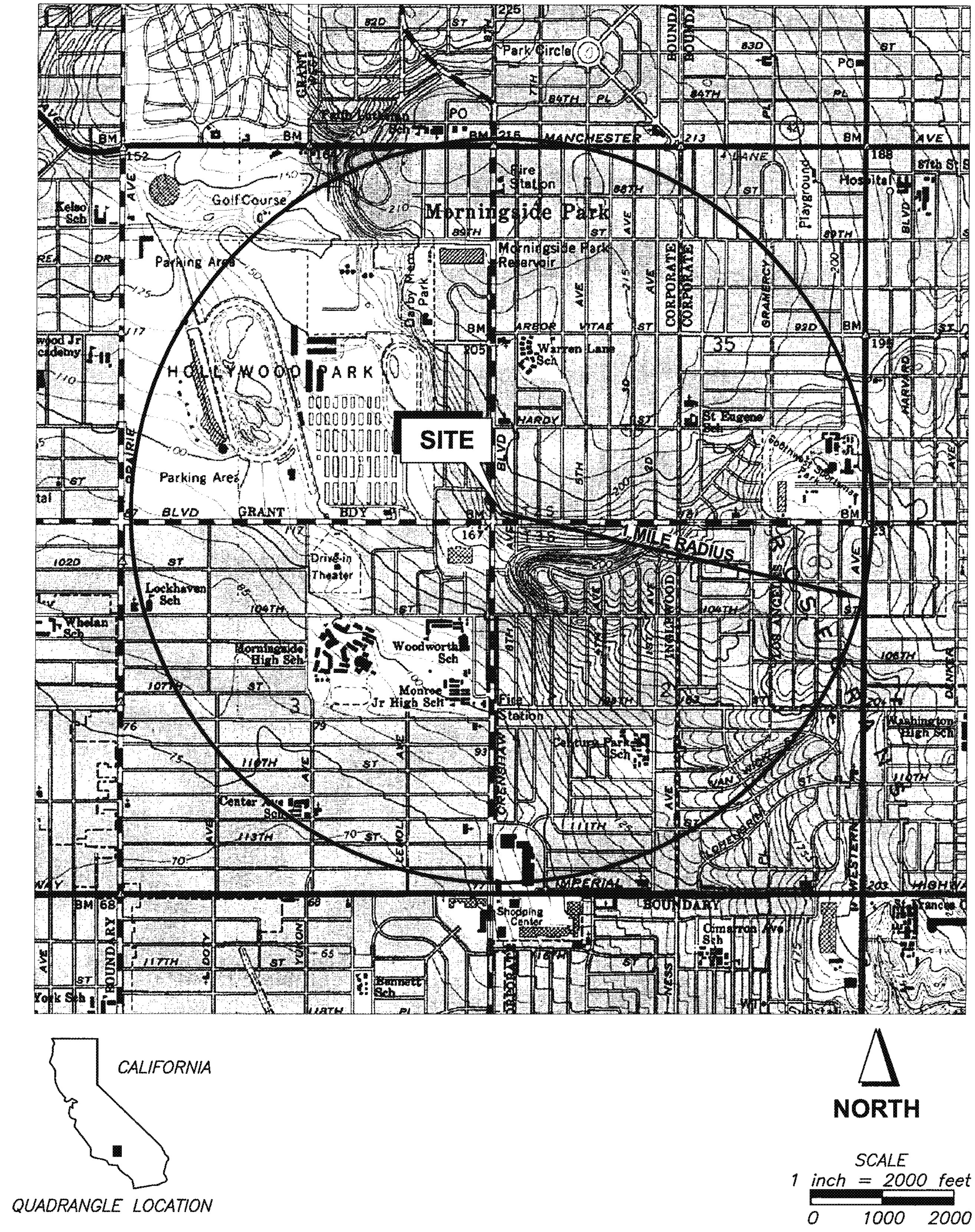
FIGURES

76 STATION NO. 2900
14CP.01148.02.1222
March 23, 2007



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; INGLEWOOD QUADRANT, CALIFORNIA; REVISION DATE 1981

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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

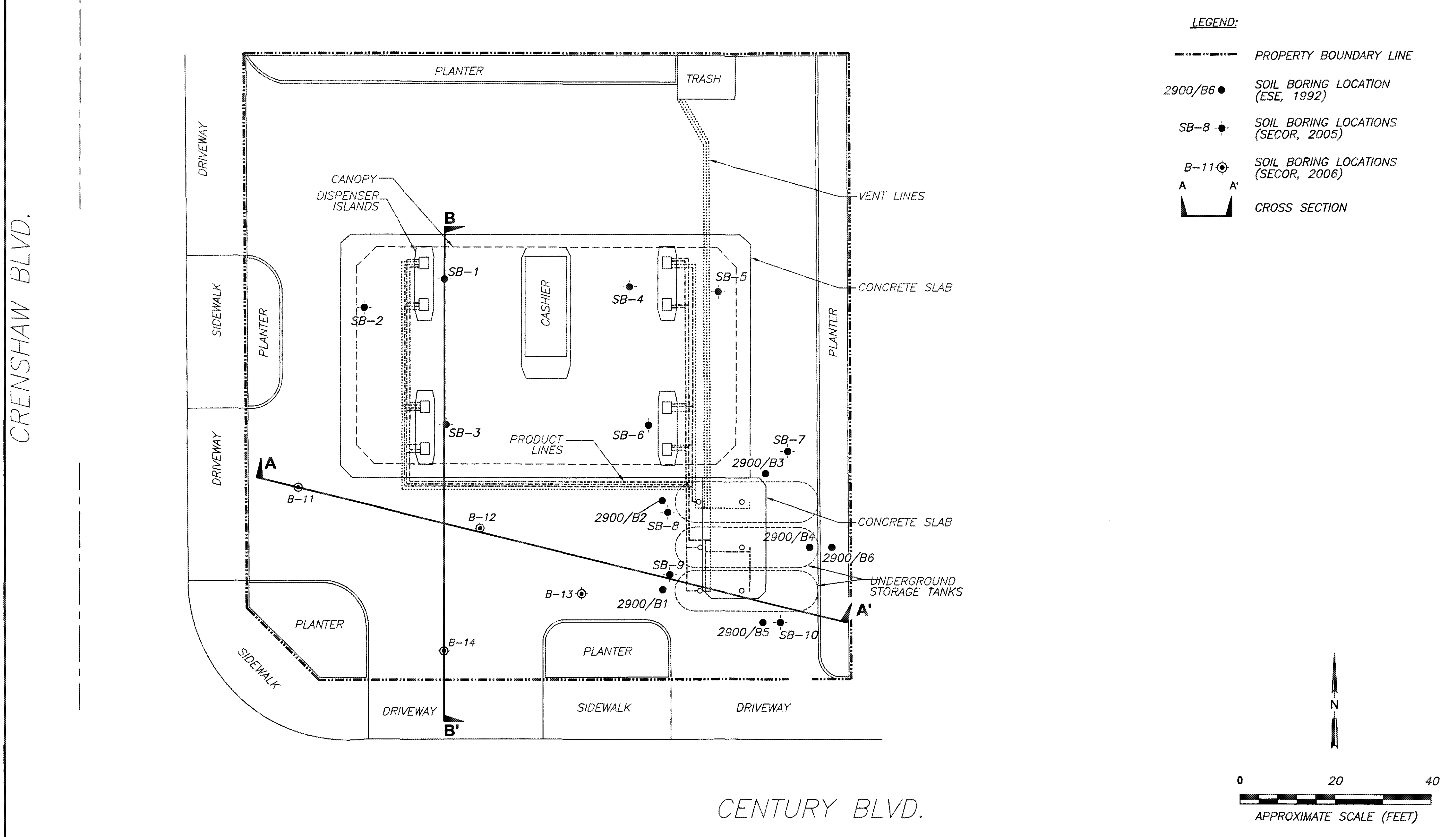
SITE LOCATION MAP

FIGURE:
1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
14CP.82900.00.0001	D. ACHARYA	A. WAGNER	K. BROWN	MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\CP2900.dwg | Layout Tab: SL(1) | Drafter: t-dacharya

CP2900.DWG



SECOR

11085 KNOTT AVENUE, SUITE B
CYPRESS, CALIFORNIA
PHONE: (714)379-3366/FAX: (714)379-3375

PREPARED FOR:

CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

SITE PLAN

FIGURE:

2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
14CP.01148.02	D. ACHARYA	A. WAGNER	K. BROWN	MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: SITEPLAN2 | Drafter: t-dacharya | Mar 20, 2007 at 17:42

2900SPX6-05.DWG

SB-2		
SD	DATE	CONC.
5'	03/17/05	<0.50
10'	03/17/05	<0.50
15'	03/17/05	<0.50
20'	03/17/05	<0.50
25'	03/17/05	<0.50
30'	03/17/05	<0.50
35'	03/17/05	<0.50
40'	03/17/05	<0.50
45'	03/17/05	<0.50
50'	03/17/05	<0.50
55'	04/12/05	0.6
60'	04/12/05	<0.2
65'	04/12/05	<0.2
70'	04/12/05	<0.2
75'	04/12/05	<0.2
80'	04/12/05	<0.2
85'	04/12/05	<0.2
90'	04/12/05	<0.2

SB-1		
SD	DATE	CONC.
5'	03/16/05	<0.50
10'	03/16/05	<0.50
15'	03/16/05	<0.50
20'	03/16/05	<0.50
25'	03/16/05	<0.50
30'	03/16/05	<0.50
35'	03/16/05	<0.50
40'	03/16/05	<0.50
45'	03/16/05	<0.50
50'	03/16/05	<0.50
55'	04/12/05	<0.2
60'	04/12/05	<0.2
65'	04/12/05	<0.2
70'	04/12/05	<0.2
75'	04/12/05	<0.2
80'	04/12/05	<0.2
85'	04/12/05	<0.2
90'	04/12/05	<0.2

SB-4		
SD	DATE	CONC.
5'	03/16/05	<0.50
10'	03/16/05	<0.50
15'	03/16/05	<0.50
20'	03/16/05	<0.50
25'	03/16/05	<0.50
30'	03/16/05	<0.50
35'	03/16/05	<0.50
40'	03/16/05	<0.50
45'	03/16/05	<0.50
50'	03/16/05	<0.50
55'	03/16/05	<0.50
60'	03/16/05	<0.50

SB-5		
SD	DATE	CONC.
5'	03/16/05	<0.50
10'	03/16/05	<0.50
15'	03/16/05	<0.50
20'	03/16/05	<0.50
25'	03/16/05	<0.50
30'	03/16/05	<0.50
35'	03/16/05	<0.50
40'	03/16/05	<0.50
45'	03/16/05	<0.50
50'	03/16/05	<0.50
55'	03/16/05	<0.50
60'	03/16/05	<0.50

SB-6		
SD	DATE	CONC.
5'	03/16/05	<0.50
10'	03/16/05	<0.50
15'	03/16/05	<0.50
20'	03/16/05	<0.50
25'	03/16/05	<0.50
30'	03/16/05	<0.50
35'	03/16/05	<0.50
40'	03/16/05	47
45'	03/16/05	1.5
50'	03/16/05	4.0
55'	04/13/05	2.7
60'	04/13/05	0.5
65'	04/13/05	<0.2
70'	04/13/05	<0.2
75'	04/13/05	<0.2
80'	04/13/05	<0.2
85'	04/13/05	<0.2

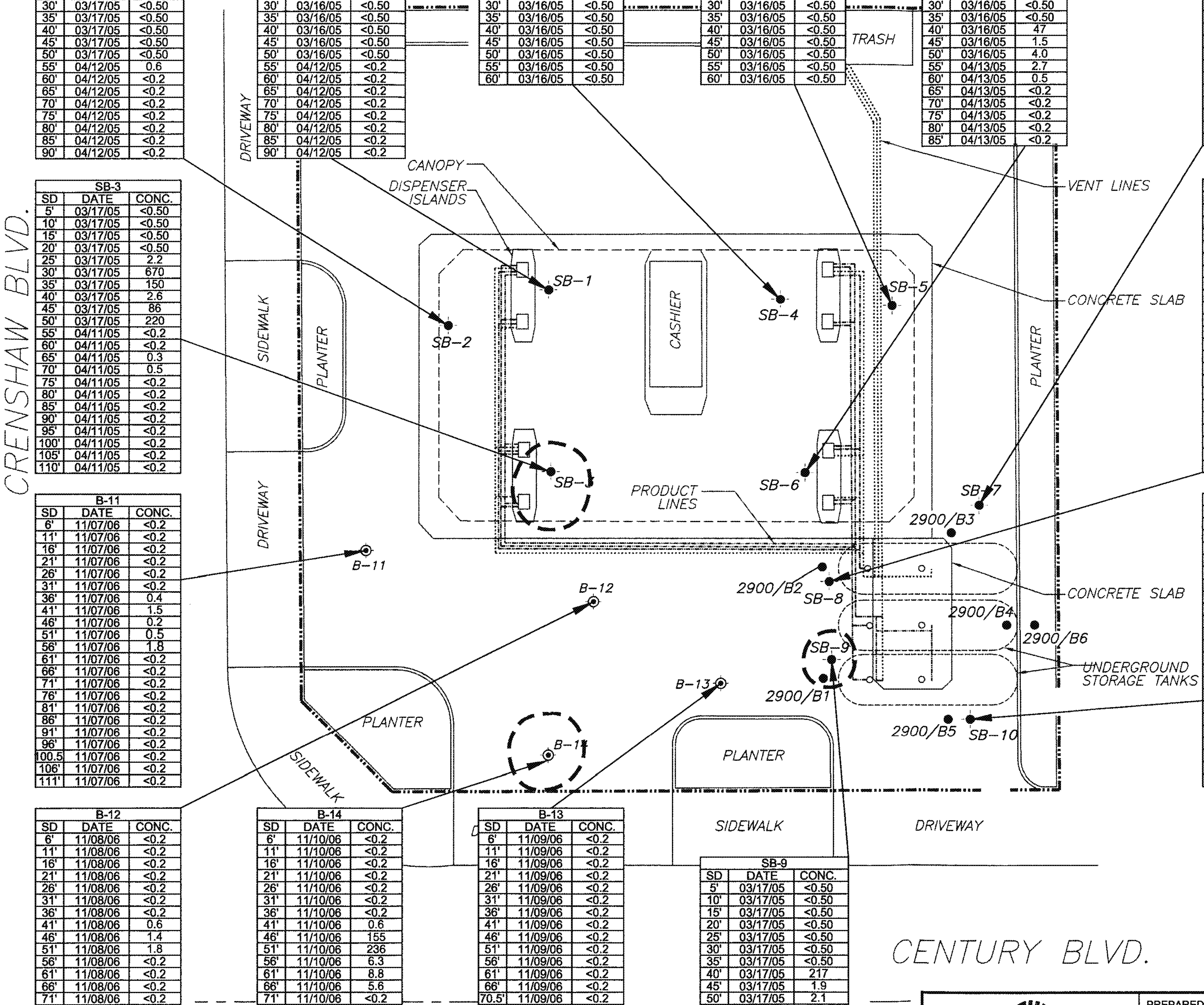
SB-7		
SD	DATE	CONC.
5'	03/18/05	<0.50
10'	03/18/05	<0.50
15'	03/18/05	<0.50
20'	03/18/05	<0.50
25'	03/18/05	<0.50
30'	03/18/05	<0.50
35'	03/18/05	<0.50
40'	03/18/05	<0.50
45'	03/18/05	<0.50
50'	03/18/05	0.47
55'	NR	NS
60'	NR	NS
65'	04/15/05	<0.2
70'	04/15/05	<0.2
75'	04/15/05	<0.2
80'	04/15/05	<0.2
85'	04/15/05	<0.2

LEGEND:

— · · — · · —	*PROPERTY BOUNDARY LINE*
2900/B6 ●	*SOIL BORING LOCATION (ESE, 1992)*
SB–7 ●	*SOIL BORING LOCATIONS (SECOR, 2005)*
B–11 ◉	*SOIL BORING LOCATIONS (SECOR, 2006)*
<	*DENOTES LESS THAN LABORATORY REPORTING LIMITS*
670	*TOTAL PETROLEUM HYDROCARBONS AS GASOLINE CONCENTRATIONS (mg/kg)*
SD	*SOIL SAMPLE DEPTH (feet below groundwater surface)*
NR	*NO RECOVERY*
NS	*NO SAMPLE*
mg/kg	*MILLIGRAMS PER KILOGRAM*
— —	*LIMIT OF HYDROCARBON IMPACT (>100 mg/kg TPHg)*

NOTE:
ALL RESULTS REPORTED IN PARTS PER MILLION (mg/kg)

SB-3		
SD	DATE	CONC.
5'	03/17/05	<0.50
10'	03/17/05	<0.50
15'	03/17/05	<0.50
20'	03/17/05	<0.50
25'	03/17/05	2.2
30'	03/17/05	670
35'	03/17/05	150
40'	03/17/05	2.6
45'	03/17/05	86
50'	03/17/05	220
55'	04/11/05	<0.2
60'	04/11/05	<0.2
65'	04/11/05	0.3
70'	04/11/05	0.5
75'	04/11/05	<0.2
80'	04/11/05	<0.2
85'	04/11/05	<0.2
90'	04/11/05	<0.2
95'	04/11/05	<0.2
100'	04/11/05	<0.2
105'	04/11/05	<0.2
110'	04/11/05	<0.2



SB-8		
SD	DATE	CONC.
5'	03/17/05	<0.50
10'	03/17/05	<0.50
15'	03/17/05	<0.50
20'	03/17/05	<0.50
25'	03/17/05	44
30'	03/17/05	<0.50
35'	03/17/05	<0.50
40'	03/17/05	<0.50
45'	03/17/05	<0.50
50'	03/17/05	0.81
55'	04/14/05	3.8
60'	04/14/05	1.3
65'	04/14/05	4.8
70'	04/14/05	1.5
75'	04/14/05	<0.20
80'	04/14/05	<0.20
85'	04/14/05	<0.20
90'	04/14/05	<0.20
95'	04/14/05	<0.20
100'	04/14/05	<0.20
105'	04/14/05	<0.20
110'	04/14/05	<0.20

B-11		
SD	DATE	CONC.
6'	11/07/06	<0.2
11'	11/07/06	<0.2
16'	11/07/06	<0.2
21'	11/07/06	<0.2
26'	11/07/06	<0.2
31'	11/07/06	<0.2
36'	11/07/06	0.4
41'	11/07/06	1.5
46'	11/07/06	0.2
51'	11/07/06	0.5
56'	11/07/06	1.8
61'	11/07/06	<0.2
66'	11/07/06	<0.2
71'	11/07/06	<0.2
76'	11/07/06	<0.2
81'	11/07/06	<0.2
86'	11/07/06	<0.2
91'	11/07/06	<0.2
96'	11/07/06	<0.2
100.5	11/07/06	<0.2
106'	11/07/06	<0.2
111'	11/07/06	<0.2

SB-10		
SD	DATE	CONC.
5'	03/18/05	<0.50
10'	03/18/05	<0.50
15'	03/18/05	<0.50
20'	03/18/05	<0.50
25'	03/18/05	<0.50
30'	03/18/05	<0.50
35'	03/18/05	<0.50
40'	03/18/05	<0.50
45'	03/18/05	<0.50
50'	03/18/05	0.25
55'	04/14/05	2.5
60'	04/14/05	<0.2
65'	04/14/05	NS
70'	04/14/05	<0.2
75'	04/14/05	<0.2
80'	04/14/05	<0.2
85'	04/14/05	<0.2
90'	04/14/05	<0.2
95'	04/14/05	<0.2
100'	04/14/05	<0.2
105'	04/14/05	<0.2
110'	04/14/05	<0.2

N

0 20 40
APPROXIMATE SCALE (FEET)

B-12		
SD	DATE	CONC.
6'	11/08/06	<0.2
11'	11/08/06	<0.2
16'	11/08/06	<0.2
21'	11/08/06	<0.2
26'	11/08/06	<0.2
31'	11/08/06	<0.2
36'	11/08/06	<0.2
41'	11/08/06	0.6
46'	11/08/06	1.4
51'	11/08/06	1.8
56'	11/08/06	<0.2
61'	11/08/06	<0.2
66'	11/08/06	<0.2
71'	11/08/06	<0.2
76'	11/08/06	<0.2
81'	11/08/06	<0.2
86'	11/08/06	<0.2
91'	11/08/06	<0.2
96'	11/08/06	<0.2
101'	11/08/06	<0.2
106'	11/08/06	<0.2
111'	11/08/06	<0.2

B-14		
SD	DATE	CONC.
6'	11/10/06	<0.2
11'	11/10/06	<0.2
16'	11/10/06	<0.2
21'	11/10/06	<0.2
26'	11/10/06	<0.2
31'	11/10/06	<0.2
36'	11/10/06	<0.2
41'	11/10/06	0.6
46'	11/10/06	155
51'	11/10/06	236
56'	11/10/06	6.3
61'	11/10/06	8.8
66'	11/10/06	5.6
71'	11/10/06	<0.2
75.5'	11/10/06	<0.2
81'	11/10/06	<0.2
85.5'	11/10/06	<0.2
91'	11/10/06	<0.2
96'	11/10/06	<0.2
100.5	11/10/06	<0.2
106'	11/10/06	<0.2
111'	11/10/06	<0.2

B-13		
SD	DATE	CONC.
6'	11/09/06	<0.2
11'	11/09/06	<0.2
16'	11/09/06	<0.2
21'	11/09/06	<0.2
26'	11/09/06	<0.2
31'	11/09/06	<0.2
36'	11/09/06	<0.2
41'	11/09/06	<0.2
46'	11/09/06	<0.2
51'	11/09/06	<0.2
56'	11/09/06	<0.2
61'	11/09/06	<0.2
66'	11/09/06	<0.2
70.5'	11/09/06	<0.2
76'	11/09/06	<0.2
81'	11/09/06	<0.2
86'	11/09/06	<0.2
91'	11/09/06	<0.2
96'	11/09/06	<0.2
100.5	11/09/06	<0.2
106'	11/09/06	<0.2
111'	11/09/06	<0.2

SB-9		
SD	DATE	CONC.
5'	03/17/05	<0.50
10'	03/17/05	<0.50
15'	03/17/05	<0.50
20'	03/17/05	<0.50
25'	03/17/05	<0.50
30'	03/17/05	<0.50
35'	03/17/05	<0.50
40'	03/17/05	217
45'	03/17/05	1.9
50'	03/17/05	2.1
55'	04/13/05	<0.2
60'	04/13/05	0.4
65'	04/13/05	0.5
70'	04/13/05	<0.2
75'	04/13/05	<0.2
80'	04/13/05	<0.2
85'	04/13/05	<0.2
90'	04/13/05	<0.2

SECOR
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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

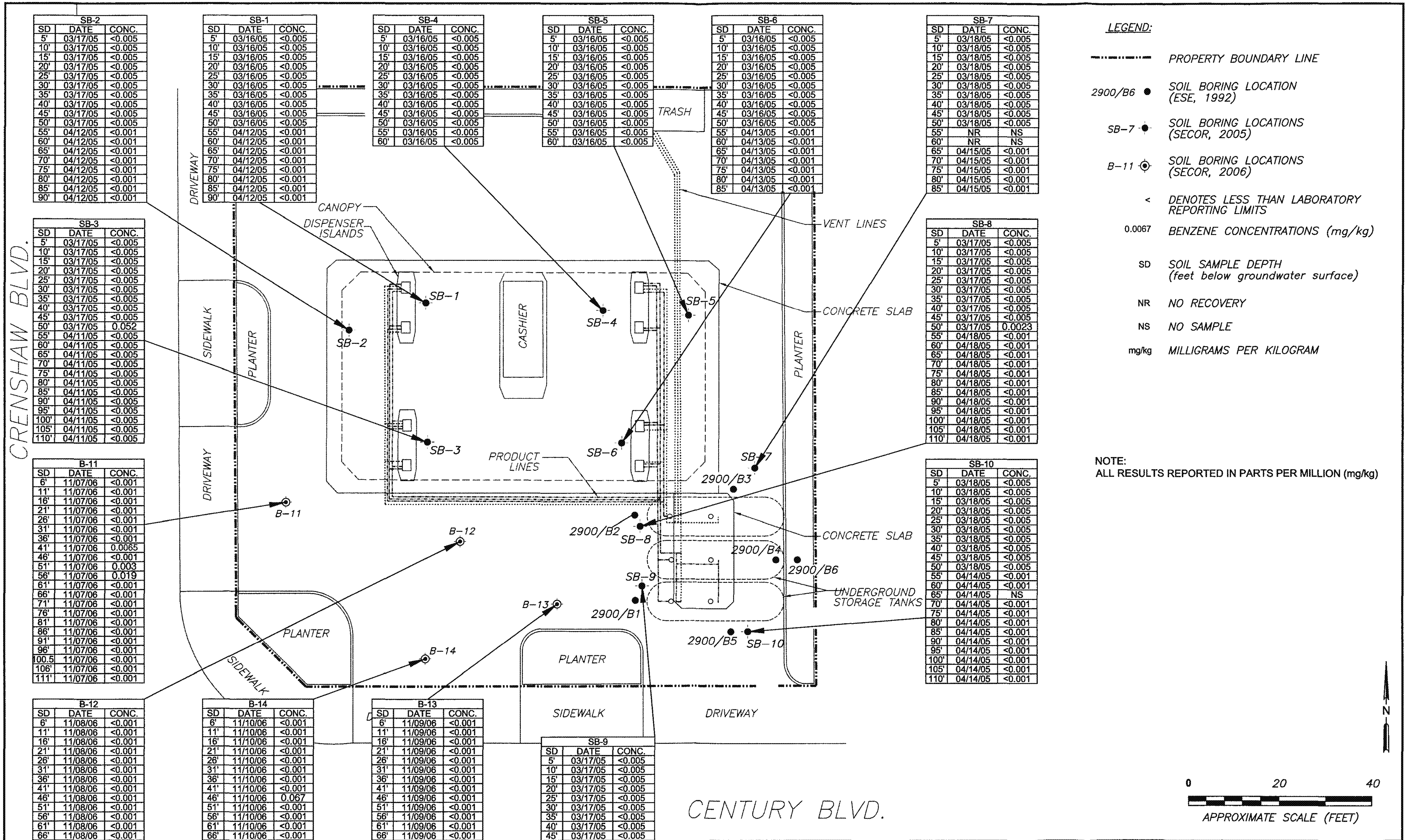
TPHg ISOCONCENTRATION MAP

FIGURE:
3

JOB NUMBER: 14CP.01148.02
DRAWN BY: D. ACHARYA
CHECKED BY: A. WAGNER
APPROVED BY: K. BROWN
DATE: MARCH2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: TPHG-3 | Drafter: t-dacharya | Mar 20, 2007 at 17:42

