

Los Angeles Regional Water Quality Control Board

October 30, 2013

Mr. Izzy Eichenstein  
c/o The Oakstone Company  
5757 West Century Boulevard, 7<sup>th</sup> Floor  
Los Angeles, CA 90045

Certified with Return Receipt  
7012 3460 0000 2166 1375

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT  
PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR  
HEXAVALENT CHROMIUM IMPACTED SITES (ORDER NO. R4-2007-0019)  
FORMER KING DELIVERY, INCORPORATED  
5600 WEST ARBOR VITAE STREET, LOS ANGELES  
(CI NO. 9945, SERIES NO. 223); (UST FILE NO. 900450143)**

Dear Mr. Eichenstein:

We have completed our review of your application for coverage under the General Waste Discharge Requirements (WDR) for in-situ chemical oxidation [RegenOx™ and Oxygen Release Compounds (ORC®)] application at the subject site. The purpose of the injection is to mitigate fuel constituents in the soil and groundwater beneath the site in order to minimize the threat to the underlying aquifers.

Izzy Eichenstein/The Oakstone Company (hereinafter Discharger) owns the facility located at the corner of Vitae Street and Portal Avenue, in Los Angeles, California (Figures 1 and 2) (Latitude: N 33° 57' 9.4", Longitude: W 118° 22' 44.4"). The site is a former King Delivery that was used as a freight distribution and warehouse facility. The site contained one gasoline underground storage tank (UST) and one diesel fuel UST which were removed in 1987. The site is currently occupied by Dollar Rent-A-Car and is used as a parking lot. The site is located in area of mixed commercial, industrial and residential properties.

In 1987, one 10,000-gallon gasoline UST and one 2,000-gallon diesel UST were removed from the site. Several site investigations conducted to date indicate that the soil and groundwater beneath the site have been impacted by fuel constituents and volatile organic compounds (VOCs).

A total of nine groundwater monitoring wells (MB1, MB2, RE1; and MW-1 through MW-6) are associated with the site. The most recent monitoring data (January 2013) reported maximum TPH<sub>6</sub> concentrations up to 21,000 micrograms per liter (µg/L), benzene up to 6,500 µg/L, naphthalene up to 420 µg/L, dichloroethane (1,2-DCA) up to 33 µg/L, trichloroethene (TCE) up to 160 µg/L and tetrachloroethene (PCE) up to 110 µg/L in the groundwater. Depth to groundwater was measured at approximately 92 feet below ground surface (bgs) and groundwater flow direction is toward the east-southeast (Figures 3, 4 and 5).

In a remedial action plan (RAP) dated February 7, 2009, the Discharger's former consultant, Ninyo & Moore proposed to conduct in-situ chemical oxidation injection using RegenOx™ and Oxygen Release Compounds (ORC®) to treat soil and groundwater contamination onsite and offsite. In a Regional Board staff directive letter dated August 6, 2010, the RAP was approved. In May 2011, Ardent Environmental Group (AEG) was retained as Oakstone's new consultant.

In a Groundwater Remediation Pilot Test Plan dated June 12, 2012, AEG proposed to conduct a pilot test study using RegenOx™ and ORC® prior to full scale implementation. In a Regional Board staff directive letter dated May 10, 2013, the RAP for the pilot study was approved.

Regional Board staff has determined that the proposed discharge meets the conditions specified in Order No. R4-2007-0019, "Revised General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Site (General WDRs)" adopted by the Los Angeles Regional Water Quality Control Board on March 1, 2007.

Enclosed are the Waste Discharge Requirements (WDR), consisting of Regional Board Order No. R4-2007-0019, Monitoring and Reporting Program No. CI-9945 and Standard Provisions.

The WDRs shall not be terminated until Regional Board staff determines the WDRs are no longer needed for the site cleanup.