2900SPX6-05.DWG



SB-2

SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	<0.005
40'	03/17/05	<0.005
45'	03/17/05	<0.005
50'	03/17/05	<0.005
55'	04/12/05	<0.001
60'	04/12/05	<0.001
65'	04/12/05	<0.001
70'	04/12/05	<0.001
75'	04/12/05	<0.001
80'	04/12/05	<0.001
85'	04/12/05	<0.001
90'	04/12/05	<0.001

SB-1

SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	04/12/05	<0.001
60'	04/12/05	<0.001
65'	04/12/05	<0.001
70'	04/12/05	<0.001
75'	04/12/05	<0.001
80'	04/12/05	<0.001
85'	04/12/05	<0.001
90'	04/12/05	<0.001

SB-4

SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	03/16/05	<0.005
60'	03/16/05	<0.005

SB-5

SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	03/16/05	<0.005
60'	03/16/05	<0.005

SB-6

SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	04/13/05	<0.001
60'	04/13/05	<0.001
65'	04/13/05	<0.001
70'	04/13/05	<0.001
75'	04/13/05	<0.001
80'	04/13/05	<0.001
85'	04/13/05	<0.001

SB-7

SD	DATE	CONC.
5'	03/18/05	<0.005
10'	03/18/05	<0.005
15'	03/18/05	<0.005
20'	03/18/05	<0.005
25'	03/18/05	<0.005
30'	03/18/05	<0.005
35'	03/18/05	<0.005
40'	03/18/05	<0.005
45'	03/18/05	<0.005
50'	03/18/05	<0.005
55'	NR	NS
60'	NR	NS
65'	04/15/05	<0.001
70'	04/15/05	<0.001
75'	04/15/05	<0.001
80'	04/15/05	<0.001
85'	04/15/05	<0.001

SB-3

SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	<0.005
40'	03/17/05	<0.005
45'	03/17/05	<0.005
50'	03/17/05	0.052
55'	04/11/05	<0.005
60'	04/11/05	<0.005
65'	04/11/05	<0.005
70'	04/11/05	<0.005
75'	04/11/05	<0.005
80'	04/11/05	<0.005
85'	04/11/05	<0.005
90'	04/11/05	<0.005
95'	04/11/05	<0.005
100'	04/11/05	<0.005
105'	04/11/05	<0.005
110'	04/11/05	<0.005

SB-8

SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	<0.005
40'	03/17/05	<0.005
45'	03/17/05	<0.005
50'	03/17/05	0.0023
55'	04/18/05	<0.001
60'	04/18/05	<0.001
65'	04/18/05	<0.001
70'	04/18/05	<0.001
75'	04/18/05	<0.001
80'	04/18/05	<0.001
85'	04/18/05	<0.001
90'	04/18/05	<0.001
95'	04/18/05	<0.001
100'	04/18/05	<0.001
105'	04/18/05	<0.001
110'	04/18/05	<0.001

B-11

SD	DATE	CONC.
6'	11/07/06	<0.001
11'	11/07/06	<0.001
16'	11/07/06	<0.001
21'	11/07/06	<0.001
26'	11/07/06	<0.001
31'	11/07/06	<0.001
36'	11/07/06	<0.001
41'	11/07/06	0.0065
46'	11/07/06	<0.001
51'	11/07/06	0.003
56'	11/07/06	0.019
61'	11/07/06	<0.001
66'	11/07/06	<0.001
71'	11/07/06	<0.001
76'	11/07/06	<0.001
81'	11/07/06	<0.001
86'	11/07/06	<0.001
91'	11/07/06	<0.001
96'	11/07/06	<0.001
100.5	11/07/06	<0.001
106'	11/07/06	<0.001
111'	11/07/06	<0.001

SB-10

SD	DATE	CONC.
5'	03/18/05	<0.005
10'	03/18/05	<0.005
15'	03/18/05	<0.005
20'	03/18/05	<0.005
25'	03/18/05	<0.005
30'	03/18/05	<0.005
35'	03/18/05	<0.005
40'	03/18/05	<0.005
45'	03/18/05	<0.005
50'	03/18/05	<0.005
55'	04/14/05	<0.001
60'	04/14/05	<0.001
65'	04/14/05	NS
70'	04/14/05	<0.001
75'	04/14/05	<0.001
80'	04/14/05	<0.001
85'	04/14/05	<0.001
90'	04/14/05	<0.001
95'	04/14/05	<0.001
100'	04/14/05	<0.001
105'	04/14/05	<0.001
110'	04/14/05	<0.001

B-12

SD	DATE	CONC.
6'	11/08/06	<0.001
11'	11/08/06	<0.001
16'	11/08/06	<0.001
21'	11/08/06	<0.001
26'	11/08/06	<0.001
31'	11/08/06	<0.001
36'	11/08/06	<0.001
41'	11/08/06	<0.001
46'	11/08/06	<0.001
51'	11/08/06	<0.001
56'	11/08/06	<0.001
61'	11/08/06	<0.001
66'	11/08/06	<0.001
71'	11/08/06	<0.001
76'	11/08/06	<0.001
81'	11/08/06	<0.001
86'	11/08/06	<0.001
91'	11/08/06	<0.001
96'	11/08/06	<0.001
101'	11/08/06	<0.001
106'	11/08/06	<0.001
111'	11/08/06	<0.001

B-14

SD	DATE	CONC.
6'	11/10/06	<0.001
11'	11/10/06	<0.001
16'	11/10/06	<0.001
21'	11/10/06	<0.001
26'	11/10/06	<0.001
31'	11/10/06	<0.001
36'	11/10/06	<0.001
41'	11/10/06	<0.001
46'	11/10/06	0.067
51'	11/10/06	<0.001
56'	11/10/06	<0.001
61'	11/10/06	<0.001
66'	11/10/06	<0.001
70.5'	11/10/06	<0.001
76'	11/10/06	<0.001
81'	11/10/06	<0.001
85.5'	11/10/06	<0.001
91'	11/10/06	<0.001
96'	11/10/06	<0.001
100.5	11/10/06	<0.001
106'	11/10/06	<0.001
111'	11/10/06	<0.001

B-13

SD	DATE	CONC.
6'	11/09/06	<0.001
11'	11/09/06	<0.001
16'	11/09/06	<0.001
21'	11/09/06	<0.001
26'	11/09/06	<0.001
31'	11/09/06	<0.001
36'	11/09/06	<0.001
41'	11/09/06	<0.001
46'	11/09/06	<0.001
51'	11/09/06	<0.001
56'	11/09/06	<0.001
61'	11/09/06	<0.001
66'	11/09/06	<0.001
70.5'	11/09/06	<0.001
76'	11/09/06	<0.001
81'	11/09/06	<0.001
86'	11/09/06	0.005
91'	11/09/06	<0.001
96'	11/09/06	<0.001
100.5	11/09/06	<0.001
106'	11/09/06	<0.001
111'	11/09/06	<0.001

SB-9

SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	<0.005
40'	03/17/05	<0.005
45'	03/17/05	<0.005
50'	03/17/05	<0.005
55'	04/13/05	<0.001
60'	04/13/05	<0.001
65'	04/13/05	<0.001
70'	04/13/05	<0.001
75'	04/13/05	<0.001
80'	04/13/05	<0.001
85'	04/13/05	<0.001
90'	04/13/05	<0.001

LEGEND:

-··-··-	PROPERTY BOUNDARY LINE
2900/B6 ●	SOIL BORING LOCATION (ESE, 1992)
SB-7 ●	SOIL BORING LOCATIONS (SECOR, 2005)
B-11 ◉	SOIL BORING LOCATIONS (SECOR, 2006)
<	DENOTES LESS THAN LABORATORY REPORTING LIMITS
0.0067	BENZENE CONCENTRATIONS (mg/kg)
SD	SOIL SAMPLE DEPTH (feet below groundwater surface)
NR	NO RECOVERY
NS	NO SAMPLE
mg/kg	MILLIGRAMS PER KILOGRAM

NOTE:
ALL RESULTS REPORTED IN PARTS PER MILLION (mg/kg)

SECOR
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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

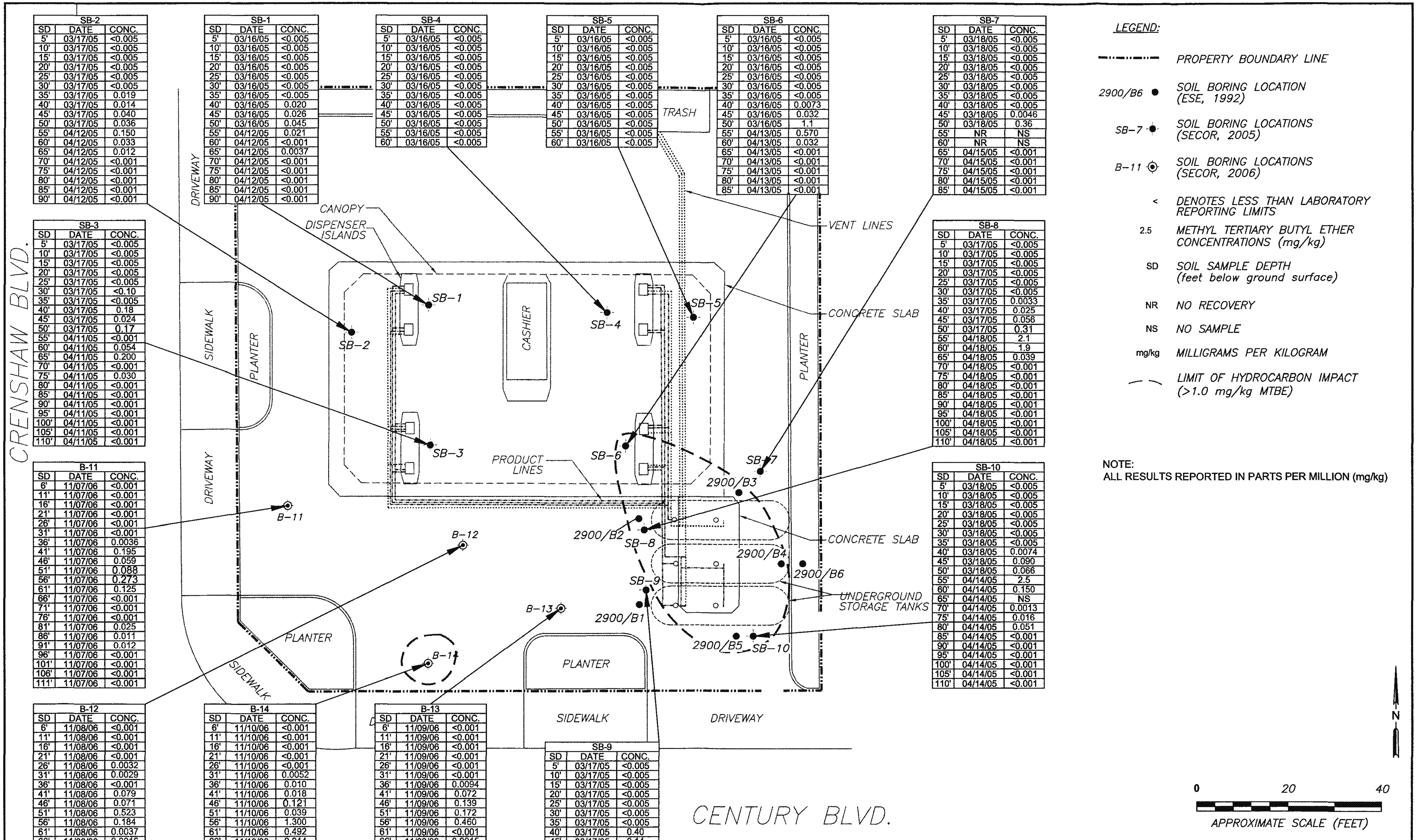
BENZENE ISOCONCENTRATION MAP

FIGURE: 4

JOB NUMBER: 14CP.01148.02
DRAWN BY: D. ACHARYA
CHECKED BY: A. WAGNER
APPROVED BY: K. BROWN
DATE: MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: BEN-4 | Drafter: t-dacharya | Mar 20, 2007 at 17:42

2900SPX6-05.DWG



SB-2		
SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	0.019
40'	03/17/05	0.014
45'	03/17/05	0.040
50'	03/17/05	0.036
55'	04/12/05	0.150
60'	04/12/05	0.033
65'	04/12/05	0.012
70'	04/12/05	<0.001
75'	04/12/05	<0.001
80'	04/12/05	<0.001
85'	04/12/05	<0.001
90'	04/12/05	<0.001

SB-1		
SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	0.020
45'	03/16/05	0.026
50'	03/16/05	0.045
55'	04/12/05	0.021
60'	04/12/05	<0.001
65'	04/12/05	0.0037
70'	04/12/05	<0.001
75'	04/12/05	<0.001
80'	04/12/05	<0.001
85'	04/12/05	<0.001
90'	04/12/05	<0.001

SB-4		
SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	03/16/05	<0.005
60'	03/16/05	<0.005

SB-5		
SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	<0.005
45'	03/16/05	<0.005
50'	03/16/05	<0.005
55'	03/16/05	<0.005
60'	03/16/05	<0.005

SB-6		
SD	DATE	CONC.
5'	03/16/05	<0.005
10'	03/16/05	<0.005
15'	03/16/05	<0.005
20'	03/16/05	<0.005
25'	03/16/05	<0.005
30'	03/16/05	<0.005
35'	03/16/05	<0.005
40'	03/16/05	0.0073
45'	03/16/05	0.032
50'	03/16/05	1.1
55'	04/13/05	0.570
60'	04/13/05	0.032
65'	04/13/05	<0.001
70'	04/13/05	<0.001
75'	04/13/05	<0.001
80'	04/13/05	<0.001
85'	04/13/05	<0.001

SB-7		
SD	DATE	CONC.
5'	03/18/05	<0.005
10'	03/18/05	<0.005
15'	03/18/05	<0.005
20'	03/18/05	<0.005
25'	03/18/05	<0.005
30'	03/18/05	<0.005
35'	03/18/05	<0.005
40'	03/18/05	<0.005
45'	03/18/05	0.0046
50'	03/18/05	0.36
55'	NR	NS
60'	NR	NS
65'	04/15/05	<0.001
70'	04/15/05	<0.001
75'	04/15/05	<0.001
80'	04/15/05	<0.001
85'	04/15/05	<0.001

SB-3		
SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.10
35'	03/17/05	<0.005
40'	03/17/05	0.18
45'	03/17/05	0.024
50'	03/17/05	0.17
55'	04/11/05	<0.001
60'	04/11/05	0.054
65'	04/11/05	0.200
70'	04/11/05	<0.001
75'	04/11/05	0.030
80'	04/11/05	<0.001
85'	04/11/05	<0.001
90'	04/11/05	<0.001
95'	04/11/05	<0.001
100'	04/11/05	<0.001
105'	04/11/05	<0.001
110'	04/11/05	<0.001

SB-8		
SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	0.0033
40'	03/17/05	0.025
45'	03/17/05	0.056
50'	03/17/05	0.31
55'	04/18/05	2.1
60'	04/18/05	1.9
65'	04/18/05	0.039
70'	04/18/05	<0.001
75'	04/18/05	<0.001
80'	04/18/05	<0.001
85'	04/18/05	<0.001
90'	04/18/05	<0.001
95'	04/18/05	<0.001
100'	04/18/05	<0.001
105'	04/18/05	<0.001
110'	04/18/05	<0.001

B-11		
SD	DATE	CONC.
6'	11/07/06	<0.001
11'	11/07/06	<0.001
16'	11/07/06	<0.001
21'	11/07/06	<0.001
26'	11/07/06	<0.001
31'	11/07/06	<0.001
36'	11/07/06	0.0036
41'	11/07/06	0.195
46'	11/07/06	0.059
51'	11/07/06	0.088
56'	11/07/06	0.273
61'	11/07/06	0.125
66'	11/07/06	<0.001
71'	11/07/06	<0.001
76'	11/07/06	<0.001
81'	11/07/06	0.025
86'	11/07/06	0.011
91'	11/07/06	0.012
96'	11/07/06	<0.001
101'	11/07/06	<0.001
106'	11/07/06	<0.001
111'	11/07/06	<0.001

SB-10		
SD	DATE	CONC.
5'	03/18/05	<0.005
10'	03/18/05	<0.005
15'	03/18/05	<0.005
20'	03/18/05	<0.005
25'	03/18/05	<0.005
30'	03/18/05	<0.005
35'	03/18/05	<0.005
40'	03/18/05	0.0074
45'	03/18/05	0.090
50'	03/18/05	0.066
55'	04/14/05	2.5
60'	04/14/05	0.150
65'	04/14/05	NS
70'	04/14/05	0.0013
75'	04/14/05	0.016
80'	04/14/05	0.051
85'	04/14/05	<0.001
90'	04/14/05	<0.001
95'	04/14/05	<0.001
100'	04/14/05	<0.001
105'	04/14/05	<0.001
110'	04/14/05	<0.001

B-12		
SD	DATE	CONC.
6'	11/08/06	<0.001
11'	11/08/06	<0.001
16'	11/08/06	<0.001
21'	11/08/06	<0.001
26'	11/08/06	0.0032
31'	11/08/06	0.0029
36'	11/08/06	<0.001
41'	11/08/06	0.079
46'	11/08/06	0.071
51'	11/08/06	0.523
56'	11/08/06	0.184
61'	11/08/06	0.0037
66'	11/08/06	0.0016
71'	11/08/06	0.0026
76'	11/08/06	0.015
81'	11/08/06	0.022
86'	11/08/06	<0.001
91'	11/08/06	<0.001
96'	11/08/06	<0.001
101'	11/08/06	<0.001
106'	11/08/06	<0.001
111'	11/08/06	<0.001

B-14		
SD	DATE	CONC.
6'	11/10/06	<0.001
11'	11/10/06	<0.001
16'	11/10/06	<0.001
21'	11/10/06	<0.001
26'	11/10/06	<0.001
31'	11/10/06	0.0052
36'	11/10/06	0.010
41'	11/10/06	0.018
46'	11/10/06	0.121
51'	11/10/06	0.039
56'	11/10/06	1.300
61'	11/10/06	0.492
66'	11/10/06	0.014
70.5'	11/10/06	0.0091
76'	11/10/06	<0.001
81'	11/10/06	0.0021
85.5'	11/10/06	0.0094
91'	11/10/06	0.010
96'	11/10/06	0.0056
100.5	11/10/06	<0.001
106'	11/10/06	<0.001
111'	11/10/06	<0.001

B-13		
SD	DATE	CONC.
6'	11/09/06	<0.001
11'	11/09/06	<0.001
16'	11/09/06	<0.001
21'	11/09/06	<0.001
26'	11/09/06	<0.001
31'	11/09/06	<0.001
36'	11/09/06	0.0094
41'	11/09/06	0.072
46'	11/09/06	0.139
51'	11/09/06	0.172
56'	11/09/06	0.460
61'	11/09/06	<0.001
66'	11/09/06	0.0015
70.5'	11/09/06	<0.001
76'	11/09/06	<0.001
81'	11/09/06	<0.001
86'	11/09/06	<0.001
91'	11/09/06	<0.001
96'	11/09/06	<0.001
100.5	11/09/06	<0.001
106'	11/09/06	<0.001
111'	11/09/06	<0.001

SB-9		
SD	DATE	CONC.
5'	03/17/05	<0.005
10'	03/17/05	<0.005
15'	03/17/05	<0.005
20'	03/17/05	<0.005
25'	03/17/05	<0.005
30'	03/17/05	<0.005
35'	03/17/05	<0.005
40'	03/17/05	0.40
45'	03/17/05	0.14
50'	03/17/05	0.45
55'	04/13/05	0.063
60'	04/13/05	0.360
65'	04/13/05	0.0081
70'	04/13/05	<0.001
75'	04/13/05	<0.001
80'	04/13/05	<0.001
85'	04/13/05	<0.001
90'	04/13/05	<0.001

LEGEND:

-··-··-	*PROPERTY BOUNDARY LINE*
2900/B6 ●	*SOIL BORING LOCATION (ESE, 1992)*
SB-7 ⊕	*SOIL BORING LOCATIONS (SECOR, 2005)*
B-11 ◎	*SOIL BORING LOCATIONS (SECOR, 2006)*
<	*DENOTES LESS THAN LABORATORY REPORTING LIMITS*
2.5	*METHYL TERTIARY BUTYL ETHER CONCENTRATIONS (mg/kg)*
SD	*SOIL SAMPLE DEPTH (feet below ground surface)*
NR	*NO RECOVERY*
NS	*NO SAMPLE*
mg/kg	*MILLIGRAMS PER KILOGRAM*
— —	*LIMIT OF HYDROCARBON IMPACT (>1.0 mg/kg MTBE)*

NOTE:
ALL RESULTS REPORTED IN PARTS PER MILLION (mg/kg)

SECOR
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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

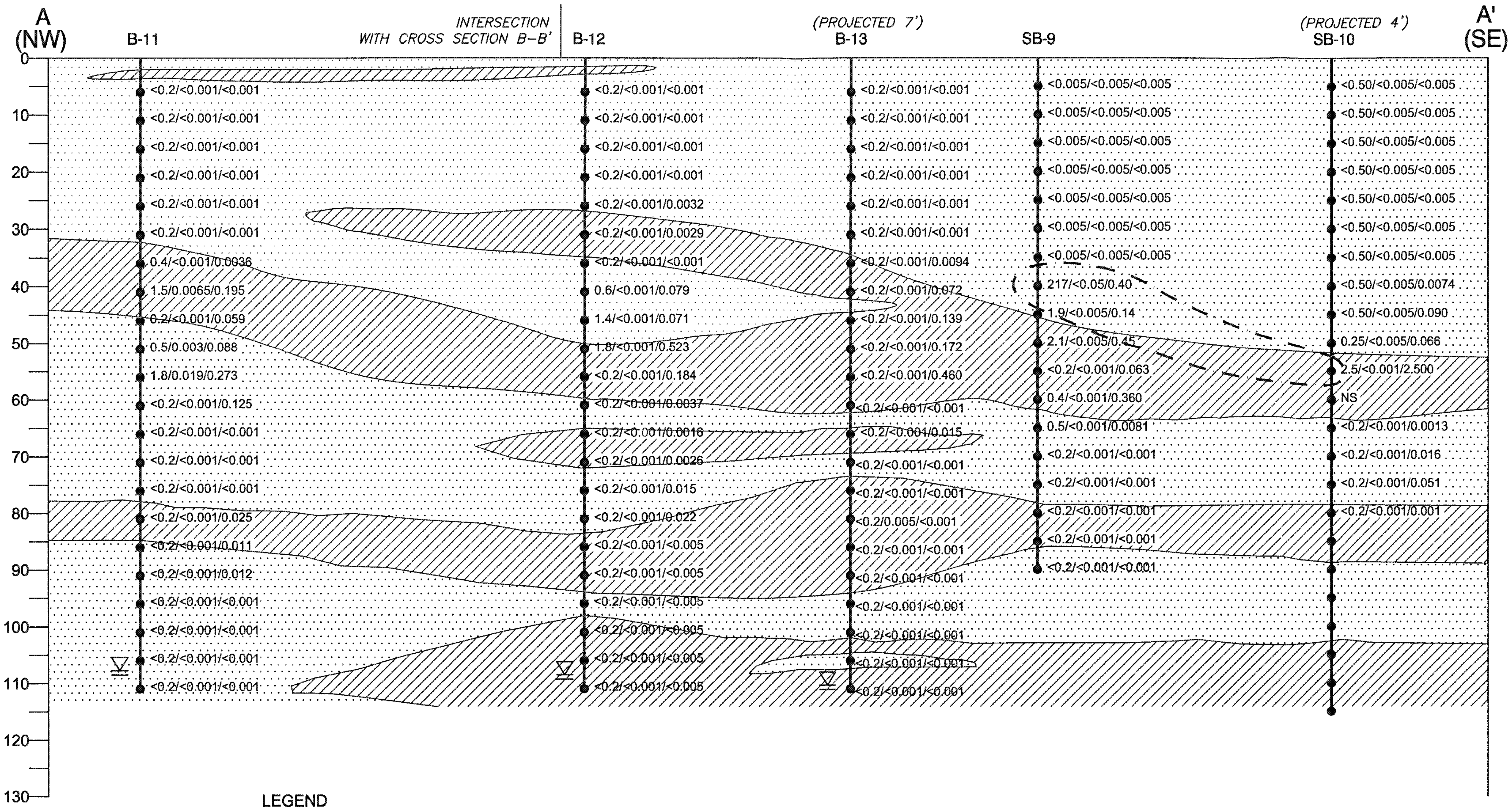
MTBE ISOCONCENTRATION MAP

FIGURE:
5

JOB NUMBER: 14CP.01148.02
DRAWN BY: D. ACHARYA
CHECKED BY: A. WAGNER
APPROVED BY: K. BROWN
DATE: MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: MTBE-5 | Drafter: t-dacharya | Mar 20, 2007 at 17:43

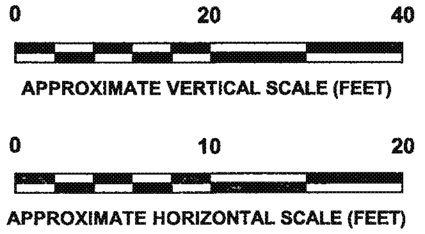
2900SPX6-05.DWG



LEGEND

(CL)	▨	SILT AND CLAY SEDIMENTS
(SM)	⬚	SAND SEDIMENTS
	— · —	LIMIT OF HYDROCARBONS IMPACT (>100 mg/kg TPHg, >1.0 mg/kg Benzene > 1.0 mg/kg MTBE)
	⁀	INFERRED GEOLOGICAL CONTACT

<0.2/<0.001/0.125	TPHg/BENZENE/MTBE CONCENTRATIONS IN mg/kg
TPHg	TOTAL PETROLEUM HYDROCARBONS as gasoline
MTBE	METHYL TERTIARY BUTYL ETHER
●	SOIL SAMPLE LOCATION
mg/kg	MILLIGRAMS PER KILOGRAMS
▽	FIRST ENCOUNTERED GROUNDWATER



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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

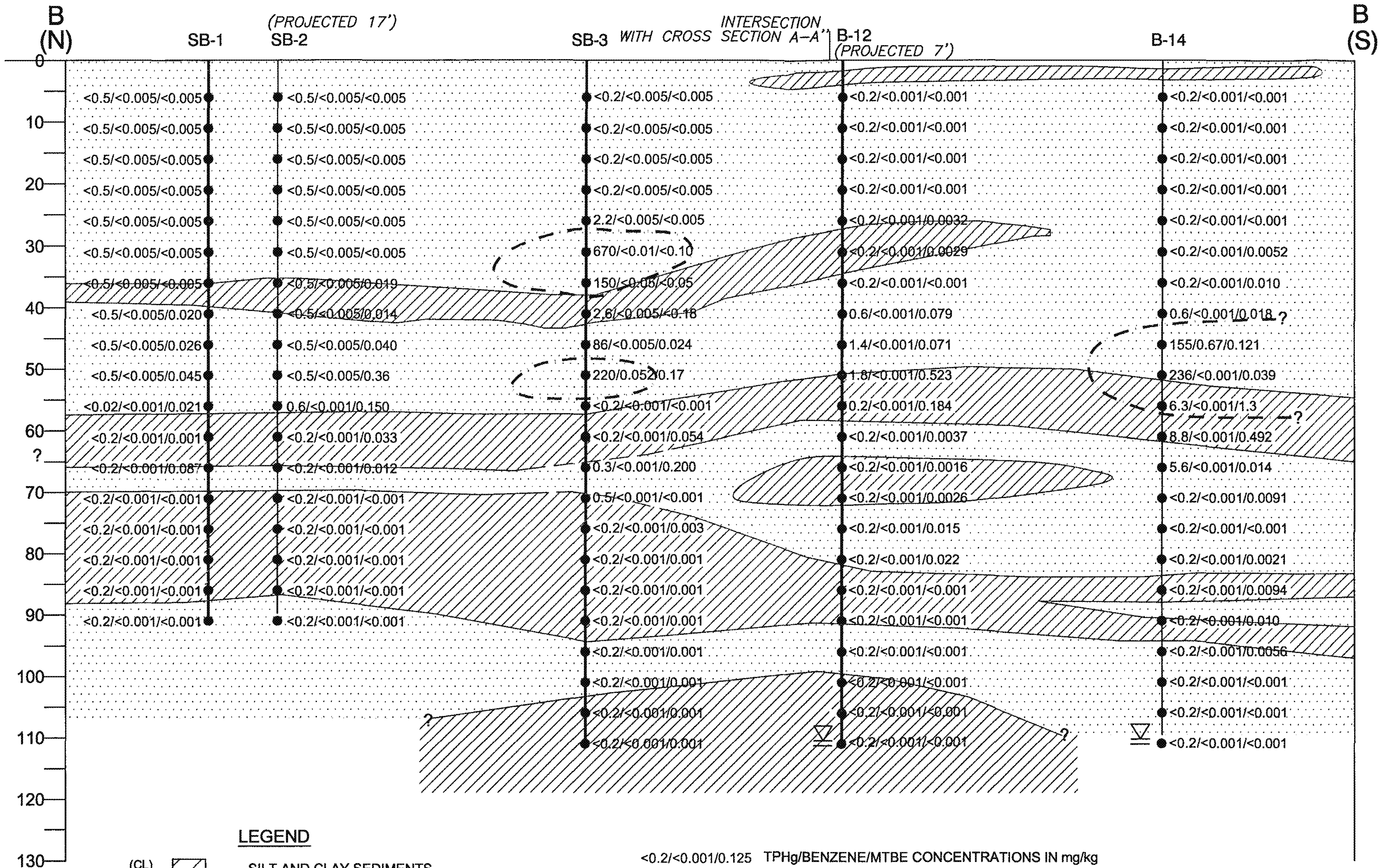
CROSS SECTION A-A'

FIGURE:
6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
14CP.01148.02	D. ACHARYA	A. WAGNER	A. WAGNER	MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg|t-dacharya|Mar 20, 2007 at 17:43|Layout: CS-AA-6

2900SPX6-05.DWG



LEGEND

(CL) ▨	SILT AND CLAY SEDIMENTS
(SM) ⬚	SAND SEDIMENTS
— · —	LIMIT OF HYDROCARBONS IMPACT (>100 mg/kg TPHg, >1.0 mg/kg Benzene > 1.0 mg/kg MTBE)
———	INFERRED GEOLOGICAL CONTACT

<0.2/<0.001/0.125	TPHg/BENZENE/MTBE CONCENTRATIONS IN mg/kg
TPHg	TOTAL PETROLEUM HYDROCARBONS as gasoline
MTBE	METHYL TERTIARY BUTYL ETHER
●	SOIL SAMPLE LOCATION
mg/kg	MILLIGRAMS PER KILOGRAMS
▽	FIRST ENCOUNTERED GROUNDWATER

0 20 40

APPROXIMATE VERTICAL SCALE (FEET)

0 10 20

APPROXIMATE HORIZONTAL SCALE (FEET)

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PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

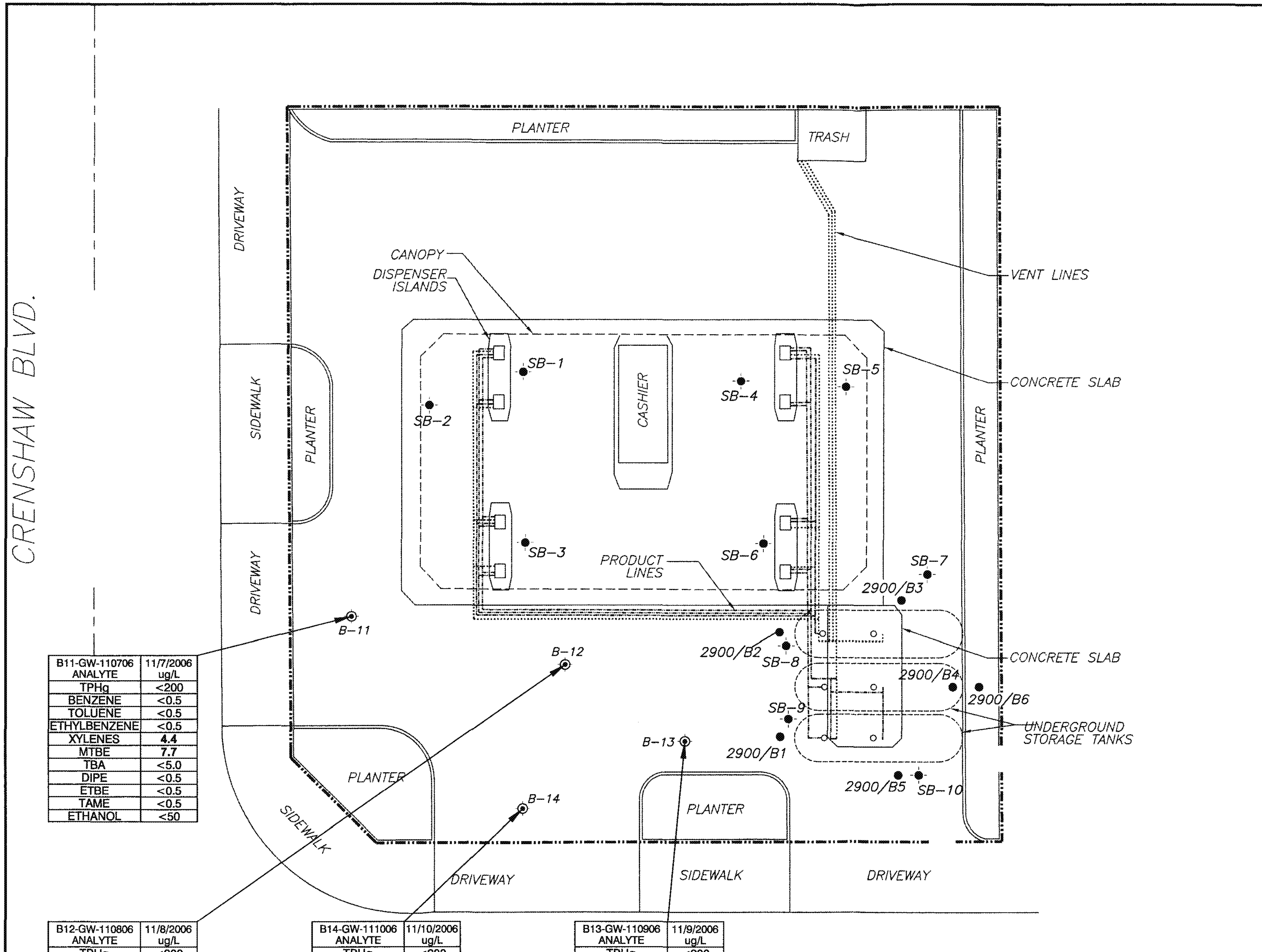
CROSS SECTION B-B'

FIGURE:
7

JOB NUMBER: 14CP.01148.02
DRAWN BY: D. ACHARYA
CHECKED BY: A. WAGNER
APPROVED BY: A. WAGNER
DATE: MARCH 2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: CS-BB-7 | Drafter: t-dacharya | Mar 20, 2007 at 17:43

2900SPX6-05.DWG



B11-GW-110706 ANALYTE	11/7/2006 ug/L
TPHg	<200
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
XYLENES	**4.4**
MTBE	**7.7**
TBA	<5.0
DIPE	<0.5
ETBE	<0.5
TAME	<0.5
ETHANOL	<50

B12-GW-110806 ANALYTE	11/8/2006 ug/L
TPHg	<200
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
XYLENES	**4.0**
MTBE	**12**
TBA	<5.0
DIPE	<0.5
ETBE	<0.5
TAME	<0.5
ETHANOL	<50

B14-GW-111006 ANALYTE	11/10/2006 ug/L
TPHg	<200
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
XYLENES	<0.5
MTBE	**8.5**
TBA	<5.0
DIPE	<0.5
ETBE	<0.5
TAME	<0.5
ETHANOL	<50

B13-GW-110906 ANALYTE	11/9/2006 ug/L
TPHg	<200
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
XYLENES	<0.5
MTBE	**2.2**
TBA	<5.0
DIPE	<0.5
ETBE	<0.5
TAME	<0.5
ETHANOL	<50

LEGEND:

—··—··—	PROPERTY BOUNDARY LINE
2900/B6 ●	SOIL BORING LOCATION (ESE, 1992)
SB-7 ●	SOIL BORING LOCATIONS (SECOR, 2005)
B-11 ⊙	SOIL BORING LOCATIONS (SECOR, 2006)
<	DENOTES LESS THAN LABORATORY REPORTING LIMITS
ug/L	MICROGRAMS PER LITER
670	HYDROCARBON CONCENTRATIONS (ug/L)
TPHg	TOTAL PETROLEUM HYDROCARBONS as gasoline
MTBE	METHYL TERTIARY-BUTYL ETHER
TBA	TERTIARY-BUTYL ALCOHOL
DIPE	DI-ISOPROPYL ETHER
ETBE	ETHYL TERTIARY-BUTYL ETHER
TAME	TERTIARY-AMYL METHYL ETHER

NOTE:
ALL RESULTS REPORTED IN PARTS PER BILLION (ug/L)

SECOR
11085 KNOTT AVENUE, SUITE B
CYPRESS, CALIFORNIA
PHONE: (714)379-3366/FAX: (714)379-3375

PREPARED FOR:
CONOCO PHILLIPS
76 STATION 2900
9830 SOUTH CRENSHAW BOULEVARD
INGLEWOOD, CALIFORNIA

Hydrocarbon Concentrations in Groundwater Map

FIGURE:
8

JOB NUMBER: 14CP.01148.02
DRAWN BY: D. ACHARYA
CHECKED BY: J. Komes
APPROVED BY: K. BROWN
DATE: MARCH2007

FILEPATH:Q:\CADD-14\Active\ConocoPhillips\76\2900\76 Station No 2900, Inglewood Assessment\12.36 Soil Concentration Map\REV\2900SPX6-05.dwg | Layout Tab: HC-8 | Drafter: t-dacharya | Mar 22, 2007 at 16:56

2900SPX6-05.DWG

TABLES

76 STATION NO. 2900
14CP.01148.02.1222
March 23, 2007

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SB-1@5	3/16/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@10	3/16/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@15	3/16/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@20	3/16/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@25	3/16/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@30	3/16/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@35	3/16/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-1@40	3/16/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	**20**	<25	<5.0	<5.0	<5.0	<500
SB-1@45	3/16/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	**26**	<25	<5.0	<5.0	<5.0	<500
SB-1@50	3/16/05	50	ND<0.50	<5.0	<5.0	<5.0	<5.0	**45**	<25	<5.0	<5.0	<5.0	<500
SB-1@55	4/12/05	55	ND<0.2	<1.0	<1.0	<1.0	<1.0	**21**	<5.0	<1.0	<1.0	<1.0	<50
SB-1@60	4/12/05	60	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-1@65	4/12/05	65	ND<0.2	<1.0	<1.0	<1.0	<1.0	**3.7**	<5.0	<1.0	<1.0	<1.0	<50
SB-1@70	4/12/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-1@75	4/12/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-1@80	4/12/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-1@85	4/12/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-1@90	4/12/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-2@5	3/17/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@10	3/17/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@15	3/17/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@20	3/17/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@25	3/17/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@30	3/17/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-2@35	3/17/05	35	ND<0.50	<5.0	<5.0	**3.3**	**7.1**	**19**	<25	<5.0	<5.0	<5.0	<500
SB-2@40	3/17/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	**14**	<25	<5.0	<5.0	<5.0	<500
SB-2@45	3/17/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	**40**	<25	<5.0	<5.0	<5.0	<500
SB-2@50	3/17/05	50	ND<0.50	<5.0	<5.0	<5.0	<5.0	**36**	<25	<5.0	<5.0	<5.0	<500
SB-2@55	4/12/05	55	**0.6**	<1.0	<1.0	**23**	**100**	**150**	<5.0	<1.0	<1.0	<1.0	<50
SB-2@60	4/12/05	60	ND<0.2	<1.0	<1.0	<1.0	**2.7**	**33**	<5.0	<1.0	<1.0	<1.0	<50

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)	(μg/kg)
SB-2@65	4/12/05	65	ND<0.2	<1.0	<1.0	<1.0	<1.0	**12**	<5.0	<1.0	<1.0	<1.0	<50
SB-2@70	4/12/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-2@75	4/12/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-2@80	4/12/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-2@85	4/12/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-2@90	4/12/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@5	3/17/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-3@10	3/17/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-3@15	3/17/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-3@20	3/17/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-3@25	3/17/05	25	**2.2**	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-3@30	3/17/05	30	**670**	<10	**350**	**12,000**	**52,000**	<100	<500	<100	<100	<100	<10,000
SB-3@35	3/17/05	35	**150**	<50	**130**	**3,800**	**17,000**	<50	<2,500	<500	<500	<500	<5,000
SB-3@40	3/17/05	40	**2.6**	<5.0	**1.6**	**4.7**	**270**	**180**	<25	<5.0	<5.0	<5.0	<500
SB-3@45	3/17/05	45	**86**	<5.0	**8.7**	**490**	**2,800**	**24**	<25	<5.0	<5.0	<5.0	<500
SB-3@50	3/17/05	50	**220**	**52**	**4,800**	**12,000**	**60,000**	**170**	<2,500	<50	<50	<50	<5,000
SB-3@55	4/11/05	55	ND<0.2	<1.0	<1.0	<1.0	**16**	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@60	4/11/05	60	ND<0.2	<1.0	<1.0	<1.0	<1.0	**54**	<5.0	<1.0	<1.0	<1.0	<50
SB-3@65	4/11/05	65	**0.3**	<1.0	<1.0	<1.0	**28**	**200**	<5.0	<1.0	<1.0	<1.0	<50
SB-3@70	4/11/05	70	**0.5**	<1.0	<1.0	<1.0	**16**	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@75	4/11/05	75	ND<0.2	<1.0	<1.0	<1.0	**1.9**	**3.0**	<5.0	<1.0	<1.0	<1.0	<50
SB-3@80	4/11/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@85	4/11/05	85	ND<0.2	<1.0	<1.0	<1.0	**19**	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@90	4/11/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@95	4/11/05	95	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@100	4/11/05	100	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@105	4/11/05	105	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-3@110	4/11/05	110	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-4@5	3/16/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@10	3/16/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SB-4@15	3/16/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@20	3/16/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@25	3/16/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@30	3/16/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@35	3/16/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@40	3/16/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@45	3/16/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-4@50	3/16/05	50	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@5	3/16/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@10	3/16/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@15	3/16/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@20	3/16/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@25	3/16/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@30	3/16/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@35	3/16/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@40	3/16/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@45	3/16/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@50	3/16/05	50	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@55	3/16/05	55	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-5@60	3/16/05	60	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@5	3/16/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@10	3/16/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@15	3/16/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@20	3/16/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@25	3/16/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@30	3/16/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@35	3/16/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-6@40	3/16/05	40	**47**	<5.0	**6.6**	**1,200**	**3,500**	**7.3**	<25	<5.0	<5.0	<5.0	<500
SB-6@45	3/16/05	45	**1.5**	<5.0	<5.0	**22**	**53**	**32**	<25	<5.0	<5.0	<5.0	<500
SB-6@50	3/16/05	50	**4.0**	<5.0	<5.0	**140**	**470**	**1,100**	<25	<5.0	<5.0	<5.0	<500

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SB-6@55	4/13/05	55	**2.7**	<1.0	<1.0	**47**	**120**	**570**	<5.0	<1.0	<5.0	<1.0	<50
SB-6@60	4/13/05	60	**0.5**	<1.0	<1.0	**110**	**13**	**32**	<5.0	<1.0	<1	<1.0	<50
SB-6@65	4/13/05	65	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1	<1.0	<50
SB-6@70	4/13/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1	<1.0	<50
SB-6@75	4/13/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1	<1.0	<50
SB-6@80	4/13/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1	<1.0	<50
SB-6@85	4/13/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1	<1.0	<50
SB-7 @5	3/18/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7 @10	3/18/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@15	3/18/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@20	3/18/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@25	3/18/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@30	3/18/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@35	3/18/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@40	3/18/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-7@45	3/18/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	**4.6**	<25	<5.0	<5.0	<5.0	<500
SB-7@50	3/18/05	50	**0.47**	<5.0	<5.0	<5.0	<5.0	**360**	**110**	<5.0	<5.0	<5.0	<500
SB-7@55	NR	55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-7@60	NR	60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-7@65	4/15/05	65	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-7@70	4/15/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-7@75	4/15/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-7@80	4/15/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-7@85	4/15/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@5	3/17/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-8@10	3/17/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-8@15	3/17/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-8@20	3/17/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-8@25	3/17/05	25	**44**	<5.0	<5.0	**73**	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-8@30	3/17/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SB-8@35	3/17/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	**3.3**	<25	<5.0	<5.0	<5.0	<500
SB-8@40	3/17/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	**25**	<25	<5.0	<5.0	<5.0	<500
SB-8@45	3/17/05	45	ND<0.50	<5.0	<5.0	<5.0	**7.6**	**56**	<25	<5.0	<5.0	<5.0	<500
SB-8@50	3/17/05	50	**0.81**	**2.3**	**3.8**	**20**	**16**	**310**	**190**	<5.0	<5.0	<5.0	<500
SB-8@55	4/14/05	55	**3.8**	<1.0	<1.0	**190**	**260**	**2,100**	<5.0	<1.0	<1.0	<1.0	**24**
SB-8@60	4/14/05	60	**1.3**	<1.0	<1.0	<1.0	<1.0	**1,900**	<5.0	<1.0	<1.0	<1.0	<50
SB-8@65	4/14/05	65	**4.8**	<1.0	<1.0	**380**	**910**	**39**	<5.0	<1.0	<1.0	<1.0	<50
SB-8@70	4/14/05	70	**1.5**	<1.0	<1.0	**140**	**150**	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@75	4/14/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@80	4/14/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@85	4/14/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@90	4/14/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@95	4/14/05	95	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@100	4/14/05	100	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@105	4/14/05	105	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-8@110	4/14/05	110	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-9@5	3/17/05	5	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@10	3/17/05	10	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@15	3/17/05	15	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9 @20	3/17/05	20	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@25	3/17/05	25	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@30	3/17/05	30	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@35	3/17/05	35	ND<0.0050	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-9@40	3/17/05	40	**217**	<50	<50	**10,000**	**11,000**	**400**	<2,500	<50	<50	<50	<5,000
SB-9@45	3/17/05	45	**1.9**	<5.0	<5.0	**38**	**89**	**140**	<25	<5.0	<5.0	<5.0	<500
SB-9@50	3/17/05	50	**2.1**	<5.0	<5.0	**150**	**280**	**450**	**180**	<5.0	<5.0	<5.0	<500
SB-9@55	4/13/05	55	ND<0.2	<1.0	<1.0	<1.0	<1.0	**63**	<5.0	<1.0	<1.0	<1.0	<50
SB-9@60	4/13/05	60	**0.4**	<1.0	<1.0	<1.0	<1.0	**360**	<5.0	<1.0	<1.0	<1.0	<50
SB-9@65	4/13/05	65	**0.5**	<1.0	<1.0	<1.0	<1.0	**8.1**	<5.0	<1.0	<1.0	<1.0	<50
SB-9@70	4/13/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50

TABLE 1
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TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SB-9@75	4/13/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-9@80	4/13/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-9@85	4/13/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-9@90	4/13/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@5	3/18/05	5	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@10	3/18/05	10	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@15	3/18/05	15	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10 @20	3/18/05	20	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@25	3/18/05	25	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@30	3/18/05	30	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@35	3/18/05	35	ND<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<500
SB-10@40	3/18/05	40	ND<0.50	<5.0	<5.0	<5.0	<5.0	**7.4**	<25	<5.0	<5.0	<5.0	<500
SB-10@45	3/18/05	45	ND<0.50	<5.0	<5.0	<5.0	<5.0	**90**	<25	<5.0	<5.0	<5.0	<500
SB-10@50	3/18/05	50	**0.25**	<5.0	<5.0	<5.0	**5.1**	**66**	**140**	<5.0	<5.0	<5.0	<500
SB-10@55	4/14/05	55	**2.5**	<1.0	<1.0	<1.0	<1.0	**2,500**	<5.0	<1.0	<1.0	<1.0	<50
SB-10@60	4/14/05	60	ND<0.2	<1.0	<1.0	<1.0	<1.0	**150**	<5.0	<1.0	<1.0	<1.0	<50
SB-10@65	NR	3/5/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-10@70	4/14/05	70	ND<0.2	<1.0	<1.0	<1.0	<1.0	**1.3**	<5.0	<1.0	<1.0	<1.0	<50
SB-10@75	4/14/05	75	ND<0.2	<1.0	<1.0	<1.0	<1.0	**16**	<5.0	<1.0	<1.0	<1.0	<50
SB-10@80	4/14/05	80	ND<0.2	<1.0	<1.0	<1.0	<1.0	**51**	<5.0	<1.0	<1.0	<1.0	<50
SB-10@85	4/14/05	85	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@90	4/14/05	90	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@95	4/14/05	95	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@100	4/14/05	100	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@105	4/14/05	105	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@110	4/14/05	110	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
SB-10@115	4/14/05	115	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@5	11/7/2006	6-6.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@10	11/7/2006	11-11.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@15	11/7/2006	16-16.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50

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SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
B-11@20	11/7/2006	21-21.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@25	11/7/2006	26-26.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@30	11/7/2006	31-31.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@35	11/7/2006	36-36.5	**0.4**	<1.0	<1.0	**3.3**	**13**	**3.6**	<5.0	<1.0	<1.0	<1.0	<50
B-11@40	11/7/2006	41-41.5	**1.5**	**6.5**	<1.0	**96**	**101**	**195**	<5.0	<1.0	<1.0	<1.0	<50
B-11@45	11/7/2006	46-46.5	**0.2**	<1.0	<1.0	**3.4**	**24**	**59**	<5.0	<1.0	<1.0	<1.0	<50
B-11@50	11/7/2006	51-51.5	**0.5**	**3.0**	**9.0**	**12**	**67**	**88**	<5.0	<1.0	<1.0	<1.0	<50
B-11@55	11/7/2006	56-56.5	**1.8**	**19**	**8.1**	**179**	**251**	**273**	<5.0	<1.0	<1.0	<1.0	<50
B-11@60	11/7/2006	61-61.5	ND<0.2	<1.0	<1.0	<1.0	**3.6**	**125**	<5.0	<1.0	<1.0	<1.0	<50
B-11@65	11/7/2006	66-66.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@70	11/7/2006	71-71.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@75	11/7/2006	76-76.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@80	11/7/2006	81-81.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**25**	<5.0	<1.0	<1.0	<1.0	<50
B-11@85	11/7/2006	86-86.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**11**	<5.0	<1.0	<1.0	<1.0	<50
B-11@90	11/7/2006	91-91.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**12**	<5.0	<1.0	<1.0	<1.0	<50
B-11@95	11/7/2006	96-96.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@100	11/7/2006	100.5-101	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@105	11/7/2006	106-106.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-11@110	11/7/2006	111-111.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@ 5	11/8/2006	6-6.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@10	11/8/2006	11-11.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@15	11/8/2006	16-16.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@20	11/8/2006	21-21.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@25	11/8/2006	26-26.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**3.2**	<5.0	<1.0	<1.0	<1.0	<50
B-12@30	11/8/2006	31-31.5	ND<0.2	<1.0	<1.0	**10**	**11**	**2.9**	<5.0	<1.0	<1.0	<1.0	<50
B-12@35	11/8/2006	36-36.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@40	11/8/2006	41-41.5	**0.6**	<1.0	**1.0**	**15**	**50**	**79**	<5.0	<1.0	<1.0	<1.0	<50
B-12@45	11/8/2006	46-46.5	**1.4**	<1.0	**3.3**	**16**	**76**	**71**	<5.0	<1.0	<1.0	<1.0	<50
B-12@50	11/8/2006	51-51.5	**1.8**	<1.0	<1.0	**88**	**171**	**523**	<5.0	<1.0	<1.0	<1.0	<50
B-12@55	11/8/2006	56-56.5	**0.2**	<1.0	<1.0	**8.2**	**11**	**184**	<5.0	<1.0	<1.0	<1.0	<50