The Monitoring and Reporting Program No. CI-9945 requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019. When submitting monitoring or technical reports to the Regional Board, per these requirements, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2007-0019 only to the applicant. A copy of the Order will be furnished to anyone who requests it. A copy of the Order can also be found online at: [http://www.waterboards.ca.gov/losangeles/board\\_decisions/adopted\\_orders/general\\_orders/r4-2007-0019/r4-2007-0019.pdf](http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/general_orders/r4-2007-0019/r4-2007-0019.pdf)

In accordance with regulations adopted by the State Water Resource Control Board (State Board) in September 2004 regarding *electronic submittal of information (ESI)*, the Discharger has been electronically submitting Underground Storage Tank Program (UST) technical reports to the State Board GeoTracker system under the UST Global ID T0603701040. To comply with this Monitoring & Reporting Program (MRP), the Discharger shall upload the MRP monitoring reports to the Geotracker under the two Global IDs T0603701040 (continuing) and WDR 100006423 (new). For more information regarding the WDR Global ID, please see the *ESI training video* at: <https://waterboards.webex.com/waterboards/ldr.php?AT=pb&SP=MC&rID=44145287&rKey=7dad4352c990334b>.

To avoid paying future annual fees, please submit a written request for termination of your enrollment under the general permit in a separate letter, when your project has been completed and the permit is no longer needed. Be aware that the annual fee covers the fiscal year billing period beginning July 1 and ending June 30, the following year. You will pay the full annual fee if your request for termination is made after the beginning of the new fiscal year beginning July 1.

Mr. Izzy Eichenstein  
c/o The Oakstone Company

-3-

October 30, 2013

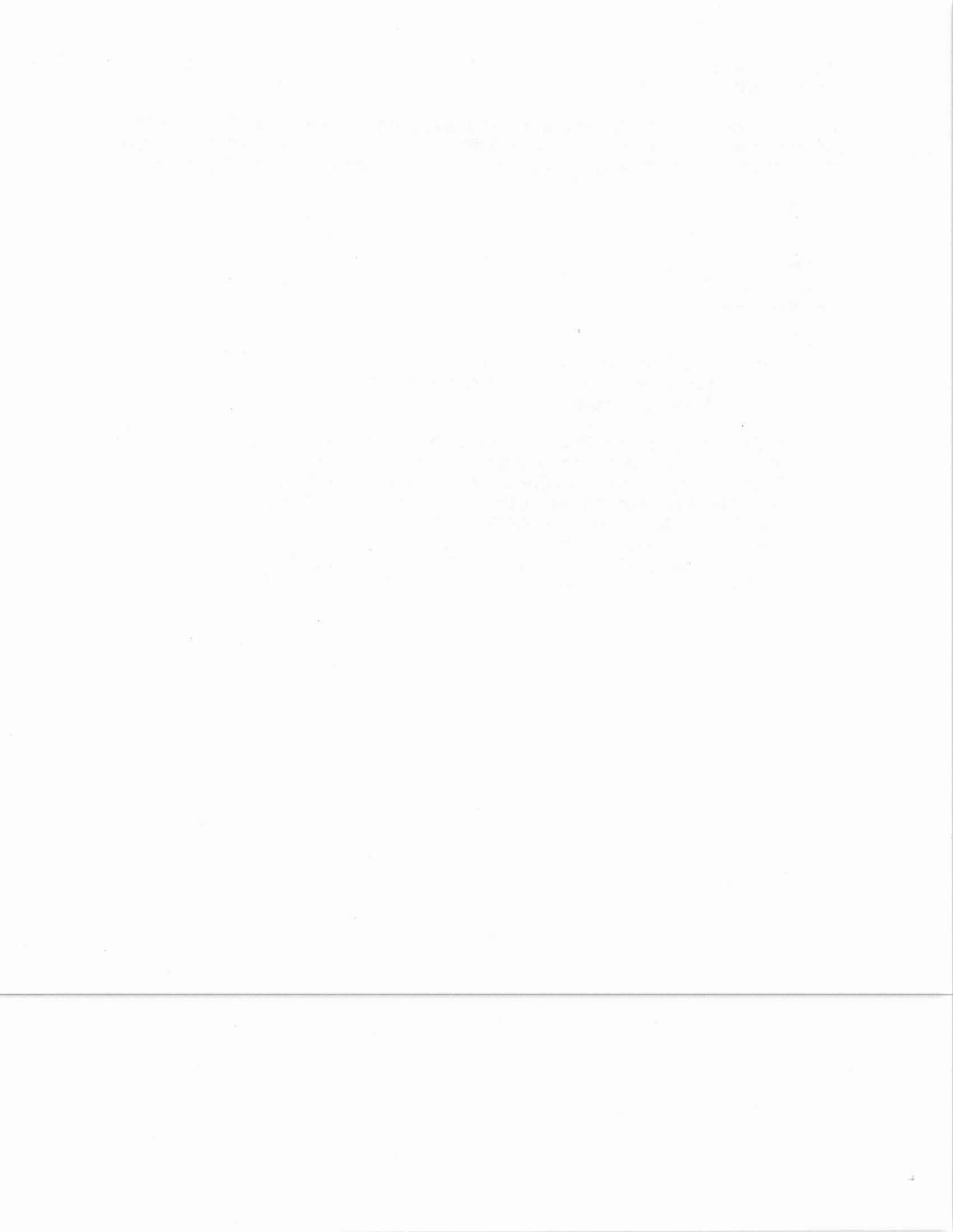
If you have any questions regarding the WDRs, please contact Mr. Eric Wu at (213) 620-6683 or Eric.Wu@waterboards.ca.gov. Questions regarding the underground storage tank issues should be forwarded to Ms. Chandra Tyler at (213) 576-6782 or Chandra.Tyler@waterboards.ca.gov.