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
B-12@60	11/8/2006	61-61.5	ND<0.2	<1.0	<1.0	**9.5**	**16**	**3.7**	<5.0	<1.0	<1.0	<1.0	<50
B-12@65	11/8/2006	66-66.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**1.6**	<5.0	<1.0	<1.0	<1.0	<50
B-12@70	11/8/2006	71-71.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**2.6**	<5.0	<1.0	<1.0	<1.0	<50
B-12@75	11/8/2006	76-76.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**15**	<5.0	<1.0	<1.0	<1.0	<50
B-12@80	11/8/2006	81-81.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**22**	<5.0	<1.0	<1.0	<1.0	<50
B-12@85	11/8/2006	86-86.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@90	11/8/2006	91-91.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@95	11/8/2006	96-96.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@100	11/8/2006	101-101.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@105	11/8/2006	106-106.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-12@110	11/8/2006	111-111.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@ 5	11/9/2006	6-6.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@10	11/9/2006	11-11.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@15	11/9/2006	16-16.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@20	11/9/2006	21-21.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@25	11/9/2006	26-26.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@30	11/9/2006	31-31.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@35	11/9/2006	36-36.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**9.4**	<5.0	<1.0	<1.0	<1.0	<50
B-13@40	11/9/2006	41-41.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**72**	<5.0	<1.0	<1.0	<1.0	<50
B-13@45	11/9/2006	46-46.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**139**	<5.0	<1.0	<1.0	<1.0	<50
B-13@50	11/9/2006	51-51.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**172**	<5.0	<1.0	<1.0	<1.0	<50
B-13@55	11/9/2006	56-56.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**460**	<5.0	<1.0	<1.0	<1.0	<50
B-13@60	11/9/2006	61-61.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@65	11/9/2006	66-66.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**1.5**	<5.0	<1.0	<1.0	<1.0	<50
B-13@70	11/9/2006	70.5-71	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@75	11/9/2006	76-76.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@80	11/9/2006	81-81.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@85	11/9/2006	86-86.5	ND<0.2	**5.0**	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@90	11/9/2006	91-91.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@95	11/9/2006	96-96.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
B-13@100	11/9/2006	100.5-101	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@105	11/9/2006	106-106.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-13@110	11/9/2006	111-111.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@ 5	11/10/2006	6-6.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@10	11/10/2006	11-11.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@15	11/10/2006	16-16.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@20	11/10/2006	21-21.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@25	11/10/2006	26-26.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@30	11/10/2006	31-31.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**5.2**	<5.0	<1.0	<1.0	<1.0	<50
B-14@35	11/10/2006	36-36.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**10**	<5.0	<1.0	<1.0	**1.6**	<50
B-14@40	11/10/2006	41-41.5	**0.6**	<1.0	<1.0	**2.2**	<1.0	**18**	<5.0	<1.0	<1.0	<1.0	<50
B-14@45	11/10/2006	46-46.5	**155**	**67**	**790**	**23**	**3,900**	**121**	<5.0	<1.0	<1.0	<1.0	<50
B-14@50	11/10/2006	51-51.5	**236**	<1.0	**4.7**	**932**	**5,700**	**39**	<5.0	<1.0	<1.0	<1.0	<50
B-14@55	11/10/2006	56-56.5	**6.3**	<1.0	<1.0	**196**	**212**	**1,300**	<5.0	<1.0	<1.0	<1.0	<50
B-14@60	11/10/2006	61-61.5	**8.8**	<1.0	<1.0	**184**	**197**	**492**	<5.0	<1.0	<1.0	<1.0	<50
B-14@65	11/10/2006	66-66.5	**5.6**	<1.0	<1.0	**292**	**348**	**14**	<5.0	<1.0	<1.0	<1.0	<50
B-14@70	11/10/2006	70.5-71	ND<0.2	<1.0	<1.0	<1.0	<1.0	**9.1**	<5.0	<1.0	<1.0	<1.0	<50
B-14@75	11/10/2006	75.5-76	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@80	11/10/2006	81-81.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**2.1**	<5.0	<1.0	<1.0	<1.0	<50
B-14@85	11/10/2006	85.5-86	ND<0.2	<1.0	<1.0	<1.0	<1.0	**9.4**	<5.0	<1.0	<1.0	<1.0	<50
B-14@90	11/10/2006	91-91.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**10**	<5.0	<1.0	<1.0	<1.0	<50
B-14@95	11/10/2006	95-95.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	**5.6**	<5.0	<1.0	<1.0	<1.0	<50
B-14@100	11/10/2006	100.5-101	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@105	11/10/2006	106-106.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50
B-14@110	11/10/2006	111-111.5	ND<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<50

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	SAMPLE DEPTH	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(feet bgs)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)

Notes:

feet bgs = feet below ground surface
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
TBA = tertiary-butyl alcohol
DIPE = di-isopropyl ether
ETBE = ethyl-tertiary-butyl ether
TAME = tertiary-amyl methyl ether
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
<0.2 = not reported above laboratory practicial quantitation limits (PQLs)

TABLE 2
SUMMARY OF GRAP GROUNDWATER SAMPLE ANALYTICAL RESULTS
TPHg, BTEX, FUEL OXYGENATES, AND ETHANOL

76 Station No. 2900
9830 South Crenshaw Boulevard
Inglewood, California

SAMPLE ID	SAMPLE DATE	TPHg	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	TBA	DIPE	ETBE	TAME	ETHANOL
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
B11-GW-110706	11/7/2006	<200	<0.5	<0.5	<0.5	**4.4**	**7.7**	<5.0	<0.5	<0.5	<0.5	<50
B12-GW-110806	11/8/2006	<200	<0.5	<0.5	<0.5	**4.0**	**12**	<5.0	<0.5	<0.5	<0.5	<50
B13-GW-110906	11/9/2006	<200	<0.5	<0.5	<0.5	<0.5	**2.2**	<5.0	<0.5	<0.5	<0.5	<50
B14-GW-111006	11/10/2006	<200	<0.5	<0.5	<0.5	<0.5	**8.5**	<5.0	<0.5	<0.5	<0.5	<50

Notes:

feet bgs = feet below ground surface
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
TBA = tertiary-butyl alcohol
DIPE = di-isopropyl ether
ETBE = ethyl-tertiary-butyl ether
TAME = tertiary-amyl methyl ether
µg/L = micrograms per liter
<0.2 = not reported above laboratory practicial quantitation limits (PQLs)

APPENDIX E

Field Methods and Procedures

APPENDIX E
Field Methods and Procedures
Hollywood Park Racetrack and Casino
1050 South Prairie Avenue, Inglewood, California

This appendix describes general field methods and procedures to be utilized by Erler & Kalinowski, Inc. ("EKI") and its subcontractors during subsurface investigations of the Hollywood Park Racetrack and Casino in Inglewood, California ("Property"), and includes the following:

- preparation activities;
- collection procedures for soil samples;
- procedures for installation and development of groundwater monitoring wells;
- collection procedures for groundwater samples;
- protocols for field and laboratory quality control samples;
- equipment decontamination procedures; and
- management of investigation-derived waste.

The subsurface investigations to be completed include collection of soil samples from four shallow soil boreholes in the western parking lot areas (described in Section 4.5 of the text); collection of soil samples from four deeper boreholes drilled for installation of groundwater monitoring wells (described in Section 2.6 of the text); and installation, development, and sampling of four 4-inch diameter groundwater monitoring wells (described in Section 2.6 of the text).

E.1 Preparation for Field Work

Prior to field work, EKI will perform the following tasks:

- notify Underground Services Alert ("USA" or "Dig Alert") of planned subsurface work at least 48 hours in advance of such work;
- retain a private utility locating company to clear all proposed drilling locations for underground utilities; and
- obtain permits to drill boreholes for installation of four groundwater monitoring wells from the Los Angeles County Department of Public Health ("LACDPH"), Bureau of Environmental Protection, Water Quality Program.[20]

Field activities (including oversight of drilling and sampling activities, well installation, collection of soil and groundwater samples, and chain-of-custody documentation) will be performed by EKI personnel under the supervision of a State of California Professional Geologist or Professional Engineer, and as described in the *Site Health and Safety Plan for Investigation, Excavation, and other Remediation Activities* for EKI personnel, dated April 2007.

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[20] Permits from LACDPH are not required for soil boreholes that are not intended to intercept groundwater.

EKI will subcontract with licensed contractors to drill boreholes, collect soil samples, and to install, develop, and sample groundwater monitoring wells. EKI field personnel will observe drilling, document the sampling, perform borehole logging and observation of soil cores, observe monitoring well construction and development, and select and prepare soil and groundwater samples for shipment to the designated laboratory for chemical analysis.

E.2 Soil Sample Collection Procedures

Soil samples will be collected from four shallow boreholes to be drilled to a total depth of approximately five feet below ground surface ("bgs"), for soil sampling purposes, and from four boreholes to be drilled to total depths of up to approximately 140 feet bgs, depending on the depth of first encountered groundwater, for installation of groundwater monitoring wells. These eight planned borehole locations are shown on Figure 3. Actual borehole locations will be determined based on the results of the utility clearances in each of the proposed drilling locations, as well as any additional discussions with the owner of the subject property regarding potential underground conflicts, access to the subject property, and timing constraints. Thus, planned borehole locations may need to be moved slightly or deleted from the sampling program.

E.2.1 Borehole Drilling Methods

The four shallow boreholes intended for collection of soil samples will be drilled using manual coring, hydraulic direct-push, or hollow-stem auger methods. The four deeper boreholes intended for installation of 4-inch diameter groundwater monitoring wells will be drilled using a hollow stem auger rig. These drilling methods are discussed below, and general soil sampling and drilling procedures that are applicable regardless of the drilling method are listed in Section E.2.2.

E.2.1.1 Manual Coring

The four shallow soil boreholes may be drilled using manual coring methods, such as hand auger or drive sampler. During advancement of soil boreholes using manual coring devices, soil samples will be collected using 1.5 to 3-inch outer diameter pre-cleaned stainless steel sample liners that will be properly loaded into the sampling device prior to advancing the sampler through the sample interval. Discrete grab samples intended for volatile organic compound ("VOC") or gasoline-range total petroleum hydrocarbons ("TPH-g") analyses will be collected in En Core® samplers, as described in Section E.2.2. For other soil samples to be retained for laboratory analysis, both ends of the stainless steel sample liner will be covered with Teflon sheets and sealed with plastic end caps, or soil will be placed in pre-cleaned containers supplied by the laboratory. The proposed analytical methods for chemical analysis are presented in Section 4.5 of the text.

At each manual coring location, soil cores will be collected continuously from the ground surface to the total depth of the shallow soil boreholes, i.e., five feet bgs (see Section 4.5 of the text), to allow observation and logging of the soil core.

E.2.1.2 Hydraulic Direct-Push Drilling

The four shallow soil boreholes may be drilled using a truck-mounted hydraulic direct-push drill rig. Direct-push sampling probes will consist of a soil sampling adapter and probe casings that will be advanced to the total depth of each borehole. Soil samples will be collected from direct-push sampling probes using 1.5-inch or larger outer diameter sample liners composed of brass, stainless steel, butyrate, or acetate. After the sampler is removed from the soil borehole and opened, the sample liners will be removed from the sampler. Butyrate or acetate liners will be cut apart using a clean knife. Discrete grab soil samples intended for VOC or TPH-g analyses will be collected in En Core® samplers, as described in Section E.2.2. For other soil samples to be retained for laboratory analysis, both ends of the sample liner containing the sample will be covered with Teflon sheets and sealed with plastic end caps, or soil will be placed in pre-cleaned containers supplied by the laboratory. The proposed analytical methods for chemical analysis are presented in Section 4.5 of the text.

At each direct-push drilling location, soil cores will be collected continuously from the ground surface to the total depth of the shallow soil boreholes, i.e., five feet bgs (see Section 4.5 of the text), to allow observation and logging of the soil core.

E.2.1.3 Hollow-Stem Auger Drilling

The four deeper boreholes intended for groundwater monitoring well installation will be drilled using a truck-mounted hollow-stem auger rig, equipped with continuous-flight augers of approximately 10-inch minimum outer diameter. The four shallow soil boreholes may be drilled using a truck-mounted hollow-stem auger rig.

During advancement of soil boreholes using a hollow-stem auger rig, soil samples will be collected using a California-modified split spoon sampler, or similar device. Soil samples will be collected within an 18-inch length of pre-cleaned, 2-inch diameter stainless steel liners that will be properly loaded into the sampling device prior to advancing the sampler through the sample interval. Discrete grab samples intended for VOC or TPH-g analyses will be collected in En Core® samplers, as described in Section E.2.2. For other soil samples to be retained for laboratory analysis, both ends of the stainless steel sample liner will be covered with Teflon® sheets and sealed with plastic end caps, or soil will be placed in pre-cleaned containers supplied by the laboratory.

At each hollow-stem auger drilling location, soil cores will be collected continuously from the ground surface to five feet bgs, and then on 5-foot intervals to the total depth of the borehole, to allow observation and logging of the soil core. Discrete soil samples will be collected for chemical analysis from various depths; the proposed analytical methods for chemical analysis are presented in Section 4.5 of the text for the shallow soil boreholes and in Section 2.6.3 of the text for the deeper boreholes drilled for installation of monitoring wells.

The deeper boreholes drilled for purposes of groundwater monitoring well installation will be advanced to approximately 20 feet below the depth of first encountered groundwater. Depending on encountered drilling conditions, e.g., if flowing sands are encountered, it may become necessary to utilize a sonic, air, or mud-rotary rig to reach desired depths, in which case drilling would be terminated until appropriate equipment could be mobilized. Soil samples may not be collected from these deeper boreholes intended for installation of groundwater monitoring wells if alternative drilling methods need to be utilized. Monitoring well installation procedures are described in Section E.3 below.

E.2.2 General Soil Sampling and Drilling Procedures

The following general soil sampling and drilling procedures will be implemented, regardless of the drilling method utilized:

- All downhole drilling and sampling equipment will be decontaminated prior to initial use at the subject property and prior to the collection of each sample (see Section E.7 below for decontamination procedures).

- Borehole logging and soil descriptions will be performed in accordance with the Unified Soil Classification System, and soil color will be described according to Munsell Soil Color Charts, under the supervision of a California Professional Geologist.

- During borehole logging, soil samples will be field screened by measuring headspace concentrations of VOCs, measured using a calibrated organic gas meter ("OVM"). OVM readings will be recorded in the field and may be used to aid selection of samples for laboratory analysis.

- Discrete samples to be analyzed for VOCs or TPH-g will be collected in and transported to the laboratory in En Core® samplers. En Core® samples will be collected using United States Environmental Protection Agency ("U.S. EPA") Method 5035 protocols and California Department of Environmental Protection Agency Department of Toxic Substances Control ("DTSC") Hazardous Materials Laboratory's standard operating procedure ("SOP") 732-S entitled *Guide for Field Sampling with Encore™ Sampler for VOC Analysis*, dated October 1998.

- A sample label will be attached to each sample container. The label will include a unique sample identification number, the sample depth interval, and the time and date the sample was collected. Labeled sample containers will be placed in zip-closure plastic bags and temporarily stored and transported to the analytical laboratory in a cooled container.

- Soil samples intended for laboratory analyses will be submitted to, and analyzed by, a state-certified analytical laboratory under chain-of-custody control.

- When drilling, sampling, and logging activities are completed for each shallow borehole, the borehole will then be filled to the original ground surface with a cement/grout mixture.

E.3 Groundwater Monitoring Well Installation Procedures

The four deeper boreholes will be converted to groundwater monitoring wells upon completion of drilling. The well casing will consist of 4-inch inner diameter, pre-cleaned, flush jointed, threaded, Schedule 40 polyvinyl chloride ("PVC") casing. No solvents or glues will be used in the construction of monitoring wells.

The lower part of the monitoring well casing will consist of 30 feet of 4-inch inner diameter, factory-slotted (0.020-inch slot size) PVC well screen. Approximately 10 feet of the total 30 foot length of well screen will be placed above the depth of first encountered groundwater, and approximately 20 feet of well screen will extend below the depth of first encountered groundwater. The lower end of the PVC well screen will be plugged with a threaded PVC end cap or a slip cap. Slip caps will be permanently attached to the PVC screen using a stainless steel screw or rivet. The upper part of all monitoring wells will consist of blank PVC casing extending to ground surface.

A continuous filter pack will be placed in the annular space between the screen and the borehole wall. The filter pack will consist of pre-washed, packaged #3 sand, or equivalent. Depending on drilling conditions, e.g., if flowing sands are encountered, pre-washed, packaged #2/12 sand (or equivalent) may be used. The filter pack will extend from approximately 1 foot below the bottom of casing to not more than two feet above the top of the screen. The sand will be placed by suspending the well casing and placing the sandpack around the well screen using a tremie pipe, while withdrawing the auger. This method will allow the sandpack to fill the annular space between the outside of the screen and the borehole wall. The level of the sand will be monitored using a weighted tape.

Above the filter pack, approximately three to five feet of bentonite pellets or chips will be emplaced and hydrated to form a well seal. Hydrated bentonite grout will be emplaced from the top of well seal to within approximately 1 foot bgs using a tremie pipe or hose. The top of the casing will be fitted with a watertight, locking cap. Surface completions will consist of a watertight, 12-inch diameter, traffic-rated vault box sealed in concrete and set even with the ground surface at each well location.

E.4 Groundwater Monitoring Well Development Procedures

Following completion of each well, the grout and concrete will be allowed to cure for at least 24 hours. After curing, the well will be developed to remove fine-grained materials inside the filter pack and casing, to stabilize the filter pack around the well screen, and to help produce more representative samples from the water-bearing zone. Bailing, pumping, surging, swabbing, or a combination of these methods will be used to develop the well.

For these 4-inch monitoring wells, well development will be performed using a well development rig that is fitted with a surge block designed to snugly fit the inside diameter of the well casing. The rig operator will proceed to surge the well with shallow, smooth strokes forcing the water back and forth through the sand pack and screen. The surge block will then be removed, and the well will be pumped to remove sediment. The well will continued to be alternately surged and pumped until well development criteria, as discussed below, have been met.

Field parameters, including pH, temperature, conductivity, and turbidity, will be measured during the development process. Development of the wells will continue until:

- A minimum of five well volumes have been removed; and
- Field parameter have stabilized (± 10%) for three successive readings at 5 minute intervals.

For wells that do not meet the development criteria described above, the development will be discontinued after 10 well volumes have been removed, or based on field conditions and observations.

E.5 Groundwater Sample Collection Procedures

As described above, four groundwater monitoring wells will be installed on the western portion of the Property. Groundwater samples will not be collected for laboratory analyses until a minimum of 24 hours following development of each well.

On the day groundwater samples are to be collected, all well caps will be removed and groundwater levels will be allowed to equilibrate while sampling preparations are made in the field. Then, prior to well purging, the depth to water will be measured from the top of each monitoring well casing or protective casing and will be recorded in hundredths of a foot. Depth to groundwater will be measured using an electric or battery-powered sounder or probe. Based on available data for the Property and nearby sites, floating product is not anticipated to be present. However, a new disposable bailer will be used to check for the presence of floating product, and if found to be present, the bailer will be used to measure the thickness of the floating product. The depth to the bottom of the well will be measured after groundwater sampling, to minimize disturbing sediments at the bottom of the well prior to sample collection.

Low flow purging and sampling techniques will be used during the sampling of each groundwater monitoring well to minimize the potential for entraining fine sediments, and mixing and possibly aerating groundwater. Low flow purging and sampling techniques will be consistent with industry standards and will not be conducted if free product or a sheen is observed.

During low flow purging and sampling, a bladder pump will be used to purge each well. The pump or tubing will be lowered to the approximate midpoint of the saturated interval of the well screen. Ideally, the flow is low enough to limit the drawdown in the well to approximately 0.3 feet, typically using a purge rate of 100 to 500 milliliters per minute ("mL/min"). In some cases of low water producing wells, the water in the well will fall below the ideal 0.3 feet.

The wells will be monitored during purging for drawdown, pH, temperature, conductivity, dissolved oxygen ("DO"), and turbidity using a multi-parameter instrument. The instrument will be calibrated prior to use. Measurements of drawdown and these five water quality parameters will be recorded approximately every five minutes. Purging will be considered complete when pH, conductivity, turbidity, and DO have stabilized for three successive readings, or when purging is considered sufficient based on field observations.

If substantial drawdown is observed at a rate of 100 mL/min, the low flow purging technique will not be used. In these cases, the entire volume of the well casing will be removed using the pump. If possible, three casing volumes of groundwater will be removed by pumping the well to dryness. The well will be allowed to recover to 80 percent of the original volume (or a maximum of two hours) and will then be sampled. The time required to purge a well will be recorded.

Following purging, samples of groundwater will be collected directly from the outlet of the pump into pre-cleaned containers supplied by the laboratory, preserved as specified by the laboratory for the analytical methods to be conducted on the samples. A sample label will be attached to each sample container. The label will include a unique sample identification number and the time and date the sample was collected. Labeled sample containers will be placed in zip-closure plastic bags and temporarily stored and transported to the analytical laboratory in a cooled container. Groundwater samples intended for laboratory analyses will be submitted to, and analyzed by, a state-certified analytical laboratory under chain-of-custody control. The proposed analytical methods for chemical analysis of groundwater samples collected from the four monitoring wells are presented in Section 2.6.4 of the text.

E.6 Quality Control Samples

The quality control sampling program implemented for the subject property will consist of field quality control samples and laboratory quality control samples, as described below.

E.6.1 Field Quality Control Samples

A single duplicate groundwater sample will be collected during monitoring well sampling, and will be analyzed using the methods described in Section 2.6.4 of the text. The location for collection of the duplicate sample will be selected in the field. The sample will be collected at the location considered to have the greatest possibility of being representative of contaminated groundwater, with sufficient volume of water available for sampling.

The duplicate sample will be preserved, packaged, and sealed in the same manner as other samples of the same matrix. A separate sample number will be assigned to the duplicate sample, and it will be submitted blind to the laboratory.

E.6.2 Field Quality Control Samples

Trip blanks will be pre-prepared and provided by the analytical laboratory. Trip blanks will be stored and shipped with collected samples to evaluate if the shipping and handling procedures are introducing contaminants into the groundwater samples, and if cross contamination in the form of VOC migration has occurred between the collected samples. The sealed trip blanks received from the laboratory will not be opened in the field and will be returned to the laboratory inside each cooler that contains collected soil or groundwater samples intended for VOC analyses. A minimum of one trip blank will be submitted to the laboratory with every shipment of collected samples intended for VOC analyses. The trip blanks will be chilled, packaged, and sealed in the manner described above for the environmental samples. A separate sample number and station number will be assigned to each trip blank sample.

One equipment blank sample will be collected during groundwater sampling by pouring distilled water into a new bailer, then transferring the water into sample containers. One field blank sample will be collected during groundwater sampling to evaluate whether contaminants have been introduced into the samples during the sampling due to ambient conditions or from sample containers. Field blank samples will be obtained by pouring distilled water into a sampling container at the sampling point. The field blank and equipment blank samples will be preserved, packaged, and sealed in the manner described above for the environmental samples. A separate sample number and station number will be assigned to each sample. Equipment blank and field blank samples will be submitted to the laboratory and placed on hold. These samples will not be analyzed unless the analytical results for environmental samples indicate that these additional analyses are warranted.

For each cooler that is shipped or transported to an analytical laboratory, a 40-milliliter ("mL") volatile organic analysis ("VOA") vial will be included that is marked "temperature blank." This blank will be used by the sample custodian and laboratory to check the temperature of samples upon receipt.

E.6.3 Laboratory Quality Control Samples

A routinely collected soil sample (i.e., the equivalent of a full 8-ounce jar or two 120-mL vials) contains sufficient volume for both routine sample analysis and additional laboratory quality control analyses. Therefore, separate soil samples for laboratory quality control purposes will not be collected for analyses.

For water samples, double volumes of samples are typically supplied to the laboratory for its use for quality control purposes. Two sets of water sample containers are filled and all containers are labeled with a single sample number. For VOC samples this would result in eight vials being collected instead of four.

The laboratory will be alerted as to which sample is to be used for quality control analysis by a notation on the sample container label and the chain-of-custody record or packing list.

For this sampling event, the locations for collection of laboratory quality control samples will be determined in the field and will be primarily dependent upon the volume of soil and/or groundwater available for sampling at each location.

E.7 Equipment Decontamination

Downhole equipment, including drilling equipment and/or sampling equipment, will be decontaminated prior to drilling and sampling each borehole, pushing each probe, or sampling each well to reduce the potential for cross-contamination. Decontamination will be accomplished by either a) steam cleaning or b) washing in a solution of Alconox® or equivalent non-phosphate detergent, followed by rinsing with clean water and distilled water. Alternatively, unused, pre-cleaned disposable sampling equipment will be utilized to reduce the potential for cross-contamination.

E.8 Investigation Derived Wastes

Drilling and sampling wastes generated during field activities described herein will be containerized in bins or drums, labeled, and temporarily stored on the Property, at a location designated by Hollywood Park personnel, until appropriate disposal at an off-site, permitted facility is arranged by the Hollywood Park Property Manager.