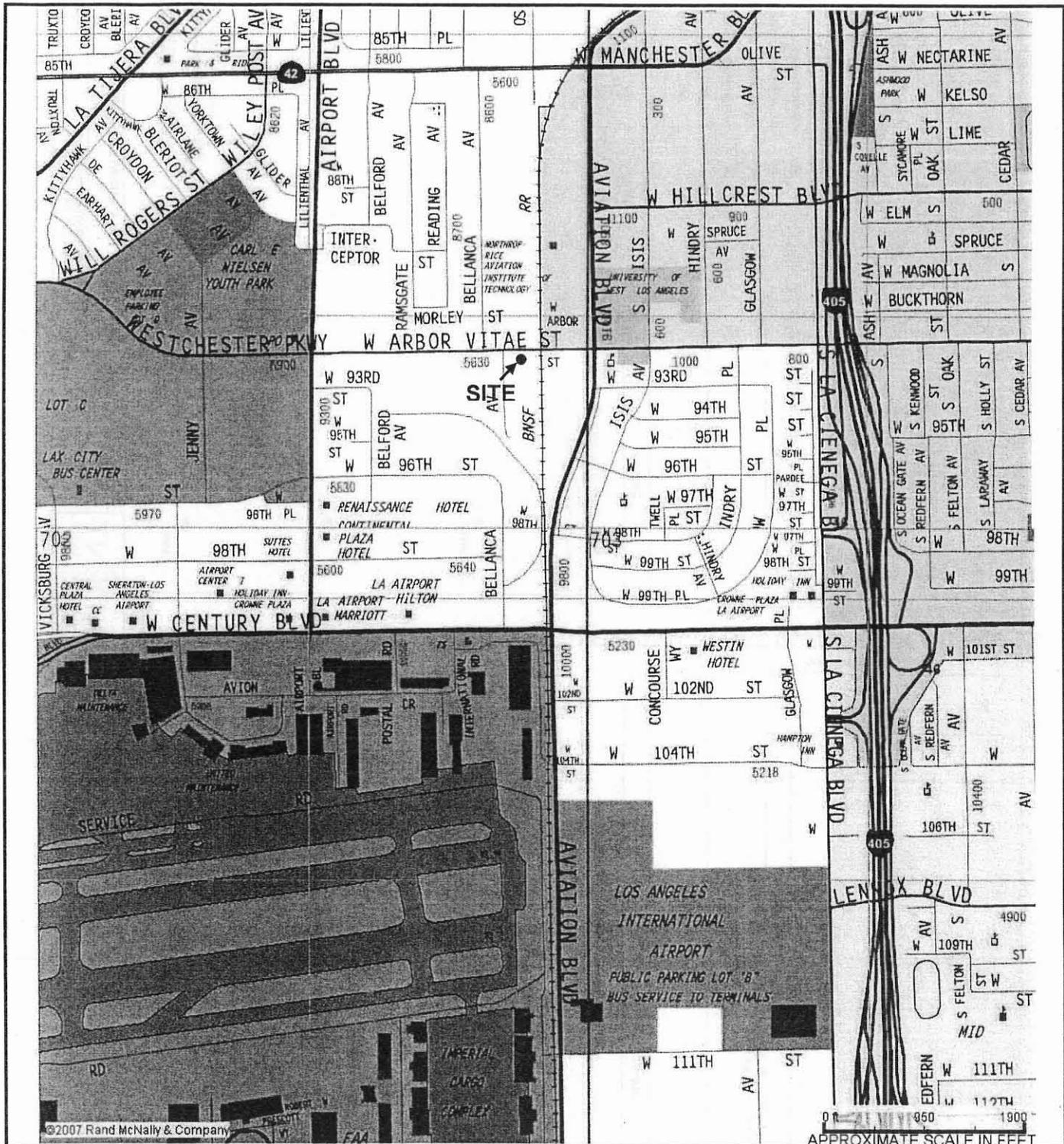
Sincerely,

  
Samuel Unger, P.E.  
Executive Officer

Enclosures: 1. Board Order No. R4-2007-0019  
2. Monitoring and Reporting Program No. CI-9945  
3. Standard Provisions

cc: Kathy Jundt, State Water Resources Control Board, UST Cleanup Fund  
Phuong Ly, Water Replenishment District of Southern California  
Eloy Luna, City of Los Angeles Fire Department, Underground Tanks  
Hani Malki, City of Los Angeles Fire Department, Underground Tanks  
Paul Roberts, Ardent Environmental Group, Inc.  
David DeVries, AMES E&I (Honeywell consultant)  
Jennifer Taggart, Demetriou, Del Guercio, Springer & Francis, LLP  
Jeffrey Z. Springer, Demetriou, Del Guercio, Springer & Francis, LLP



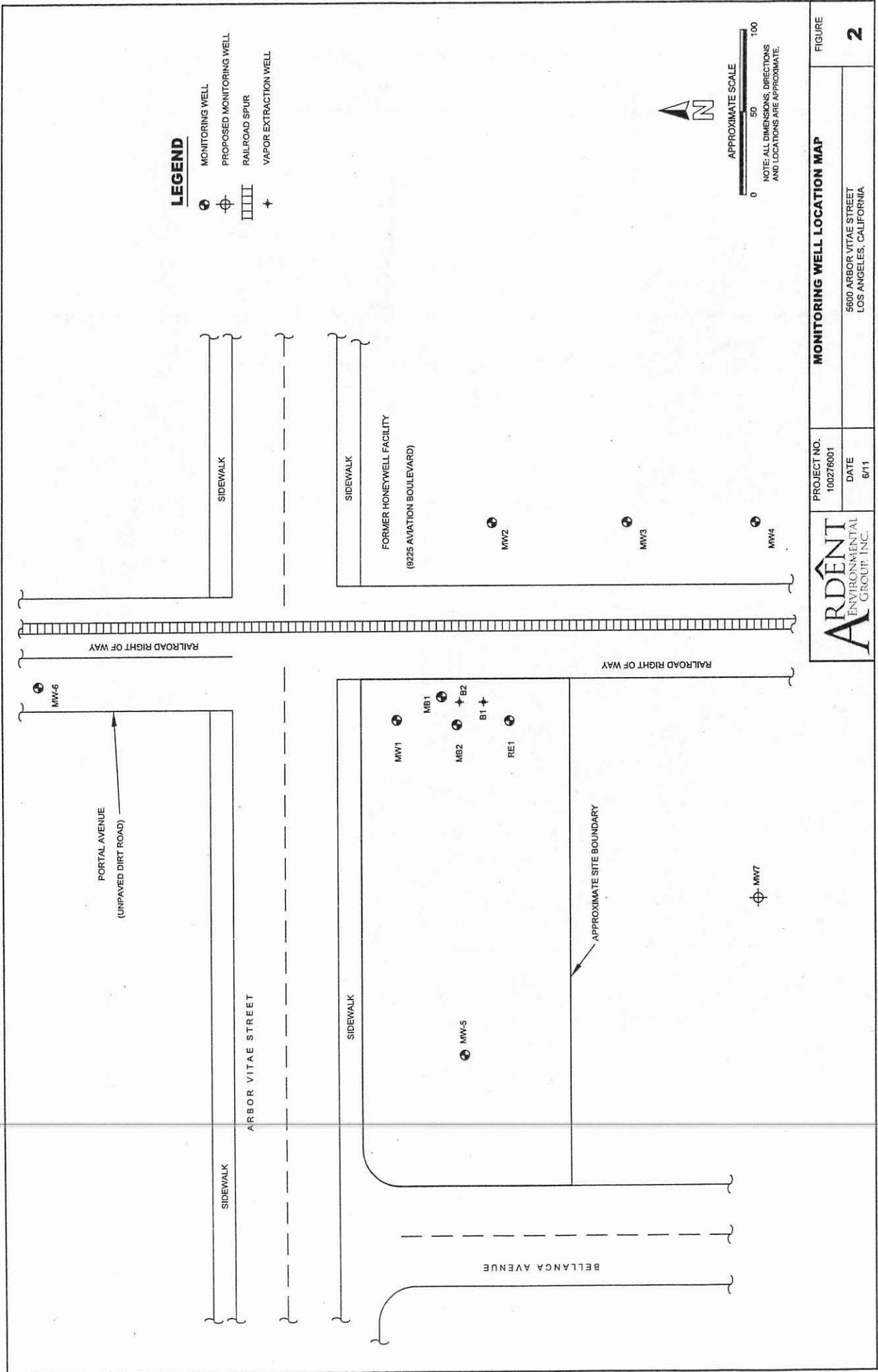


REFERENCE: 2007 RAND McNALLY DIGITAL EDITION FOR LOS ANGELES/ORANGE COUNTY, STREET GUIDE AND DIRECTORY



NOTE: ALL DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE

	PROJECT NO.	<b>SITE LOCATION MAP</b>  5600 ARBOR VITAE STREET LOS ANGELES, CALIFORNIA	FIGURE
	DATE		
	100276001		
	6/11		



PORTAL AVENUE  
(UNPAVED DIRT ROAD)

MW-6

RAILROAD RIGHT OF WAY

SIDEWALK

ARBOR VITAE STREET

SIDEWALK

MW-5

MW1

MB1

MB2

B2

B1

RE1

APPROXIMATE SITE BOUNDARY

MW7

SIDEWALK

FORMER HONEYWELL FACILITY  
(9225 AVIATION BOULEVARD)