APPENDIX F

Analysis of Property Arsenic Data and Naturally-Occurring Background Concentration

TABLE F-1

Summary of Metal Analytical Results for Soil Samples

Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California

				Analytical Results (mg/kg) (a)								
Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Nickel	Vanadium	Aluminum	Iron
Available Data for the Property (EKI, 2006b)												
Former Oil Field Area												
PS-SB-2	PS-SB-2-4.5-5.5	6/27/2005	4.5 - 5.5	1.48	0.337	<0.1	11.6	6.35	6.83	27	9,670	12,900
	PS-SB-2-9.5-10.5	6/27/2005	9.5 - 10.5	1.68	0.403	<0.1	14.4	6.49	9.29	32.2	11,800	16,400
	PS-SB-2-14.5-15.5	6/27/2005	14.5 - 15.5	0.634	0.159	<0.1	2.48	1.88	2.4	9.06	3,740	4,860
	PS-SB-2-19.5-20.5	6/27/2005	19.5 - 20.5	0.43	0.103	<0.1	1.49	1.59	1.81	6.26	2,800	3,430
PS-SB-12 (b)	PS-SB-12-4.5-5.5	6/29/2005	4.5 - 5.5	1.58	0.424	<0.1	12.8	8.14	7.59	28.6 B	11,700	14,400
	PS-SB-12-9.5-10.5	6/29/2005	9.5 - 10.5	1.73	0.395	<0.1	10.6	7.32	8.22	28.9 B	10,800	14,700
	PS-SB-12-14.5-15.5	6/29/2005	14.5 - 15.5	0.572	0.128	<0.1	2.3	2.06	2.44	8.93 B	4,060	4,640
	PS-SB-12-19.5-20.5	6/29/2005	19.5 - 20.5	0.557	0.142	<0.1	3.31	2.89	3.05	12.7 B	4,540	6,560
Former Oil Wells and Impoundment Area												
PS-SB-8 (b)	PS-SB-8-1.5-2.5	6/28/2005	1.5 - 2.5	7.12	0.393	0.134	12.9	7.03	8.74	28.4 B	9,420	14,500
	PS-SB-8-4.5-5.5	6/28/2005	4.5 - 5.5	18.7	0.322	0.206	23.6	6.31	10.2	26.5 B	8,630	13,700
	PS-SB-8-9.5-10.5	6/28/2005	9.5 - 10.5	1.33	0.431	0.337	15.4	8.89	11.9	31.3 B	11,200	17,900
	PS-SB-8-14.5-15.5	6/28/2005	14.5 - 15.5	1.71	0.532	<0.1	15.8	8.98	10	35.5 B	13,000	17,800
	PS-SB-8-19.5-20.5	6/28/2005	19.5 - 20.5	1.36	0.386	<0.1	11.5	5.19	8.17	29 B	10,200	15,400
	PS-SB-8-22.5-23.5	6/28/2005	22.5 - 23.5	0.83	0.218	<0.1	5.04	4.1	4.28	17.2 B	5,780	8,870
PS-SB-9 (b)	PS-SB-9-1.5-2.5	6/28/2005	1.5 - 2.5	3.7	0.346	0.147	13.1	7.08	8.3	27.8 B	8,440	14,400
	PS-SB-9-4.5-5.5	6/28/2005	4.5 - 5.5	1.5	0.41	0.14	13.7	7.13	9.53	31.7 B	9,940	16,300
	PS-SB-9-9.5-10.5	6/28/2005	9.5 - 10.5	2.42	0.465	<0.1	17.6	9.77	12.8	44 B	13,200	21,600
	PS-SB-9-14.5-15.5	6/28/2005	14.5 - 15.5	1.49	0.328	<0.1	13.3	8.47	10.7	30.4 B	11,000	17,600
	PS-SB-9-19.5-20.5	6/28/2005	19.5 - 20.5	0.45	0.143	<0.1	4.38	3.27	3.57	16.3 B	4,780	8,390
Print Room (Tunnel 4)												
PS-SG-1	PS-SG-1-5-5.5	7/5/2005	5 - 5.5	2.39	0.506	0.13	17.2	8.82	13.2	38.7	15,500	20,100
PS-SG-2	PS-SG-2-4.5-5	7/5/2005	4.5 - 5	21.6	0.475	0.138	16.7	9.23	12	34.3	13,400	17,400
PS-SG-3	PS-SG-3-5-5.5	7/5/2005	5 - 5.5	2.38	0.553	<0.1	17.8	9.43	11.4	41.8	17,100	20,300
Current Vehicle Maintenance Area												
PS-SB-1	PS-SB-1-1.5-2.5	6/27/2005	1.5 - 2.5	1.64	0.407	0.181	16.1	10.1	12	35.8	10,500	17,100
PS-SB-14	PS-SB-14-2-2.5	7/11/2005	2 - 2.5	1.59	0.362	0.192	14.4	8.74	10.1	31.2	10,600	14,700
	PS-SB-14-5-5.5	7/11/2005	5 - 5.5	1.94	0.586	<0.1	19.9	8.2	12.1	36.7	16,900	19,400
PS-SG-14	PS-SG-14-5-5.5	7/6/2005	5 - 5.5	2.16	0.64	0.122	26	13.1	18.6	50	22,200	27,300

TABLE F-1

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Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California

Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Analytical Results (mg/kg) (a)								
				Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Nickel	Vanadium	Aluminum	Iron
Available Data for the Property (EKI, 2006b), Continued												
Former Track Maintenance Area												
PS-SB-3	PS-SB-3-1.5-2.5	6/27/2005	1.5 - 2.5	1.42	0.342	0.171	12.6	7.48	8.68	27.6	8,150	14,000
PS-SB-4	PS-SB-4-1.5-2.5	6/27/2005	1.5 - 2.5	1.54	0.462	<0.1	16.5	6.36	9.01	33.3	11,700	17,300
PS-SB-5	PS-SB-5-1.5-2.5	6/27/2005	1.5 - 2.5	1.46	0.372	<0.1	12.6	6.58	8.08	29.6	10,800	15,100
Former Triangle Waste Area												
PS-SB-10 (b)	PS-SB-10-1.5-2.5	6/28/2005	1.5 - 2.5	1.34	0.288	0.114	12	5.46	7.64	24 B	7,240	13,200
PS-SB-11 (b)	PS-SB-11-1.5-2.5	6/28/2005	1.5 - 2.5	6.22	0.22	0.148	9.79	5.12	7.67	23.4 B	5,040	9,870
PS-SB-13 (b)	PS-SB-13-1.5-2.5	6/29/2005	1.5 - 2.5	1.34	0.317	0.181	11.1	6.41	7.44	21.2 B	7,540	11,700
Main Racetrack Soil												
PS-MT-1,2,3,4 (b)	COMP (PS-MT-1,2,3,4)	6/27/2005	0.5	0.808	<0.1	<0.1	5.41	1.08	2.44	6.57 B	2,260	2,910
PS-MT-5,6,7,8 (b)	COMP (PS-MT-5,6,7,8)	6/27/2005	0.5	0.785	<0.1	<0.1	5.28	1.03	2.51	6.35 B	2,190	2,870
BF-1	BF-1-02082008	2/8/2008	(c)	1.46	0.117	<0.1	8.01	2.18	3.97	10.8	3,180	5,430
Training Track Soil												
PS-TT-1,2,3,4 (b)	COMP (PS-TT-1,2,3,4)	6/27/2005	0.5	1.44	<0.1	<0.1	4.67	1.44	2.87	7.26 B	2,290	3,710
PS-TT-5,6,7,8 (b)	COMP (PS-TT-5,6,7,8)	6/27/2005	0.5	1.89	<0.1	<0.1	5.7	1.74	3.26	9.36 B	2,640	4,310
Stable Area Soil												
PS-SGM-2,15,16,17 (b)	COMP (PS-SGM-2,15,16,17)	7/6/2005	0.5 - 1.0	2.85	0.442	<0.1	13	6.37	9.44	29.9 B	12,400	14,900
PS-SGM-22,21,19,49 (b)	COMP (PS-SGM-22,21,19,49)	7/6/2005	0.5 - 1.0	4.11	0.314	0.131	11.1	5.77	8.38	24.6 B	8,420	11,700
PS-SGM-34,36,38,47 (b)	COMP (PS-SGM-34,36,38,47)	7/7/2005	0.5 - 1.0	3.32	0.267	0.158	11.4	5.63	9.03	24 B	8,990	11,500
PS-SGM-51,52,56,57	COMP (PS-SGM-51,52,56,57)	7/11/2005	0.5 - 1.0	3.17	0.295	0.152	12.2	8.4	8.5	28.2	10,100	14,100
BF-2	BF-2-02082008	2/8/2008	(c)	4.04	0.136	0.132	6.81	3.24	4.86	14.2	3,960	7,350
Storm Water Sediment Area												
PS-P2	PS-P2-0.5-1.0	7/19/2005	0.5 - 1	0.697	0.198	0.246	9.68	6.88	13.5	22.2	7,010	11,100
PS-P3	PS-P3-SS	7/19/2005	0 - 0.5	1.06	<0.1	0.128	3.12	1.72	3.51	9.7	1,520	4,930
PS-P5	PS-P5-4.5-5.0	7/19/2005	4.5 - 5	1.91	0.271	0.345	12.6	7.23	12.4	28.1	9,260	14,200
Storm Water Sediment Area Excavation Confirmation Samples												
SSAEX-F1	SSAEX-F1-10	2/22/2007	10	0.851	0.491	0.155	22.3	13.1	19.4	47.4	--	--
SSAEX-S1	SSAEX-S1-3.5	4/6/2007	3.5	2.57	0.235	0.193	13.1	8.09	13.2	34.9	--	--
SSAEX-N1	SSAEX-N1-8	4/11/2007	8	1.44	0.582	0.318	21.4	15.6	24.6	50.4	--	--
SSAEX-W1	SSAEX-W1-9	4/11/2007	9	1.67	0.533	0.128	19.4	11.1	15.5	43.7	--	--
SSAEX-E1	SSAEX-E1-4	4/11/2007	4	1.93	0.454	0.251	21.9	12.3	22.5	49.7	--	--
SSAEX-F2	SSAEX-F2-11	4/11/2007	11	2.84	0.637	0.249	22.5	11.6	15.3	41.2	--	--
SSAEX-F3	SSAEX-F3-9	4/11/2007	9	0.531	0.399	0.193	20.8	12.1	17.2	44.4	--	--
SSAEX-W2	SSAEX-W2-4	4/11/2007	4	1.13	0.356	0.246	16	9.14	15.7	36.9	--	--

TABLE F-1
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Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California

				Analytical Results (mg/kg) (a)								
Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Nickel	Vanadium	Aluminum	Iron
Available Data for the Former Cypress Fee Site												
Former Texaco Cypress Fee Site (Terra Vac, 1995)												
TSS-1	TSS-1	12/21/1994	0	7.9	<RL	1.6	23	8.8	19	37	--	--
TSS-2	TSS-2	12/21/1994	0	8.3	<RL	1.9	28	9.8	22	39	--	--
Former Texaco Cypress Fee Site (Hart Crowser, 2003)												
H-1	H-1@10'	12/17/2002	10	1.8	<RL	<RL	17	7.9	6.7	32	--	--
H-2	H-2@10'	12/17/2002	10	3.9	<RL	<RL	24	8.8	13	44	--	--
I-1	I-1@10'	12/17/2002	10	1.9	<RL	<RL	15	7.1	5.6	34	--	--
I-2	I-2@10'	12/17/2002	10	2.7	<RL	<RL	19	7.6	8.6	38	--	--
J-1	J-1@10'	12/17/2002	10	1	<RL	<RL	9.8	5.2	3.6	25	--	--
HB-10N	HB-10N@10'	12/26/2002	10	1.8	<RL	<RL	13	9.1	9	37	--	--
HB-10WC	HB-10WC@10'	12/26/2002	10	3	<RL	<RL	20	11	12	43	--	--
HB-10S	HB-10S@10'	12/26/2002	10	2.6	<RL	<RL	20	7.8	9.1	44	--	--
IB-10NW	IB-10NW@10'	12/26/2002	10	4.4	<RL	<RL	21	8.3	13	36	--	--
IB-10C	IB-10C@10'	12/26/2002	10	1.6	<RL	<RL	14	10	6.1	31	--	--
IB-10SW	IB-10SW@10'	12/26/2002	10	4.5	<RL	<RL	20	11	14	47	--	--
JB-9C	JB-9C@10'	12/26/2002	10	2.1	<RL	<RL	14	6.8	7.8	33	--	--
JB-9S	JB-9S@10'	12/26/2002	10	1.5	<RL	<RL	12	6.8	5.1	27	--	--
FB-4	FB-4@10'	12/26/2002	10	3.3	<RL	<RL	16	7.4	6.3	30	--	--
JB-2	JB-2@10'	1/10/2002	10	2.3	<RL	<RL	18	9.5	6.7	40	--	--
Available Data for the Former Inglewood Manufactured Gas Plant Site, Current Southern California Gas Property												
Southern California Gas Property (HydroSolutions, 1992)												
B-1	B-1-NS	4/24/1992	0	<1.5	<0.5	1.25	4.75	--	4.7	--	--	--
B-2	B-2-NS	4/24/1992	0	1.6	<0.5	2.25	21.8	--	7.6	--	--	--
B-3	B-3	4/24/1992	0	2.4	--	--	--	--	--	--	--	--
B-4	B-4	4/24/1992	0	1.77	--	--	--	--	--	--	--	--
B-5	B-5-NS	4/24/1992	0	<1.5	--	--	--	--	--	--	--	--
B-6	B-6-NS	4/24/1992	0	<1.5	<0.5	1.2	4.05	--	4	--	--	--
	B-6-20	4/24/1992	20	<1.5	--	--	--	--	--	--	--	--
B-7	B-7	4/24/1992	0	8.92	--	--	--	--	--	--	--	--
B-8	B-6-NS	4/24/1992	0	<2.0	--	--	--	--	--	--	--	--
B-9	B-9	4/24/1992	0	5.05	--	--	--	--	--	--	--	--
B-10	B-10-NS	4/24/1992	0	<1.5	--	--	--	--	--	--	--	--

TABLE F-1

Summary of Metal Analytical Results for Soil Samples

Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California

Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Analytical Results (mg/kg) (a)								
				Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Nickel	Vanadium	Aluminum	Iron
Available Data for the Former Inglewood Manufactured Gas Plant Site, Current Southern California Gas Property, Continued												
Southern California Gas Property (HydroSolutions, 1992), Continued												
B-11	B-11-NS	4/24/1992	0	<1.5	<0.5	1.05	3.85	--	4.3	--	--	--
	B-11-5	4/24/1992	5	<1.5	<0.5	0.6	2.8	--	2.4	--	--	--
B-12	B-12-NS	4/24/1992	0	<1.5	<0.5	<0.5	5.35	--	3.9	--	--	--
B-13	B-13-NS	4/24/1992	0	<1.5	<0.5	1.5	6.05	--	5	--	--	--
	B-13-5	4/24/1992	5	<1.5	<0.5	0.8	3.45	--	3.35	--	--	--
	B-13-10	4/24/1992	10	<1.5	<0.5	1.05	3.55	--	4.7	--	--	--
	B-13-15	4/24/1992	15	<1.5	<0.5	<0.5	1.7	--	1.7	--	--	--
B-14	B-14-NS	4/24/1992	0	<1.5	<0.5	2.6	17.7	--	7.15	--	--	--
	B-14-3	4/24/1992	3	<1.5	<0.5	0.85	4.35	--	4.25	--	--	--
B-15	B-15-NS	4/24/1992	0	<1.5	--	--	--	--	--	--	--	--
B-17	B-17-NS	4/24/1992	0	2.55	--	--	--	--	--	--	--	--
B-18	B-18-5	4/24/1992	5	<1.5	--	--	--	--	--	--	--	--
TB1	TB1-3.5	4/5/1994	3.5	<0.5	<0.5	<0.5	8.7	6.5	8.2	20	--	--
TB2	TB2-3.5	4/5/1994	3.5	<0.5	<0.5	<0.5	6.4	4.7	6.2	<0.5	--	--
TB3	TB3-4.0	4/5/1994	4	<0.5	<0.5	<0.5	5.9	4.2	6.2	13	--	--
TB14	TB14-5.0	4/6/1994	5	<0.5	<0.5	<0.5	5.3	4	5.3	13	--	--
TB17	TB17-0.5	4/6/1994	0.5	7.1	<0.5	1.4	9.5	4.9	7.4	16	--	--
TT3	TT3-5.5	4/5/1994	5.5	<0.5	<0.5	<0.5	7.3	4.4	7.2	15	--	--
TT5	TT5-1.0	4/5/1994	1	0.5	<0.5	<0.5	7	5.4	6.9	17	--	--
TT7	TT7-4.5	4/5/1994	4.5	<0.5	<0.5	<0.5	5.2	4.3	5.2	11	--	--

Abbreviations:

-- = not analyzed

<0.50 = compound not detected at or above indicated laboratory detection limit

B = method blank detection - see Note (b)

bgs = below ground surface

COMP = 4-point composite sample

mg/kg = milligrams per kilogram

na = not available

RL = laboratory reporting limit

TABLE F-1

Summary of Metal Analytical Results for Soil Samples

Hollywood Park Racetrack and Casino, 1050 South Prairie Avenue, Inglewood, California

				Analytical Results (mg/kg) (a)								
Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Nickel	Vanadium	Aluminum	Iron

Notes:

(a) Only detected chemicals are shown.

(b) Vanadium was detected in the method blank.

(c) Samples BF-1 and BF-2 were collected from soil stockpiles.

References:

Hart Crowser, 2003. Subsurface Investigation Report, Former Texaco Cypress Fee Facility and Inglewood Gasoline Company Property, Inglewood, California, Hart Crowser, 4 April 2003.

HydroSolutions, 1992. Preliminary Endangerment Assessment, Former Inglewood Manufactured Gas Plant 700 Warren Lane, Inglewood, California, HydroSolutions of California, Inc., 13 May 1992.

Terra Vac, 1995. Soil Investigation Report Conducted at the Texaco Cypress Fee Property, West 90th Street, Inglewood, California, Terra Vac, 18 January 1995.

Figure F-1 - Detectable Arsenic Probability Plot

Lognormal - 95% CI

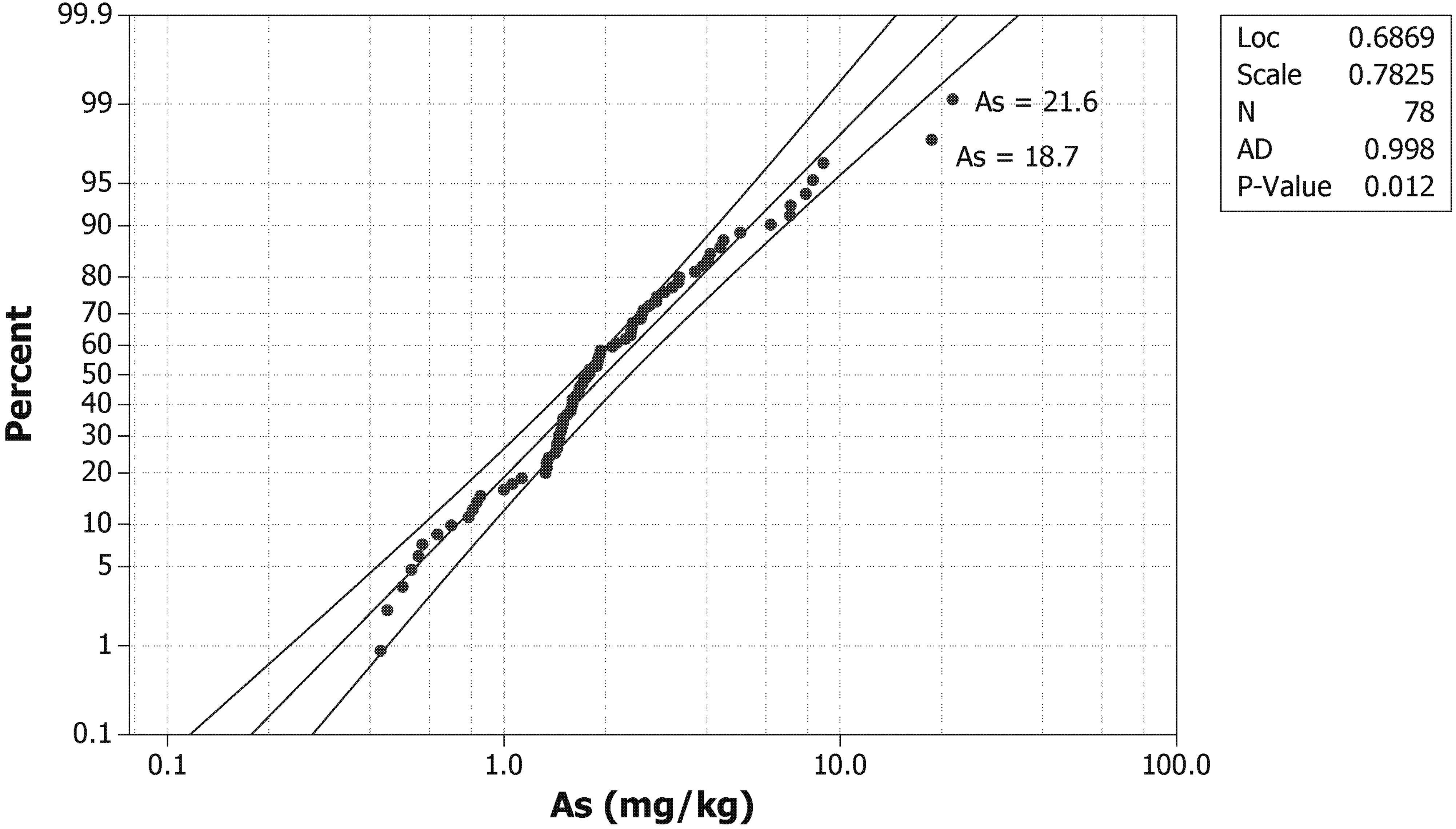


Figure F-2 - Detectable Arsenic Probability Plot with Outliers Removed

Lognormal - 95% CI

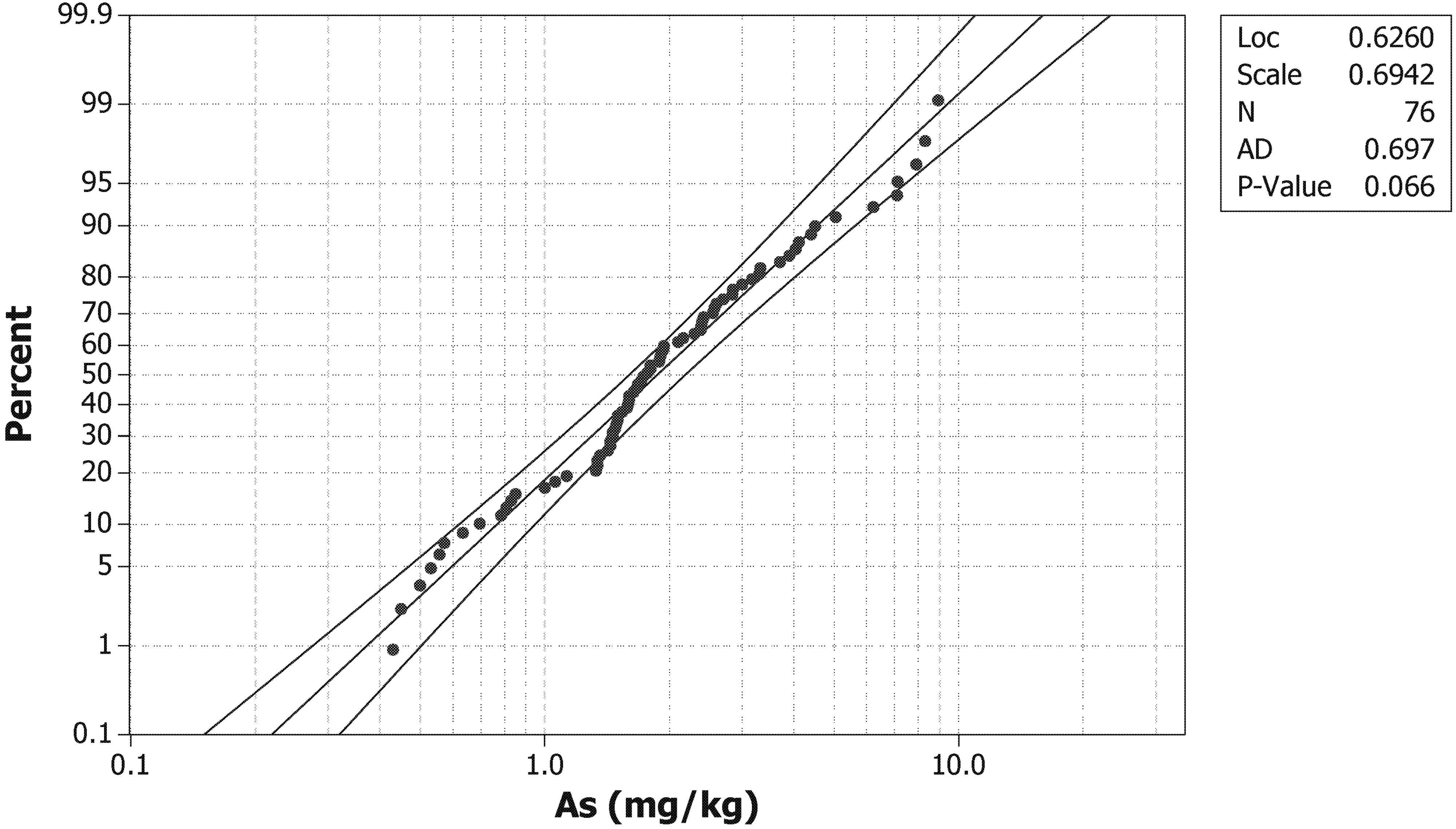
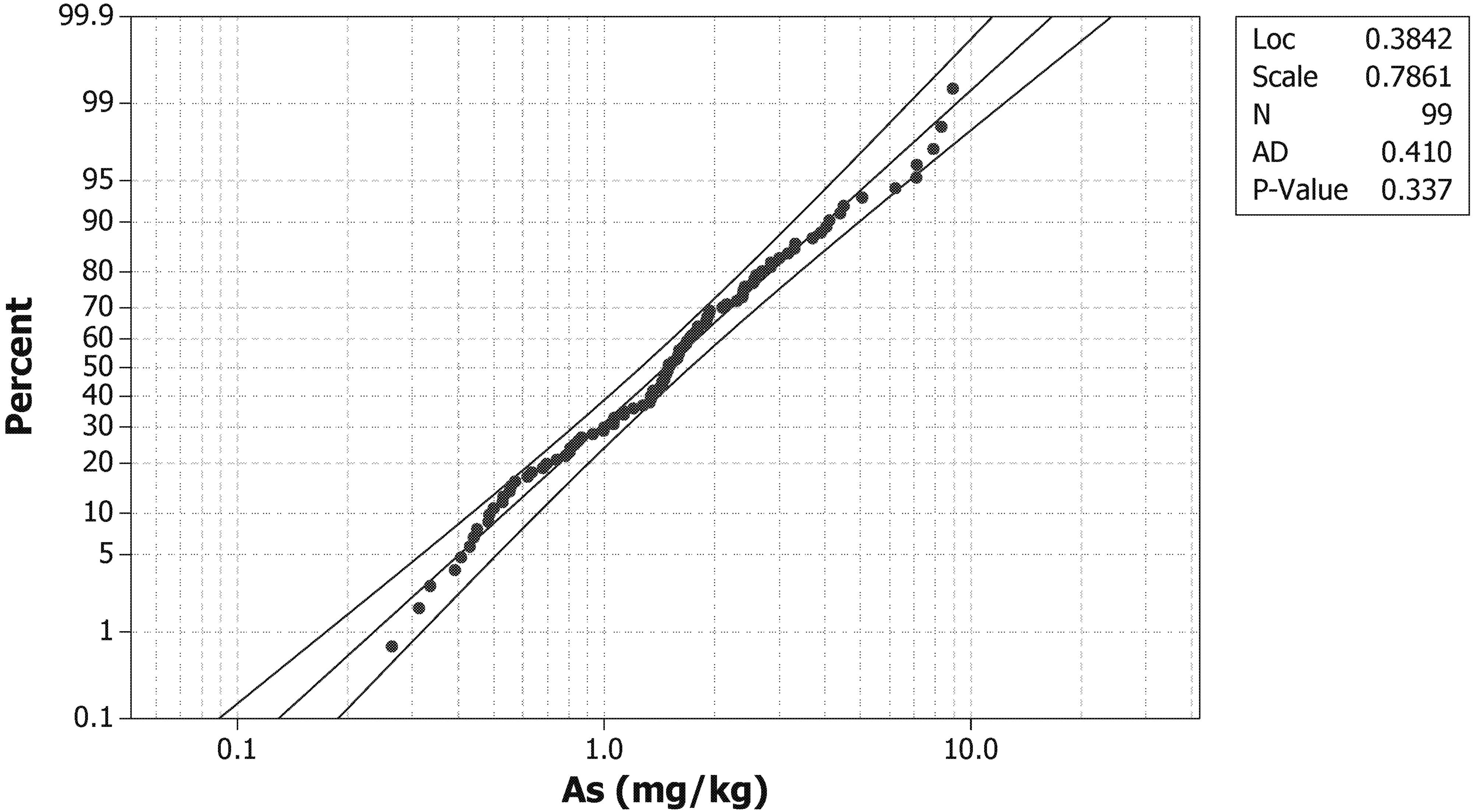


Figure F-3 - Background Arsenic Distribution: NDs Estimated by ROS

Lognormal - 95% CI



ROS = Regression on Ordered Statistics

Figure F-4 - Relationship Between Indicators of Clay and Iron Oxides

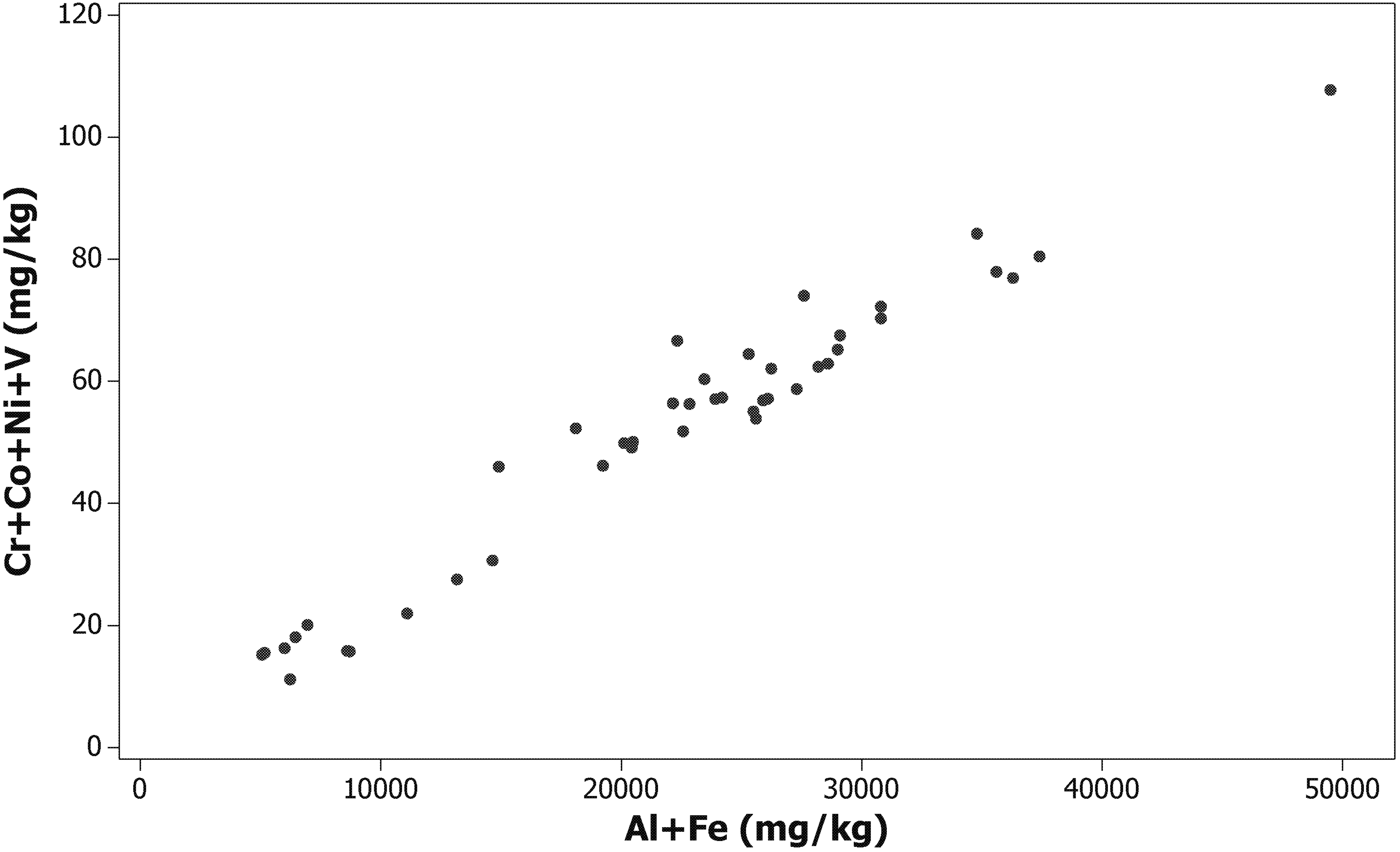
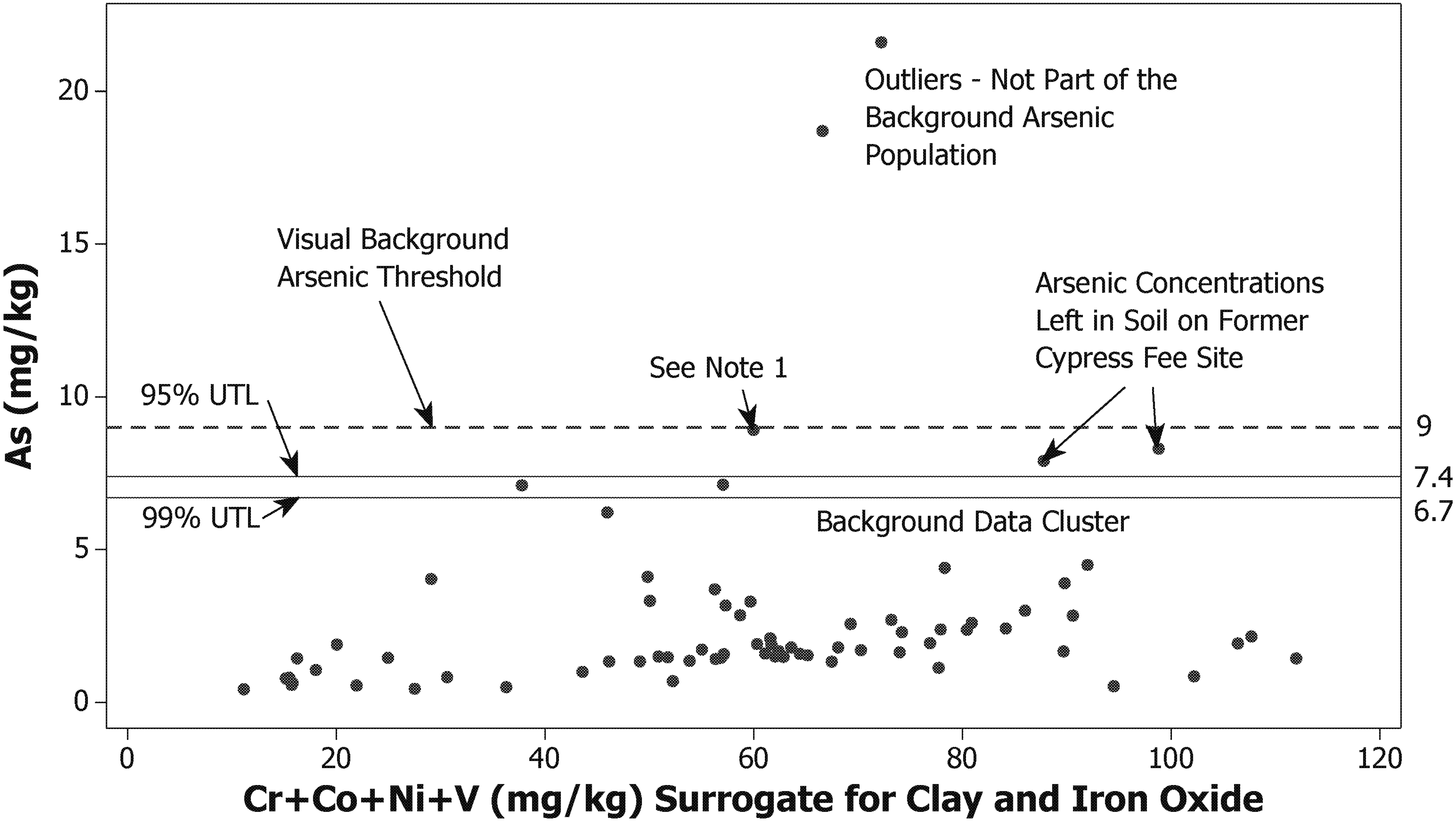


Figure F-5 - Visual Background Arsenic Threshold



1 - This soil sample was collected from surface soil at the Former Inglewood MGP Site, and does not have associated Cr+Co+Ni+V data. Plotted location on the X-axis is arbitrary.

General Background Statistics for Full Data Sets

User Selected Options	
From File	D:\Projects\projects\HollywoodPark\ProUCLAllDatawithCompsLogROSMinitab.wst
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Values	1
Number of Bootstrap Operations	2000

LnROS_As

General Statistics

Total Number of Observations	99	Number of Distinct Observations	93

Raw Statistics		Log-Transformed Statistics	
Minimum	0.264	Minimum	-1.333
Maximum	8.92	Maximum	2.188
Second Largest	8.3	Second Largest	2.116
First Quartile	0.83	First Quartile	-0.186
Median	1.5	Median	0.405
Third Quartile	2.4	Third Quartile	0.875
Mean	1.999	Mean	0.384
SD	1.774	SD	0.786
Coefficient of Variation	0.888		
Skewness	2.114		

Background Statistics

Normal Distribution Test		Lognormal Distribution Test	
Lilliefors Test Statistic	0.21	Lilliefors Test Statistic	0.0762
Lilliefors Critical Value	0.089	Lilliefors Critical Value	0.089
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% UTL with 95% Coverage	5.415	95% UTL with 95% Coverage	6.668
95% UPL (t)	4.961	95% UPL (t)	5.452
90% Percentile (z)	4.273	90% Percentile (z)	4.021
95% Percentile (z)	4.918	95% Percentile (z)	5.35
99% Percentile (z)	6.127	99% Percentile (z)	9.142
Gamma Distribution Test		**Data Distribution Test**	
k star	1.722	Data appear Lognormal at 5% Significance Level	
Theta Star	1.161		
nu star	340.9		
A-D Test Statistic	1.237	**Nonparametric Statistics**	
5% A-D Critical Value	0.767	90% Percentile	4.11
K-S Test Statistic	0.112	95% Percentile	7.1
5% K-S Critical Value	0.0913	99% Percentile	8.92
Data not Gamma Distributed at 5% Significance Level			
Assuming Gamma Distribution		95% UTL with 95% Coverage	7.9

90% Percentile	4.029	95% Percentile Bootstrap UTL with 95% Coverage	7.9
95% Percentile	4.976	95% BCA Bootstrap UTL with 95% Coverage	7.9
99% Percentile	7.094	95% UPL	7.1
		95% Chebyshev UPL	9.773
		Upper Threshold Limit Based upon IQR	4.755
Note: UPL (or upper percentile for gamma distributed data) represents a preferred estimate of BTV			

General Background Statistics for Full Data Sets

User Selected Options	
From File	D:\Projects\projects\HollywoodPark\ProUCLAllDatawithCompsLogROSMinitab.wst
Full Precision	OFF
Confidence Coefficient	99%
Coverage	95%
Different or Future K Values	1
Number of Bootstrap Operations	2000

LnROS_As

General Statistics

Total Number of Observations	99	Number of Distinct Observations	93

Raw Statistics		Log-Transformed Statistics	
Minimum	0.264	Minimum	-1.333
Maximum	8.92	Maximum	2.188
Second Largest	8.3	Second Largest	2.116
First Quartile	0.83	First Quartile	-0.186
Median	1.5	Median	0.405
Third Quartile	2.4	Third Quartile	0.875
Mean	1.999	Mean	0.384
SD	1.774	SD	0.786
Coefficient of Variation	0.888		
Skewness	2.114		

Background Statistics

Normal Distribution Test		Lognormal Distribution Test	
Lilliefors Test Statistic	0.21	Lilliefors Test Statistic	0.0762
Lilliefors Critical Value	0.089	Lilliefors Critical Value	0.089
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
99% UTL with 95% Coverage	5.653	99% UTL with 95% Coverage	7.411
99% UPL (t)	6.217	99% UPL (t)	9.513
90% Percentile (z)	4.273	90% Percentile (z)	4.021
95% Percentile (z)	4.918	95% Percentile (z)	5.35
99% Percentile (z)	6.127	99% Percentile (z)	9.142
Gamma Distribution Test		**Data Distribution Test**	
k star	1.722	Data appear Lognormal at 5% Significance Level	
Theta Star	1.161		
nu star	340.9		
A-D Test Statistic	1.237	**Nonparametric Statistics**	
5% A-D Critical Value	0.767	90% Percentile	4.11
K-S Test Statistic	0.112	95% Percentile	7.1
5% K-S Critical Value	0.0913	99% Percentile	8.92
Data not Gamma Distributed at 5% Significance Level			
Assuming Gamma Distribution		99% UTL with 95% Coverage	8.3

90% Percentile	4.029	99% Percentile Bootstrap UTL with 95% Coverage	8.3
95% Percentile	4.976	99% BCA Bootstrap UTL with 95% Coverage	8.3
99% Percentile	7.094	99% UPL	8.92
		99% Chebyshev UPL	19.74
		Upper Threshold Limit Based upon IQR	4.755
Note: UPL (or upper percentile for gamma distributed data) represents a preferred estimate of BTV			

APPENDIX G

Geotechnical Engineer Project Memorandum Regarding Location of Existing Fill

GROUP
DELTA
CONSULTANTS

Geotechnical
Engineering

Geology

HydroGeology

Earthquake
Engineering

Materials Testing
& Inspection

Forensic Services

February 14, 2008

Wilson Meany Sullivan
100 Wilshire Boulevard
STE 940
Santa Monica, CA 90401

Attention: **Mr. Chris Holmquist**

Subject: **Project Memo**
Location of Existing fill
Proposed Residential and Commercial Development
Hollywood Park Redevelopment
Inglewood, California
Project No.: L-713

Mr. Holmquist:

Group Delta Consultants, Inc. (GDC) is pleased to present this project memo providing a brief discussion of the location of existing fill, and the most likely source of this fill.

The subsurface conditions at the site were investigated on September 18 to 19 and October 2 to 5. The exploration program included drilling 11 hollow stem auger borings and performing 11 Cone Penetration Tests (CPT). Boring and CPT locations are shown in Figure 1. The borings and CPTs were advanced to depths ranging between 50 feet and 75 feet. Laboratory testing program were conducted on selected soil samples obtained from field exploration to evaluate their physical properties and engineering characteristics.

Based on general elevation, soil condition encountered in our field exploration, and past site usage, the site is subdivided into "Parking Area" on the west, "Track Area" in the middle, and "Barn Area" on the east side.

370 Amapola Avenue, Suite 212 ◆ Torrance, CA 90501 ◆ Tel (310) 320-5100 ◆ Fax (310) 320-2118
Aliso Viejo ◆ (949) 609-1020 ◆ www.GroupDelta.com ◆ San Diego ◆ (858) 524-1500

Parking Area

Three to seven feet of likely fill were encountered in our field exploration. The fill consists predominantly of clay and silt with sand. Though we do not have specific records as to the source of the fill, the fill appears to result primarily from human activities such as farming prior to the construction of the racetrack, as well as grading activities performed during construction of the parking areas to level the site.

Track Area

Up to 7.5 feet of fill was encountered in our field exploration. The fill consists predominantly of clay, silt and clayey sand as is most likely the result of cut and fill grading operations that lowered the ground elevation in the eastern part of the track area, and raised the ground elevation in the western part of the track area and under the grandstand. . Previous reports archived by the City of Inglewood revealed that the south portion of the racing track was extended to its present limit in probably 1983. Twenty four feet of fill was placed for track extension.

Barn Area

Up to 4.5 feet of fill was encountered in our field exploration. The fill consists predominantly of silty clay and clayey silt with sand. Western Laboratories (1991), and Lockwood-Singh and Associates (1974) encountered 4 to 7 feet of uncertified fill in their field exploration for individual stables. Though we do not have specific records as to the source of the fill, the fill appears to result primarily from human activities such as farming prior to the construction of the racetrack, as well as grading activities performed during construction of the barns areas to level the site.

If you have any questions pertaining to this letter, or if we can be of further service, please do not hesitate to contact us.

Sincerely,
GROUP DELTA CONSULTANTS, INC.

Michael D. Reader, CEO, G.E.

APPENDIX H

Evaluation of Fill Soil on the Property

APPENDIX H
Evaluation of Fill Soil on the Property
Hollywood Park Racetrack and Casino
1050 South Prairie Avenue, Inglewood, California

Section 4 of the text provides responses to California Regional Water Quality Control Board, Los Angeles Region ("RWQCB") Comment Nos. 1 and 9 regarding the historical presence of fill soil in certain areas of the Property and suggested need for environmental investigations of a portion of the Property that has been consistently used as a parking area since original development of the Property in the 1930s (see Appendix A for complete comment). EKI gathered additional information gathered regarding the fill soils identified on the Property, including likely sources. As described in Section 4 of the text, the Property was graded, cut, and filled between 1930 and 1938. Therefore, the Property is not entirely covered by 15 feet of fill material as stated in the 21 December 2007 RWQCB letter (see Appendix A). Based on a comparison of the 1930 ground surface elevations with the current ground surface elevations, the approximate areas and volumes of cut and fill associated with the original development of the Property are believed to have been relatively balanced; therefore, no further characterization of fill soil on the Property appears to be warranted at this time.

The sections below provide additional discussion of the evaluation of fill soils present in specific areas of the Property. Refer to Sections 4 and 7 of the text for EKI's conclusions regarding this information.

H.1 Main Track

Ground surface elevation changes observed during original development of the Property prior to 1938 indicate that up to 15 feet of soil were excavated from the northeastern portion of the Main Track and placed on the southwestern portion to achieve a grade level of approximately +125 feet msl in the center of the Main Track area for purposes of cut and fill estimation. The ground and water surfaces of the Main Track infield and ponds are lower than +125 feet msl, and the volumes of these areas were estimated assuming they were cut from a +125 feet msl surface. Soil excavated from the eastern part of the racetrack location and lagoons was likely utilized as fill for the western portion of the racetrack and other locations such as the former drainage area now located below the western side of the Grandstand Building, as discussed below. In 1984, additional filling was performed on the southern end of the Main Track to extend the track further to the south. This construction occurred prior to HPLC's purchase of the Property, and Hollywood Park personnel reported that they do not have any records that indicate soils were imported from off-site for use as fill during this construction activity. However, the volume calculations listed above show that this amount of soil could have been available on the Property for use as fill soil, and Hollywood Park personnel have confirmed that soil has historically been moved around and regraded on the Property, and excess soil generated by these activities has been stored in less-used portions of the Property, such as the infield of the Training Track and the area east and southeast of the Training Track.

H.2 Training Track

As observed on the historical aerial photographs of the provided in Appendix B, the location of the Training Track has changed since original development of the Property before 1938, with associated additional soil cuts and grading. Between 1938 and 1947, up to approximately 30 feet of soil were removed (cut) from the eastern portion of the current Training Track to achieve the current ground surface elevations of approximately +145 to +150 feet msl across the Training Track area. Excavated soil was likely utilized as backfill materials for other locations across the Property. Prior to 1952, the Training Track was moved again, to its approximate current location, and additional soil was cut from the eastern hillside to level this area. Prior to 1970, the shape of the Training Track was changed, which would have been associated with additional grading and leveling of the ground surface, but no significant cut or fill volumes appear to be associated with this reconfiguration.

H.3 Grandstand Building

It appears that during original development of the Property in the 1930s, approximately 10 to 20 feet of fill soil were used to achieve current elevations of the base of the Grandstand Building, which range from approximately +115 to +125 feet msl from west to east, based on elevations observed on historical topographic maps in Appendix B. The fill soil likely came from the soil cuts and grading of the northeastern part of the Main Racetrack and excavations for construction of original Main Track infield ponds. The depth of fill soils now found in this former drainage area appear to be approximately 10 to 20 feet deep, and this area now also includes a 7.5 foot wide buried concrete storm drain box culvert. The volume of fill soil shown on Figure 5 and listed above was calculated without accounting for the volume of the storm drain box culvert because its depth and length are not known; however, the volume of this box culvert is significant. Therefore, the volume of fill material in the Grandstand Building area is likely significantly less than the 80,000 cubic yard volume estimated, further reducing the likelihood that fill soil was imported onto the Property from off-site locations to achieve existing grades.

H.4 Parking Lots

The shallow fill soils observed in the western and southern parking lot areas appear to have originated from the grading and leveling of these areas during original development of the Property in the 1930s. The historical topographical maps and aerial photographs from 1924 to current-day, provided in Appendix B, show small topographical differences in the parking lot areas prior to the development of the site prior to 1938, relative to current paved conditions; therefore, no fill soils appear to have been placed in these parking areas since grading for original development. Further, a review of historical aerial photographs confirms that these parking areas have remained relatively unchanged since the 1930s, with no uses other than for parking, and these areas have been covered with asphalt pavement, i.e., a relatively impervious surface, for many years. As documented in the multiple Phase I and Phase II ESAs conducted for the Property over the past several years by multiple environmental professionals, including Dames & Moore, ENVIRON, and EKI, there is no basis for concern that these areas are impacted by COPCs.

H.5 Stable Area

A review of the historical topographic maps and aerial photographs indicates that the shallow fill soils observed in the current-day Stable Area likely resulted from grading and leveling during original development of the Property in the 1930s. Observed fill soils likely originated from the nearby cut areas within the original Stable Area and other portions of the current-day Stable Area.

H.6 Former Oil Field Impoundment Area

Only one oil well had been drilled in the Former Oil Field Impoundment Area prior to the original development of the Property; however, this former oil well only operated eight years and was abandoned in 1935.[21] The fill encountered in the Former Oil Field Impoundment Area, located on the northeastern portion of the property near the current location of the Training Track, is likely associated with relocation of the Training Track that occurred between 1938 and 1947, during which the impoundment area was filled, based on a review of historical aerial photographs from those years (Appendix B).

---

[21] The Texaco Pacific Southwest 1 former oil well was drilled in June 1927 and abandoned in August 1935 (EKI, 2006b).

APPENDIX I

ENVIRON Data Summary Table for TPH Concentrations in Soil at the Former Oil Field Impoundment Area

Table 2
Churchill Downs - Hollywood Park
Additional Soil Investigation - Former Oil Wells & Impoundment Area
Total Petroleum Hydrocarbons in Soil
August 15 & 16, 2005

Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Total Petroleum Hydrocarbons Gasoline, Diesel, & Oil Ranges (mg/kg)		
				TPHg C5-C11	TPHd C13-C22	TPHmo C23-C40
Former Oil Wells and Impoundment Area						
SB-1	SB-1-5'	8/16/2005	5-5.5	<0.2	<2.5	<2.5
	SB-1-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-1-15'	8/16/2005	15-15.5	<0.2	<2.5	<2.5
	SB-1-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-2	SB-2-5'	8/15/2005	5-5.5	<0.2	**81**	**200**
	SB-2-10'	8/15/2005	10-10.5	<0.2	**150**	**240**
	SB-2-15'	8/15/2005	15-15.5	<0.2	**4.3**	**5.8**
	SB-2-20'	8/15/2005	20-20.5	<0.2	**52**	**93**
SB-3	SB-3-5'	8/15/2005	5-5.5	<0.2	**2.7**	**13**
	SB-3-10'	8/15/2005	10-10.5	<0.2	**140**	**210**
	SB-3-15'	8/15/2005	15-15.5	**0.71**	**3.5**	**36**
	SB-3-20'	8/15/2005	20-20.5	**2.1**	**32**	**92**
SB-4[2]	SB-4-5'	8/15/2005	5-5.5	<0.87	**2.8**	**12**
	SB-4-10'	8/15/2005	10-10.5	<0.83	<2.5	<2.5
	SB-4-15'	8/15/2005	15-15.5	<0.83	<2.5	<2.5
	SB-4-20'	8/15/2005	20-20.5	<0.76	<2.5	<2.5
SB-5	SB-5-5'	8/15/2005	5-5.5	<0.2	<2.5	**10**
	SB-5-10'	8/15/2005	10-10.5	<0.2	**27**	**32**
	SB-5-15'	8/15/2005	15-15.5	<0.2	**22**	**24**
	SB-5-20'	8/15/2005	20-20.5	<0.2	**11**	**40**
SB-6	SB-6-5'	8/15/2005	5-5.5	<0.2	<2.5	<2.5
	SB-6-10'	8/15/2005	10-10.5	<0.2	<2.5	<2.5
	SB-6-15'	8/15/2005	15-15.5	<0.2	<2.5	<2.5
	SB-6-20'	8/15/2005	20-20.5	<0.2	<2.5	<2.5
SB-7[2]	SB-7-5'	8/15/2005	5-5.5	<800	**14**	**44**
	SB-7-10'	8/15/2005	10-10.5	<910	<2.5	**3.2**
	SB-7-15'	8/15/2005	15-15.5	<780	<2.5	**3**
	SB-7-20'	8/15/2005	20-20.5	<770	**6.4**	**50**
SB-8	SB-8-5'	8/15/2005	5-5.5	<0.2	<2.5	<2.5
	SB-8-10'	8/15/2005	10-10.5	<0.2	<2.5	<2.5
	SB-8-15'	8/15/2005	15-15.5	<0.2	<2.5	<2.5
	SB-8-20'	8/15/2005	20-20.5	<0.2	<2.5	<2.5
SB-9[2]	SB-9-5'	8/15/2005	5-5.5	<0.74	**340**	**900**
	SB-9-10'	8/15/2005	10-10.5	<0.77	**16**	**15**
	SB-9-15'	8/15/2005	15-15.5	<0.77	**26**	**31**
	SB-9-20'	8/15/2005	20-20.5	<0.78	**700**	**190**
SB-10	SB-10-5'	8/16/2005	5-5.5	<0.2	**80**	**280**
	SB-10-10'	8/16/2005	10-10.5	<0.2	**8.6**	**24**
	SB-10-15'	8/16/2005	15-15.5	<0.2	<2.5	**2.5**
	SB-10-20'	8/16/2005	20-20.5	<0.2	**500**	**1200**

Table 2
Churchill Downs - Hollywood Park
Additional Soil Investigation - Former Oil Wells & Impoundment Area
Total Petroleum Hydrocarbons in Soil
August 15 & 16, 2005

Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Total Petroleum Hydrocarbons Gasoline, Diesel, & Oil Ranges (mg/kg)		
				TPHg C5-C11	TPHd C13-C22	TPHmo C23-C40
SB-11	SB-11-5'	8/16/2005	5-5.5	<0.2	**10**	**26**
	SB-11-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-11-15'	8/16/2005	15-15.5	<0.2	<2.5	**4.3**
	SB-11-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-12	SB-12-5'	8/16/2005	5-5.5	<0.2	**15**	**68**
	SB-12-10'	8/16/2005	10-10.5	<0.2	**25**	**77**
	SB-12-15'	8/16/2005	15-15.5	<0.2	**110**	**190**
	SB-12-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-13	SB-13-5'	8/16/2005	5-5.5	<0.2	<2.5	<2.5
	SB-13-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-13-15'	8/16/2005	15-15.5	<0.2	<2.5	<2.5
	SB-13-20'	8/16/2005	20-20.5	<0.2	<2.5	**31**
SB-14	SB-14-5'	8/16/2005	5-5.5	<0.2	<2.5	**3.2**
	SB-14-10'	8/16/2005	10-10.5	<0.2	<2.5	**4.4**
	SB-14-15'	8/16/2005	15-15.5	<0.2	<2.5	<2.5
	SB-14-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-15	SB-15-5'	8/16/2005	5-5.5	<0.2	<2.5	<2.5
	SB-15-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-15-15'	8/16/2005	15-15.5	<0.2	<2.5	<2.5
	SB-15-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-16	SB-16-5'	8/16/2005	5-5.5	<0.2	**240**	**780**
	SB-16-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-16-15'	8/16/2005	15-15.5	<0.2	<2.5	<2.5
	SB-16-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
SB-17	SB-17-5'	8/16/2005	5-5.5	<0.2	<2.5	<2.5
	SB-17-10'	8/16/2005	10-10.5	<0.2	<2.5	<2.5
	SB-17-15'	8/16/2005	15-15.5	<0.2	**220**	**280**
	SB-17-20'	8/16/2005	20-20.5	<0.2	<2.5	<2.5
RWQCB Soil Screening Levels	**Ground Water > 120 ft bgs**			**1,000**	**10,000**	**50,000**

Notes:

[1] <X = Below laboratory reporting limit

[2] SB-X = TPH gasoline range analyses performed in stationary lab C4-C12

[3] µg/kg = TPH gasoline is reported in micrograms per kilogram

[4] mg/kg = TPH diesel and oil is reported in milligrams per kilogram

APPENDIX J

Material Safety Data Sheet for Cushion Track

Equestrian Surfaces International Ltd

MATERIAL SAFETY DATA SHEET

SECTION 1 -- PRODUCT AND COMPANY IDENTIFICATION

Material CUSHION TRACK – RACE TRACK FOOTING	Revision date 1-Aug-06

Previous revision date 19-Jul-05	File designation	Material use Equestrian footings

Manufacture's Name and issuing location Equestrian Surfaces International Ltd Railway Sidings, Station Rd Padiham, Burnley Lancashire. United Kingdom	**EMERGENCY PHONE NUMBER** **011 44 7889 310442 day & night** Issuer's phone number 011 44 1282 681 720

Manufacturing sites

Railway Sidings, Station Rd. Padiham, Burnley Lancashire. United Kingdom	Unit 5 Ladytown, Co. Kildare. Ireland	Smallshawe Ind. Est. Phoenix Way, Burnley Lancs

SECTION 2 -- COMPOSITION / INFORMATION ON INGREDIENTS

No hazardous ingredients as defined by the European Hazardous Products Act
Composite mixture of sand, strands of polypropylene and polyester, granulated rubber and petroleum based wax

Chemical name Not Applicable	Chemical family Several	

SECTION 3 -- HAZARDS IDENTIFICATION

Emergency Overview

The material is a granulated sand like substance with a wax content. The wax remains solid at room temperature exhibiting elevated temperature softening characteristics. Above its softening point, the material liquefies and flows more readily as the temperature increases.

SKIN CONTACT	Contact with the material at temperatures up to 110°f is non hazadous
EYE CONTACT	Direct contact of product at ambient temperatures to the eyes will cause irritation.
INHALATION	Breathing fumes in enclosed indoor areas can cause respiratory discomfort and possible irritation.

Potential Health Effects

(HMIS Rating)

Fire Hazard: 0	Health Hazard: 0	Reactivity: 0	Personal Protection: See Section 8

0 = MINIMAL 1 = SLIGHT HAZARD 2 = MODERATE HAZARD 3 = SERIOUS HAZARD 4 = SEVERE HAZARD

SECTION 3 -- HAZARDS IDENTIFICATION (CONTINUED)

EYE CONTACT	Exposure to fumes, vapors or smoke from thermally degraded product can cause irritation to eyes.
INHALATION	Exposure to vapors, fumes, or smoke from molten material handled in confined areas can produce irritation of respiratory tracts, and possible physical discomfort to sensitive individuals.
INGESTION	This material is essentially inert and non-toxic. Regardless of this the material should be handled with care and not be ingested or put in mouth.
SKIN	Skin contact with molten material can cause severe burns.

SECTION 4 -- FIRST AID MEASURES

EYES	Direct contact may cause irritation. Should an accident occur, flush eyes with generous amounts of water for at least 15 minutes. Administer prompt first aid measures.
SKIN	Direct contact is non hazardous. Wash with generous amounts of warm soapy water.
INHALATION	Where vapour inhaled in a confined enclosed area remove individual to a well ventilated area for fresh air and **call a physician if respiratory symptoms warrant medical attention.**
INGESTION	Material is not acutely toxic by ingestion. **If material is ingested, do not induce vomiting. Call a physician.**

SECTION 5 -- FIRE FIGHTING MEASURES

Flammability YES [X] NO [ ]	If yes, under which conditions? Non flammable but will burn under prolonged exposure to flame or high temperature. See attached Fire Report – Exhibit B

Means of extinction
Use water fog, foam, dry chemical, CO_2 extinguisher or water.

Special procedures

FIRE and EXPLOSION DATA

Flash point (ASTM D92) > 390°F	Upper explosion limit (% by volume) 3.0%	Lower explosion limit (% by volume) 0.9%
Auto ignition temperature Not Available	TDG flammability classification Not Dangerous	Hazardous combustion products CO_2, CO (See Section 10)

Sensitivity to impact Not Applicable	Rate of burning Not Applicable	Explosive power Not Applicable	Sensitivity to static discharge Not Applicable

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS	Not applicable

SECTION 7 -- HANDLING AND STORAGE

May be stored in open areas. Keep away from sources of ignition and oxidizing materials.

SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:	None required if good ventilation is maintained.
Ventilation:	Under normal handling conditions special ventilation is not necessary.
Eye Protection:	Not necessary unless material becomes airborne.
Protective Clothing	No protection clothing is necessary when handling this product. PVC gloves may be used with prolonged skin contact.

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

See attached Laboratory report – Exhibit A

SECTION 10 -- STABILITY AND REACTIVITY

Chemical stability YES [X] NO [ ]	If no, which conditions?

Reactivity, and under what conditions
Stable

Hazardous decomposition products
Not applicable

SECTION 11 -- TOXICOLOGICAL INFORMATION

Non Toxic substance. See attached Laboratory report – Exhibit A

SECTION 12 -- ECOLOGICAL INFORMATION

Material is not considered harmful to the environment. Nevertheless, material from spills and other generated waste must be disposed of properly in conformance with all local, state and federal laws.

SECTION 13 -- DISPOSAL CONSIDERATIONS

This material is not a RCRA hazardous waste material. Follow local regulatory laws for proper disposal.

SECTION 14 -- TRANSPORT INFORMATION

No Special Instructions

SECTION 15 -- REGULATORY INFORMATION

CERCLA reportable quantity	This material is not reportable under 40 CFR Part 302.4.
OSHA hazardous chemicals	None according to 29 CFR 1910.1200.
RCRA	This material is not a RCRA hazardous waste.
SARA status	Sections 311 and 312: Not Applicable Section 313: None
TSCA status	This product, nor its ingredients as a mixture, appears on the toxic substances control act inventory.
WHMIS status	This is not a controlled material as defined by the European Hazardous Products Act.
California Proposition 65 list	Carcinogens: None, Adverse reproductive effects: None
Massachusetts Substance list	None
New Jersey Haz. Substance list	None
Pennsylvania Haz. Substance list	None
CONEG	In compliance

SECTION 16 -- OTHER

Source used:

A.C.G.I.H. (Documentation of threshold values), RTECS, IARC Monographs, Oxford Toxicology Forum, Special Meeting on Hydrocarbons.

Prepared by	Signature
F. Heyes	Frank Heyes

Disclaimer

This material safety data sheet is offered for your information only. We believe the statements, technical information and recommendations contained here in are reliable, but are given without warranty or guarantee of any kind, expressed or implied. Equestrian Surfaces International Ltd. assumes no responsibility for any loss, damage or expense, direct or consequential, arising from the use of our material. It is the responsibility of the user to determine the suitability and completeness of such information for the required use or application. We do not assume any legal responsibility for nor do we give permission, inducement or recommendation to practice any patented invention without a license. Further, it is the user's obligation to utilize this material in full compliance with all health, safety and environmental regulations.

APPENDIX K

Material Safety Data Sheet for Specialty Sand Product

P.W. GILLIBRAND CO., INC

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name and Trade Names:	SPECIALTY SAND PRODUCTS sold under various names: 12-16-20-30-50-60-70-80-90-120 mesh size, Oversized and different blends. 30x140, G-Series Sand, T-Series Sand and different blends for golf course and other sport fields.
Common Names:	Silica sand, crystalline sand, quartz, flint, filter sand, filter gravel, glass sand, frac sand, construction sand, construction gravel, and trade names.
Manufacturer:	P.W. GILLIBRAND CO., INC 4537 ISH DRIVE SIMI VALLEY CA 93063 Tel: (805) 526-2195 (Monday – Friday 8:00am to 5:00pm PST) Fax : (805) 522-4031 (Monday – Friday 8:00am to 5:00pm PST)
Date Issued:	September 12, 2007
Revision Number	0

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name, Chemical Compound	CAS Number	Typical % By Weight
Amorphous Silica (Diatomaceous Earth), SiO_2	61790-53-2	76 - 87
Crystalline Silica (Quartz), SiO_2	14808-60-7	13 - 24
Natural Peat	n/a	0 - 10

This product is 0.05% respirable SiO_2 by weight. See SECTION 11 for TOXICOLOGICAL INFORMATION.

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview: This product is a white, silver, gray, tan, or granular sand. It is not flammable, combustible or explosive. It does not cause burns or severe skin or eye irritation. A single exposure will not result in serious adverse health effects. This product is not known to be an environmental hazard.

HMIS Rating: **Health:0*** **Fire: 0** **Physical Hazard: 0** **Personal Protection: E**

* Carcinogen

Primary Routes of Entry: Via respirable dust and particulates to the eyes.

Primary Target Organs: Respiratory system and eyes.

Potential Health Effects:

Inhalation: Prolonged exposure to respirable crystalline silica may cause silicosis, a fibrosis (scarring) of the lung which is permanent and progressive that may lead to death. Silicosis may aggravate or increase the risk of tuberculosis, scleroderma, nephrotoxicity, bronchitis, emphysema, and asthma.
Skin Contact: Not applicable.
Eye Contact: A mechanical irritant which can cause moderate eye irritation. This product may cause abrasion to the cornea. Recommend not wearing contact lenses when working with product.
Ingestion: Not applicable.

Signs and Symptoms of Exposure:

Eyes: Exposure may cause eye tissue inflammation.

Inhalation: For single or limited exposures there are no signs or symptoms of exposure to crystalline silica. For routine exposure and for individuals with existing respiratory illness (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) symptoms include shortness of breath, wheezing, cough, sputum production, weight loss, fever.

Medical Conditions Generally Aggravated by Exposure: The condition of individuals with existing respiratory illness can be aggravated by exposure to this product.

Carcinogenicity: This product contains respirable crystalline silica which is classified as a Class 1 carcinogen by IARC, a known human carcinogen by NTP, and a California Proposition 65 carcinogen.

SECTION 4: FIRST AID MEASURES

Inhalation: No specific first-aid is necessary since adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposure. In case of gross inhalation, remove the person to fresh air, give artificial respiration if needed and seek medical attention.

Eye Contact: Wash immediately with water. If irritation persists, seek medical attention.

Skin Contact: None required.

Ingestion: Not applicable.

SECTION 5: FIRE FIGHTING MEASURES

This product is not flammable, combustible or explosive. Hazardous polymerization will not occur.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spills: Use of dustless methods (water or HEPA-A type Vacuum) to clean up if possible. Avoid breathing dust. See personal protective equipment (PPE) specified in EXPOSURE CONTROL/PERSONAL PROTECTION SECTION 8.

Waste Disposal Methods: This product is not a hazardous waste and should be disposed of in accordance with federal, state and local regulations. See SECTION 13.

SECTION 7: HANDLING AND STORAGE

Precautions During Handling and Use: Do not breathe dust. Use adequate ventilation and/or dust collection methods. Avoid breakage of bagged material or spills of bulk material. Wash or vacuum clothing which becomes dusty. If concentrations exceed applicable standards, then use proper respiratory protection. Avoid contact with eyes. The wearing of contact lenses is not recommended. See SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION.

Storage Requirements: None.

Special Sensitivity or Incompatibility: Avoid contact with strong acids and oxidizers. See SECTION 10. STABILITY AND REACTIVITY.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering and Administrative Controls: Natural ventilation is usually adequate for protection from inhalation hazards. Use designed ventilation systems and/or wet methods to control product in workplace air, if necessary. Use administrative controls such job rotation to supplement engineering controls. Use personal protection equipment (PPE) as a last resort to control exposure.

Respiratory Protection: Not normally required. May be required if material is further reduced in size to produce a higher fraction of respirable crystalline silica dust or dispersed into air (e.g. sandblasting). When concentrations exceed applicable standards, a NIOSH/MSHA approved air purifying respirator with HEPA cartridges or supplied air is recommended.

Eye Protection: Wear safety glasses with side shields or goggles to protect eyes from dust and particulate. Wearing of contact lenses is not recommended because dust can get under the lenses and cause abrasion of the cornea.

Skin Protection: Not required under normal circumstances

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	4046 ˚F (2230 C)
Specific Gravity (H2O = 1):	2.60 - 2.65
Melting Point:	3050 ˚F (1677C)
Solubility in Water:	Insoluble
Appearance:	White, silver, grey, tan, granular, crushed or ground solid.
Odor:	None
Taste:	None

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable
Incompatibility:	Contact with strong acids or oxidizing agents such as molten magnesium, fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, or hydrofluoric acid may cause fires or generation of corrosive gases.
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Hazardous Components:	Respirable crystalline silica - quartz	(14808-60-7)	144 ppmw
	Crystalline silica – quartz	(14808-60-7)	13-24%
	Amorphous silica - diatomaceous earth	(61790-53-2)	76-87%
Chemical compound:	Silicon Dioxide SiO_2		

Exposure Limits	ACGIH TLV	OSHA PEL	NIOSH IDLH	NIOSH REL
Respirable crystalline silica:	.05 mg/m^3	(10 mg/m^3)/(%SiO_2+2) mg/m^3	50 mg/m^3	.05 mg/m^3
Total crystalline silica:	.05 mg/m^3	(30 mg/m^3)/(%SiO_2+2) mg/m^3	-	-
Amorphous silica:	10 mg/m^3	(80 mg/m^3)/(%SiO_2) mg/m^3	3000mg/m^3	6 mg/m^3
Respirable amorphous silica:	3 mg/m^3	-	-	-
Respirable nuisance dust:	3 mg/m^3	5 mg/m^3	-	-
Total nuisance dust:	10 mg/m^3	15 mg/m^3	-	-

Silicosis: Prolonged exposure to respirable crystalline silica may cause silicosis, a fibrosis (scarring) of the lungs which is permanent and progressive that may lead to death. Silicosis may aggravate or increase the risk of tuberculosis, scleroderma, nephrotoxicity, bronchitis, emphysema, and asthma.

Carcinogenicity: This product contains respirable crystalline silica which is classified as a Class 1 carcinogen by IARC, a known human carcinogen by NTP, and a California Proposition 65 carcinogen.

Biological Agents: Blends that contain natural peat may also contain naturally occurring microorganisms. These microorganisms are ubiquitous in nature. Humans are repeatedly exposed, day after day, to a wide variety of such materials. There are no regulatory thresholds because: contaminants are a complex mixture and do not comprise and single entity; human responses to biologically derived contaminants depend on the specific material involved and workers' susceptibility to it; it is not possible to collect and evaluate this complex mixture using a single sampling method; and information relating concentration to health effects is generally insufficient to describe exposure in terms of dose-response. Information provided in this MSDS to control of crystalline silica is adequate to control microorganisms that may be present.

SECTION 12: ECOLOGICAL INFORMATION

This product is not known to be ecotoxic (i.e. there is no data which suggests that this product is toxic to birds, fish, invertebrates, microorganisms or plants).

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Methods: This product is not a hazardous waste and may be landfilled. If material is contaminated with hazardous materials, place waste in properly labeled, suitable waste container. Contaminated material must be disposed in accordance with federal, state and local regulations using the proper waste classification.

SECTION 14: TRANSPORT INFORMATION

US DOT Shipping Name: Not Regulated **DOT LABEL:** None **UN/NA Number:** None

This product not listed as a hazardous substance by U.S. Department of Transportation.

SECTION 15: REGULATORY INFORMATION

OSHA Regulatory Status: Respirable crystalline silica is an OSHA carcinogen.

TSCA/CEPA Status: Components of this product is included in the TSCA and CEPA Chemical Inventories.

CERCLA: N/A

RCRA: N/A

NTP: Respirable crystalline silica (quartz) is classified as a substance known to the State of California to be a carcinogen.

California Proposition 65: This product contains respirable crystalline silica (quartz) that is classified as a substance known to the state of California to be a carcinogen.

SARA Title III:

Section 302 Extremely Hazardous: N/A

Section 311/312 Hazard Categories: Reportable as a hazardous substance. Check with your Local Emergency Planning Committee for reportable quantities.

Section 313 Toxic Chemicals: N/A

SECTION 16: DISCLAIMER

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE CORRECT. HOWEVER, P.W. GILLIBRAND CO., INC MAKES NO GUARANTEE OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED WITH RESPECT TO THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ANY LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION AND OR ANY HARMFUL EFFECTS WHICH MAY BE CAUSED BY EXPOSURE TO ITS SILICA SAND. DISTRIBUTORS, CUSTOMERS AND USERS OF SILICA SAND MUST COMPLY WITH ALL APPLICABLE HEALTH AND SAFETY FEDERAL, STATE, LOCAL LAWS, REGULATIONS AND ORDERS, AND MUST SEEK MEDICAL, LEGAL, AND TECHNICAL OPINIONS REGARDING THEIR USE AND THEIR HAZARDS.

APPENDIX L

Analytical Laboratory Report for Soil Stockpile Samples

**Calscience
Environmental
Laboratories, Inc.**

February 15, 2008

Jami Striegel
Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Subject:	**Calscience Work Order No.:**	**08-02-0597**
	Client Reference:	**Hollywood Park / A50015.01**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/8/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 3050B
Method:	EPA 6020
Units:	mg/kg

Project: Hollywood Park / A50015.01

Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-A**	**02/08/08 11:02**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 18:16**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	3180	25.0	1		Manganese	87.1	2.50	1	
Iron	5430	50.0	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-A**	**02/08/08 11:18**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 18:20**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	3960	25.0	1		Manganese	145	2.50	1	
Iron	7350	50.0	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-10-002-1,041**	**N/A**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 17:59**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	25.0	1		Manganese	ND	2.50	1	
Iron	ND	50.0	1						

Calscience
Environmental
Laboratories, Inc.

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-A**	**02/08/08 11:02**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 18:16**	**080213L01**

Comment(s): -Mercury was analyzed on 2/12/2008 4:34:10 PM with batch 080212L04

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.500	1		Mercury	ND	0.0835	1	
Arsenic	1.46	0.200	1		Molybdenum	0.519	0.100	1	
Barium	39.1	0.100	1		Nickel	3.97	0.100	1	
Beryllium	0.117	0.100	1		Selenium	ND	0.500	1	
Cadmium	ND	0.100	1		Silver	ND	0.100	1	
Chromium	8.01	0.100	1		Thallium	ND	0.100	1	
Cobalt	2.18	0.100	1		Vanadium	10.8	0.100	1	B
Copper	6.24	0.100	1		Zinc	18.8	1.00	1	
Lead	3.84	0.100	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-A**	**02/08/08 11:18**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 18:20**	**080213L01**

Comment(s): -Mercury was analyzed on 2/12/2008 4:36:20 PM with batch 080212L04

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.500	1		Mercury	ND	0.0835	1	
Arsenic	4.04	0.200	1		Molybdenum	0.252	0.100	1	
Barium	45.5	0.100	1		Nickel	4.86	0.100	1	
Beryllium	0.136	0.100	1		Selenium	ND	0.500	1	
Cadmium	0.132	0.100	1		Silver	ND	0.100	1	
Chromium	6.81	0.100	1		Thallium	ND	0.100	1	
Cobalt	3.24	0.100	1		Vanadium	14.2	0.100	1	B
Copper	13.7	0.100	1		Zinc	35.1	1.00	1	
Lead	2.72	0.100	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-10-002-1,041**	**N/A**	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08 17:59**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.500	1		Lead	ND	0.100	1	
Arsenic	ND	0.200	1		Molybdenum	ND	0.100	1	
Barium	ND	0.100	1		Nickel	ND	0.100	1	
Beryllium	ND	0.100	1		Selenium	ND	0.500	1	
Cadmium	ND	0.100	1		Silver	ND	0.100	1	
Chromium	ND	0.100	1		Thallium	ND	0.100	1	
Cobalt	ND	0.100	1		Vanadium	0.380	0.100	1	
Copper	ND	0.100	1		Zinc	ND	1.00	1	

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-04-007-5,298**	**N/A**	**Solid**	**Mercury**	**02/12/08**	**02/12/08 16:04**	**080212L04**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0835	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-B**	**02/08/08 11:02**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 18:38**	**080211B06**

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	105	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-B**	**02/08/08 11:18**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 18:47**	**080211B06**

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	97	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-254-372**	**N/A**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 16:07**	**080211B06**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	82	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report

Erler & Kalinowski, Inc.		Date Received:	02/08/08
35 North Lake Avenue, Suite 705		Work Order No:	08-02-0597
Pasadena, CA 91101-1856		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)

Project: Hollywood Park / A50015.01 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-B**	**02/08/08 11:02**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 18:38**	**080211B05**

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	106	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-B**	**02/08/08 11:18**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 18:47**	**080211B05**

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	97	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-275-1,432**	**N/A**	**Solid**	**GC 23**	**02/11/08**	**02/11/08 16:07**	**080211B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	82	61-145	

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 5035
Method:	EPA 8015B (M)

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-H**	**02/08/08 11:02**	**Solid**	**GC 11**	**02/08/08**	**02/09/08 13:28**	**080209B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.23	0.903		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	83	60-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-G**	**02/08/08 11:18**	**Solid**	**GC 11**	**02/08/08**	**02/09/08 15:09**	**080209B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	0.38	0.37	1.47		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	61	60-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-285-535**	**N/A**	**Solid**	**GC 11**	**02/09/08**	**02/09/08 04:47**	**080209B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	60-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3545
Method: EPA 8310
Units: ug/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-A**	**02/08/08 11:02**	**Solid**	**HPLC 5**	**02/11/08**	**02/13/08 00:42**	**080211L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	15	1		Benzo (a) Anthracene	ND	10	1	
Acenaphthylene	ND	30	1		Chrysene	ND	10	1	
Acenaphthene	ND	15	1		Benzo (b) Fluoranthene	ND	10	1	
Fluorene	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
Phenanthrene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
Anthracene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
Fluoranthene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Pyrene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	77	40-160	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-A**	**02/08/08 11:18**	**Solid**	**HPLC 5**	**02/11/08**	**02/13/08 01:14**	**080211L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	15	1		Benzo (a) Anthracene	ND	10	1	
Acenaphthylene	ND	30	1		Chrysene	ND	10	1	
Acenaphthene	ND	15	1		Benzo (b) Fluoranthene	ND	10	1	
Fluorene	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
Phenanthrene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
Anthracene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
Fluoranthene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Pyrene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	66	40-160	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-002-996**	**N/A**	**Solid**	**HPLC 5**	**02/11/08**	**02/12/08 21:59**	**080211L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	15	1		Benzo (a) Anthracene	ND	10	1	
Acenaphthylene	ND	30	1		Chrysene	ND	10	1	
Acenaphthene	ND	15	1		Benzo (b) Fluoranthene	ND	10	1	
Fluorene	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
Phenanthrene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
Anthracene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
Fluoranthene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Pyrene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	90	40-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3545
Method: EPA 8082
Units: ug/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-A**	**02/08/08 11:02**	**Solid**	**GC 16**	**02/11/08**	**02/12/08 04:36**	**080211L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	ND	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	79	50-130			2,4,5,6-Tetrachloro-m-Xylene	57	50-130		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-A**	**02/08/08 11:18**	**Solid**	**GC 16**	**02/11/08**	**02/12/08 04:54**	**080211L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	ND	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	67	50-130			2,4,5,6-Tetrachloro-m-Xylene	84	50-130		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-535-263**	**N/A**	**Solid**	**GC 16**	**02/11/08**	**02/12/08 04:18**	**080211L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	ND	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	97	50-130			2,4,5,6-Tetrachloro-m-Xylene	99	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Laboratories, Inc.

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 5035
Method:	EPA 8260B
Units:	ug/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-1-02082008	**08-02-0597-1-D**	**02/08/08 11:02**	**Solid**	**GC/MS LL**	**02/08/08**	**02/13/08 17:46**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	43	0.856		c-1,3-Dichloropropene	ND	0.86	0.856	
Benzene	ND	0.86	0.856		t-1,3-Dichloropropene	ND	1.7	0.856	
Bromobenzene	ND	0.86	0.856		Ethylbenzene	ND	0.86	0.856	
Bromochloromethane	ND	1.7	0.856		2-Hexanone	ND	17	0.856	
Bromodichloromethane	ND	0.86	0.856		Isopropylbenzene	ND	0.86	0.856	
Bromoform	ND	4.3	0.856		p-Isopropyltoluene	ND	0.86	0.856	
Bromomethane	ND	17	0.856		Methylene Chloride	9.1	8.6	0.856	
2-Butanone	ND	17	0.856		4-Methyl-2-Pentanone	ND	17	0.856	
n-Butylbenzene	ND	0.86	0.856		Naphthalene	ND	8.6	0.856	
sec-Butylbenzene	ND	0.86	0.856		n-Propylbenzene	ND	0.86	0.856	
tert-Butylbenzene	ND	0.86	0.856		Styrene	ND	0.86	0.856	
Carbon Disulfide	ND	8.6	0.856		1,1,1,2-Tetrachloroethane	ND	0.86	0.856	
Carbon Tetrachloride	ND	0.86	0.856		1,1,2,2-Tetrachloroethane	ND	1.7	0.856	
Chlorobenzene	ND	0.86	0.856		Tetrachloroethene	ND	0.86	0.856	
Chloroethane	ND	1.7	0.856		Toluene	ND	0.86	0.856	
Chloroform	ND	0.86	0.856		1,2,3-Trichlorobenzene	ND	1.7	0.856	
Chloromethane	ND	17	0.856		1,2,4-Trichlorobenzene	ND	1.7	0.856	
2-Chlorotoluene	ND	0.86	0.856		1,1,1-Trichloroethane	ND	0.86	0.856	
4-Chlorotoluene	ND	0.86	0.856		1,1,2-Trichloroethane	ND	0.86	0.856	
Dibromochloromethane	ND	1.7	0.856		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.6	0.856	
1,2-Dibromo-3-Chloropropane	ND	4.3	0.856		Trichloroethene	ND	1.7	0.856	
1,2-Dibromoethane	ND	0.86	0.856		Trichlorofluoromethane	ND	8.6	0.856	
Dibromomethane	ND	0.86	0.856		1,2,3-Trichloropropane	ND	1.7	0.856	
1,2-Dichlorobenzene	ND	0.86	0.856		1,2,4-Trimethylbenzene	ND	1.7	0.856	
1,3-Dichlorobenzene	ND	0.86	0.856		1,3,5-Trimethylbenzene	ND	1.7	0.856	
1,4-Dichlorobenzene	ND	0.86	0.856		Vinyl Acetate	ND	8.6	0.856	
Dichlorodifluoromethane	ND	1.7	0.856		Vinyl Chloride	ND	0.86	0.856	
1,1-Dichloroethane	ND	0.86	0.856		p/m-Xylene	ND	1.7	0.856	
1,2-Dichloroethane	ND	0.86	0.856		o-Xylene	ND	0.86	0.856	
1,1-Dichloroethene	ND	0.86	0.856		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.856	
c-1,2-Dichloroethene	ND	0.86	0.856		Tert-Butyl Alcohol (TBA)	ND	17	0.856	
t-1,2-Dichloroethene	ND	0.86	0.856		Diisopropyl Ether (DIPE)	ND	0.86	0.856	
1,2-Dichloropropane	ND	0.86	0.856		Ethyl-t-Butyl Ether (ETBE)	ND	0.86	0.856	
1,3-Dichloropropane	ND	0.86	0.856		Tert-Amyl-Methyl Ether (TAME)	ND	0.86	0.856	
2,2-Dichloropropane	ND	4.3	0.856		Ethanol	ND	430	0.856	
1,1-Dichloropropene	ND	1.7	0.856						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	71-137		1,2-Dichloroethane-d4	110	58-160	
1,4-Bromofluorobenzene	93	66-126		Toluene-d8	99	87-111	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience
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Laboratories, Inc.

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 5035
Method:	EPA 8260B
Units:	ug/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BF-2-02082008	**08-02-0597-2-D**	**02/08/08 11:18**	**Solid**	**GC/MS LL**	**02/08/08**	**02/13/08 18:14**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	140	73	1.46		c-1,3-Dichloropropene	ND	1.5	1.46	
Benzene	ND	1.5	1.46		t-1,3-Dichloropropene	ND	2.9	1.46	
Bromobenzene	ND	1.5	1.46		Ethylbenzene	ND	1.5	1.46	
Bromochloromethane	ND	2.9	1.46		2-Hexanone	ND	29	1.46	
Bromodichloromethane	ND	1.5	1.46		Isopropylbenzene	ND	1.5	1.46	
Bromoform	ND	7.3	1.46		p-Isopropyltoluene	12	1.5	1.46	
Bromomethane	ND	29	1.46		Methylene Chloride	17	15	1.46	
2-Butanone	ND	29	1.46		4-Methyl-2-Pentanone	ND	29	1.46	
n-Butylbenzene	ND	1.5	1.46		Naphthalene	ND	15	1.46	
sec-Butylbenzene	ND	1.5	1.46		n-Propylbenzene	ND	1.5	1.46	
tert-Butylbenzene	ND	1.5	1.46		Styrene	ND	1.5	1.46	
Carbon Disulfide	ND	15	1.46		1,1,1,2-Tetrachloroethane	ND	1.5	1.46	
Carbon Tetrachloride	ND	1.5	1.46		1,1,2,2-Tetrachloroethane	ND	2.9	1.46	
Chlorobenzene	ND	1.5	1.46		Tetrachloroethene	ND	1.5	1.46	
Chloroethane	ND	2.9	1.46		Toluene	2.9	1.5	1.46	
Chloroform	ND	1.5	1.46		1,2,3-Trichlorobenzene	ND	2.9	1.46	
Chloromethane	ND	29	1.46		1,2,4-Trichlorobenzene	ND	2.9	1.46	
2-Chlorotoluene	ND	1.5	1.46		1,1,1-Trichloroethane	ND	1.5	1.46	
4-Chlorotoluene	ND	1.5	1.46		1,1,2-Trichloroethane	ND	1.5	1.46	
Dibromochloromethane	ND	2.9	1.46		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	15	1.46	
1,2-Dibromo-3-Chloropropane	ND	7.3	1.46		Trichloroethene	ND	2.9	1.46	
1,2-Dibromoethane	ND	1.5	1.46		Trichlorofluoromethane	ND	15	1.46	
Dibromomethane	ND	1.5	1.46		1,2,3-Trichloropropane	ND	2.9	1.46	
1,2-Dichlorobenzene	ND	1.5	1.46		1,2,4-Trimethylbenzene	ND	2.9	1.46	
1,3-Dichlorobenzene	ND	1.5	1.46		1,3,5-Trimethylbenzene	ND	2.9	1.46	
1,4-Dichlorobenzene	ND	1.5	1.46		Vinyl Acetate	ND	15	1.46	
Dichlorodifluoromethane	ND	2.9	1.46		Vinyl Chloride	ND	1.5	1.46	
1,1-Dichloroethane	ND	1.5	1.46		p/m-Xylene	ND	2.9	1.46	
1,2-Dichloroethane	ND	1.5	1.46		o-Xylene	ND	1.5	1.46	
1,1-Dichloroethene	ND	1.5	1.46		Methyl-t-Butyl Ether (MTBE)	ND	2.9	1.46	
c-1,2-Dichloroethene	ND	1.5	1.46		Tert-Butyl Alcohol (TBA)	ND	29	1.46	
t-1,2-Dichloroethene	ND	1.5	1.46		Diisopropyl Ether (DIPE)	ND	1.5	1.46	
1,2-Dichloropropane	ND	1.5	1.46		Ethyl-t-Butyl Ether (ETBE)	ND	1.5	1.46	
1,3-Dichloropropane	ND	1.5	1.46		Tert-Amyl-Methyl Ether (TAME)	ND	1.5	1.46	
2,2-Dichloropropane	ND	7.3	1.46		Ethanol	ND	730	1.46	
1,1-Dichloropropene	ND	2.9	1.46						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	71-137		1,2-Dichloroethane-d4	105	58-160	
1,4-Bromofluorobenzene	83	66-126		Toluene-d8	100	87-111	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Hollywood Park / A50015.01

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-15,534**	**N/A**	**Solid**	**GC/MS LL**	**02/13/08**	**02/13/08 13:01**	**080213L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	1.0	1	
Benzene	ND	1.0	1		t-1,3-Dichloropropene	ND	2.0	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	2.0	1		2-Hexanone	ND	20	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	20	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	20	1		4-Methyl-2-Pentanone	ND	20	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	2.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	2.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	2.0	1	
Chloromethane	ND	20	1		1,2,4-Trichlorobenzene	ND	2.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
Dibromochloromethane	ND	2.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	2.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	2.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	2.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	2.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	2.0	1		Vinyl Chloride	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	2.0	1	
1,2-Dichloroethane	ND	1.0	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	20	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	500	1	
1,1-Dichloropropene	ND	2.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	71-137		1,2-Dichloroethane-d4	103	58-160	
1,4-Bromofluorobenzene	95	66-126		Toluene-d8	101	87-111	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597

Project: Hollywood Park / A50015.01

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix
BF-1-02082008	**08-02-0597-1**	**02/08/08**	**Solid**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrite (as N)	ND	1.0	1		mg/kg	N/A	02/08/08	EPA 300.0
Nitrate (as N)	1.0	1.0	1		mg/kg	N/A	02/08/08	EPA 300.0
Perchlorate	ND	20.0	1		ug/kg	02/12/08	02/12/08	EPA 314.0M
Chromium, Hexavalent	430	40	1		ug/kg	02/11/08	02/11/08	EPA 7199
pH	8.13	0.01	1		pH unit	02/08/08	02/08/08	EPA 9045D

BF-2-02082008	**08-02-0597-2**	**02/08/08**	**Solid**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrite (as N)	4.8	1.0	1		mg/kg	N/A	02/08/08	EPA 300.0
Nitrate (as N)	1.2	1.0	1		mg/kg	N/A	02/08/08	EPA 300.0
Perchlorate	ND	20.0	1		ug/kg	02/12/08	02/12/08	EPA 314.0M
Chromium, Hexavalent	130	40	1		ug/kg	02/11/08	02/11/08	EPA 7199
pH	6.86	0.01	1		pH unit	02/08/08	02/08/08	EPA 9045D

Method Blank		**N/A**	**Solid**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrite (as N)	ND	0.10	0.1		mg/kg	N/A	02/08/08	EPA 300.0
Nitrate (as N)	ND	0.10	0.1		mg/kg	N/A	02/08/08	EPA 300.0
Perchlorate	ND	20.0	1		ug/kg	02/12/08	02/12/08	EPA 314.0M
Chromium, Hexavalent	ND	40	1		ug/kg	02/11/08	02/11/08	EPA 7199

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3050B
Method: EPA 6020

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
BF-1-02082008	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08**	**080213S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	101	104	1-97	3	0-39	3
Arsenic	118	119	72-132	1	0-13	
Barium	89	107	50-152	7	0-41	
Beryllium	110	106	61-121	3	0-13	
Cadmium	117	118	85-121	1	0-12	
Chromium	113	118	20-182	4	0-15	
Cobalt	116	116	40-166	0	0-14	
Copper	115	113	25-157	1	0-22	
Lead	113	112	62-134	1	0-23	
Molybdenum	110	112	69-123	2	0-13	
Nickel	114	115	46-154	1	0-15	
Selenium	116	116	54-132	0	0-14	
Silver	117	123	78-126	5	0-15	
Thallium	108	107	79-115	1	0-11	
Vanadium	111	113	28-178	1	0-28	
Zinc	108	114	23-173	4	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-0683-5	**Solid**	**GC 23**	**02/11/08**	**02/11/08**	**080211S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	99	100	64-130	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: 02/08/08
Work Order No: 08-02-0597
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-0683-5	**Solid**	**GC 23**	**02/11/08**	**02/11/08**	**080211S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	90	89	64-130	2	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.	Date Received: 02/08/08
35 North Lake Avenue, Suite 705	Work Order No: 08-02-0597
Pasadena, CA 91101-1856	Preparation: EPA 7471A Total
	Method: EPA 7471A

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-0596-4	**Solid**	**Mercury**	**02/12/08**	**02/12/08**	**080212S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	106	107	84-138	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 3545
Method:	EPA 8310

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
BF-1-02082008	**Solid**	**HPLC 5**	**02/11/08**	**02/13/08**	**080211S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Naphthalene	88	86	40-160	2	0-20	
Acenaphthylene	78	78	40-160	0	0-20	
Acenaphthene	93	91	40-160	2	0-20	
Fluorene	79	79	40-160	0	0-20	
Phenanthrene	76	76	40-160	0	0-20	
Anthracene	77	77	40-160	0	0-20	
Fluoranthene	71	72	40-160	0	0-20	
Pyrene	74	73	40-160	0	0-20	
Benzo (a) Anthracene	76	76	40-160	0	0-20	
Chrysene	82	82	40-160	0	0-20	
Benzo (b) Fluoranthene	76	76	40-160	0	0-20	
Benzo (k) Fluoranthene	78	78	40-160	0	0-20	
Benzo (a) Pyrene	75	76	40-160	0	0-20	
Dibenz (a,h) Anthracene	72	74	40-160	3	0-20	
Benzo (g,h,i) Perylene	78	72	40-160	8	0-20	
Indeno (1,2,3-c,d) Pyrene	74	74	40-160	1	0-20	

RPD - Relative Percent Difference ,   CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	02/08/08
Work Order No:	08-02-0597
Preparation:	EPA 3545
Method:	EPA 8082

Project Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
BF-1-02082008	**Solid**	**GC 16**	**02/11/08**	**02/12/08**	**080211S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	82	85	50-135	4	0-20	
Aroclor-1260	62	68	50-135	8	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Spike/Spike Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597

Project: Hollywood Park / A50015.01

Matrix: Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrite (as N)	EPA 300.0	BF-2-02082008	02/08/08	N/A	92	92	59-137	0	0-10	
Nitrate (as N)	EPA 300.0	BF-2-02082008	02/08/08	N/A	103	103	68-128	0	0-3	
Chromium, Hexavalent	EPA 7199	08-02-0596-4	02/11/08	2/11/08	110	109	75-125	1	0-25	
Perchlorate	EPA 314.0M	BF-1-02082008	02/12/08	2/12/08	100	101	80-120	2	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597

Project: Hollywood Park / A50015.01

Matrix: Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
pH	EPA 9045D	BF-1-02082008	02/08/08	8.13	8.16	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597
Preparation: EPA 3050B
Method: EPA 6020

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-10-002-1,041	**Solid**	**ICP/MS A**	**02/13/08**	**02/13/08**	**080213L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	105	104	80-120	1	0-20	
Arsenic	103	104	80-120	1	0-20	
Barium	108	107	80-120	1	0-20	
Beryllium	97	96	80-120	2	0-20	
Cadmium	105	104	80-120	1	0-20	
Chromium	103	103	80-120	1	0-20	
Cobalt	107	106	80-120	2	0-20	
Copper	106	106	80-120	1	0-20	
Lead	102	99	80-120	3	0-20	
Molybdenum	101	101	80-120	0	0-20	
Nickel	105	103	80-120	2	0-20	
Selenium	103	103	80-120	0	0-20	
Silver	118	119	80-120	0	0-20	
Thallium	99	97	80-120	2	0-20	
Vanadium	100	97	80-120	3	0-20	
Zinc	108	109	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-254-372	**Solid**	**GC 23**	**02/11/08**	**02/11/08**	**080211B06**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	108	96	75-123	11	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	N/A
Work Order No:	08-02-0597
Preparation:	EPA 3550B
Method:	EPA 8015B (M)

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-275-1,432	**Solid**	**GC 23**	**02/11/08**	**02/11/08**	**080211B05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	81	81	75-123	1	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597
Preparation: EPA 5035
Method: EPA 8015B (M)

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-285-535	**Solid**	**GC 11**	**02/09/08**	**02/09/08**	**080209B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	90	91	55-139	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-007-5,298	**Solid**	**Mercury**	**02/12/08**	**02/12/08**	**080212L04**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	106	106	87-117	0	0-3	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	N/A
Work Order No:	08-02-0597
Preparation:	EPA 3545
Method:	EPA 8310

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-002-996	**Solid**	**HPLC 5**	**02/11/08**	**02/12/08**	**080211L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Naphthalene	123	117	40-160	5	0-20	
Acenaphthylene	101	97	40-160	3	0-20	
Acenaphthene	111	109	40-160	2	0-20	
Fluorene	107	103	40-160	4	0-20	
Phenanthrene	107	103	40-160	4	0-20	
Anthracene	99	95	40-160	4	0-20	
Fluoranthene	105	101	40-160	4	0-20	
Pyrene	111	106	40-160	4	0-20	
Benzo (a) Anthracene	111	108	40-160	3	0-20	
Chrysene	116	113	40-160	3	0-20	
Benzo (b) Fluoranthene	57	55	40-160	3	0-20	
Benzo (k) Fluoranthene	115	112	40-160	2	0-20	
Benzo (a) Pyrene	104	100	40-160	4	0-20	
Dibenz (a,h) Anthracene	115	111	40-160	4	0-20	
Benzo (g,h,i) Perylene	118	113	40-160	4	0-20	
Indeno (1,2,3-c,d) Pyrene	109	105	40-160	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597
Preparation: EPA 3545
Method: EPA 8082

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-535-263	**Solid**	**GC 16**	**02/11/08**	**02/12/08**	**080211L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	84	84	50-135	1	0-20	
Aroclor-1260	99	92	50-135	7	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received:	N/A
Work Order No:	08-02-0597
Preparation:	EPA 5035
Method:	EPA 8260B

Project: Hollywood Park / A50015.01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-15,534	**Solid**	**GC/MS LL**	**02/13/08**	**02/13/08**	**080213L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	104	85-115	3	0-11	
Carbon Tetrachloride	102	105	68-134	2	0-14	
Chlorobenzene	105	105	83-119	0	0-9	
1,2-Dibromoethane	106	107	80-120	2	0-20	
1,2-Dichlorobenzene	103	106	57-135	2	0-10	
1,1-Dichloroethene	113	118	72-120	5	0-10	
Ethylbenzene	108	107	80-120	1	0-20	
Toluene	105	102	67-127	3	0-10	
Trichloroethene	100	102	88-112	2	0-9	
Vinyl Chloride	107	99	57-129	7	0-16	
Methyl-t-Butyl Ether (MTBE)	106	113	76-124	6	0-12	
Tert-Butyl Alcohol (TBA)	105	113	31-145	8	0-23	
Diisopropyl Ether (DIPE)	107	111	74-128	4	0-10	
Ethyl-t-Butyl Ether (ETBE)	110	116	77-125	6	0-9	
Tert-Amyl-Methyl Ether (TAME)	107	111	81-123	4	0-10	
Ethanol	105	112	44-152	7	0-24	

RPD - Relative Percent Difference , CL - Control Limit

Quality Control - LCS/LCS Duplicate

Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, CA 91101-1856

Date Received: N/A
Work Order No: 08-02-0597

Project: Hollywood Park / A50015.01

Matrix: Solid

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Nitrite (as N)	EPA 300.0	099-08-002-208	N/A	02/08/08	90	89	77-119	1	0-19	
Nitrate (as N)	EPA 300.0	099-08-002-208	N/A	02/08/08	98	98	87-111	1	0-14	
Chromium, Hexavalent	EPA 7199	099-05-125-1,857	02/11/08	02/11/08	100	96	80-120	4	0-20	
Perchlorate	EPA 314.0M	099-05-205-328	02/12/08	02/12/08	100	104	85-115	4	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Glossary of Terms and Qualifiers

Work Order Number: 08-02-0597

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

From: fuan, alejandro
To: Virendra Patel;
CC:
Subject: Hollywood Park (A50015.01) - Request for report for additional metal analysis
Date: Thursday, February 14, 2008 4:01:51 PM
Attachments:

Hi Virendra,

I understand that James Yoon from our office turned in some soil samples collected from the Hollywood Park site for analysis. For these new samples, could you report for the metal section the additional samples results of iron, aluminum, and manganese as requested before for the old samples? Thank you.

Sincerely,

Alejandro Fuan
Erler & Kalinowski, Inc.
35 North Lake Avenue, Suite 705
Pasadena, California 91101
phone: (626) 432-5900 x 209
fax: (626) 432-5905
afuan@ekiconsult.com <mailto:afuan@ekiconsult.com>
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0597

Erler & Kalinowski, Inc. CHAIN OF CUSTODY RECORD PAGE 1 OF 1

CONSULTING ENGINEERS AND SCIENTISTS 1870 Ogden Drive, Burlingame CA 94010 PHONE: 650-292-9100 FAX: 650-552-9012

Project Name
Hollywood Park

Project No.
A50015.01

Location:
1050 South Prairie Avenue, Inglewood, CA

Sampled By:
Samus Yoon

Reporting:
Electronic Format: [✓ EDD] [✓ CA State EDF]
Hard Copy Format: PDF
EPA Data Report Level: II
Report results to:
jyoon@ekiconsult.com
and jstriegel@ekiconsult.com

Laboratory:
Calscience Environmental Laboratories, Inc., Virendra Patel
7440 Lincoln Way, Garden Grove, CA 92841
Phone: (714) 895-5494 FAX: (714) 894-7501

ANALYSES REQUESTED

EKI COC No. ________

Field Sample Identification	Lab Sample No.	Date	Time	Matrix	No./Type of Containers	*Method No.*	5035/8260B	8015 Mod.	6020	5035/8015 Mod.	8310	3060A/7199	8082	314.0	300.0	9045D							
						Analyte Group	VOCs + oxygenates	TPH diesel and motor oil with silica gel cleanup	Title 22 Metals with mercury by ICP/MS	TPH gasoline	PAHs	Hexavalent Chromium	PCBs	Perchlorate	Nitrate and nitrite	pH				EXTRACT AND HOLD	PLACE ON HOLD	EXPECTED TURNAROUND TIME	Remarks
1 **BF-1-02082008**		8-Feb-08	11:02	Soil	2 8 oz jars + 5 Encores		X	X	X	X	X	X	X	X	X	X							
2 **BF-2-02082008**		8-Feb-08	11:18	Soil	2 8 oz jars + 5 Encores		X	X	X	X	X	X	X	X	X	X							

Special Instructions:

Notes:

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)
EKI	2/8/8	15⁰⁰	CEL
	2/8/8	16¹⁰	CEL

HP backfill coc.xlsE Form

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 02-0597

Cooler 1 **of** 1

SAMPLE RECEIPT FORM

CLIENT: EKI

DATE: 2/8/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

___ Chilled, cooler with temperature blank provided.
___ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
XB Ambient and placed in cooler with wet ice.
___ Ambient temperature.
5.0 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ °C Temperature blank.
___ °C IR thermometer.
___ Ambient temperature.

Initial: ___

CUSTODY SEAL INTACT:

Sample(s): ___
Cooler: ___
No (Not Intact) : ___
Not Present: ✓
Initial: ___

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace			✓
Tedlar bag(s) free of condensation			✓

Initial: ___

COMMENTS:

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Kalinowski,
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