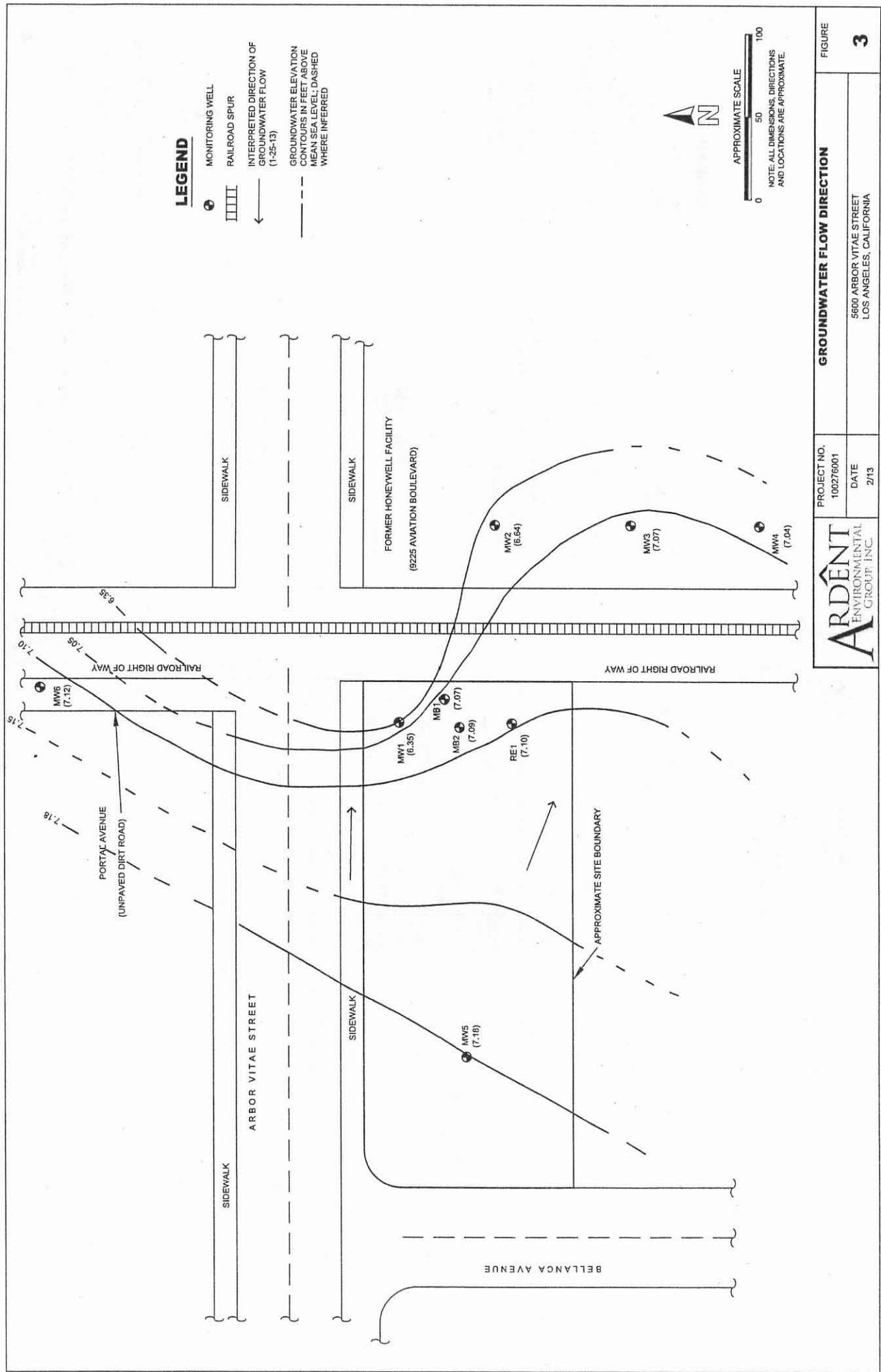
MW2

MW3

MW4

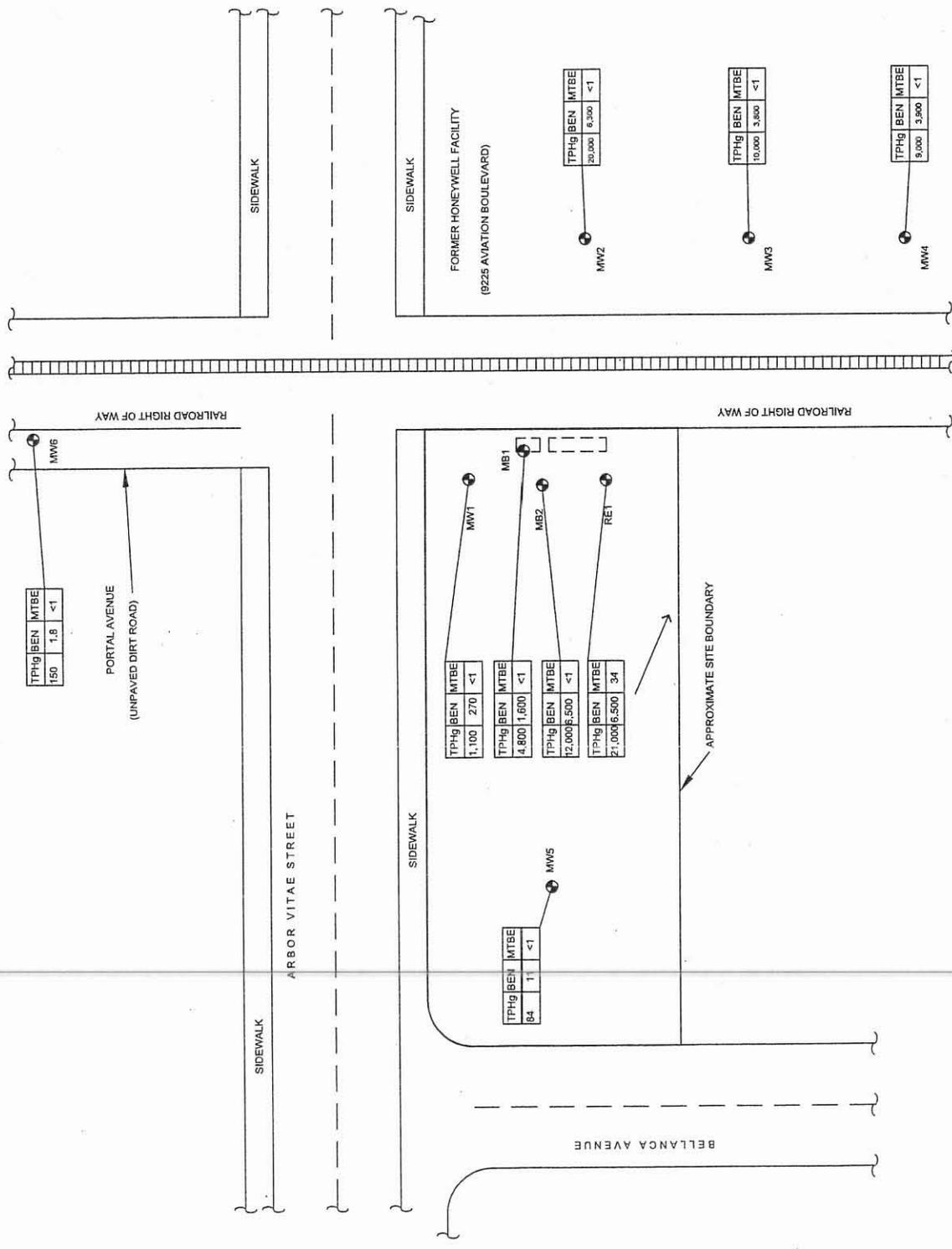
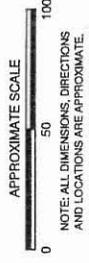
RAILROAD RIGHT OF WAY

BELLANCA AVENUE



**LEGEND**

- ⊕ MONITORING WELL
- ▬ RAILROAD SPUR
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE IN MILLIGRAMS PER LITER (mg/l)
- BEN BENZENE CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l)
- MTBE METHYL TERTIARY BUTYL ETHER IN ug/l
- FORMER UNDERGROUND STORAGE TANK
- ← GENERAL DIRECTION OF GROUNDWATER FLOW



PROJECT NO. 100276001  
DATE 2/13

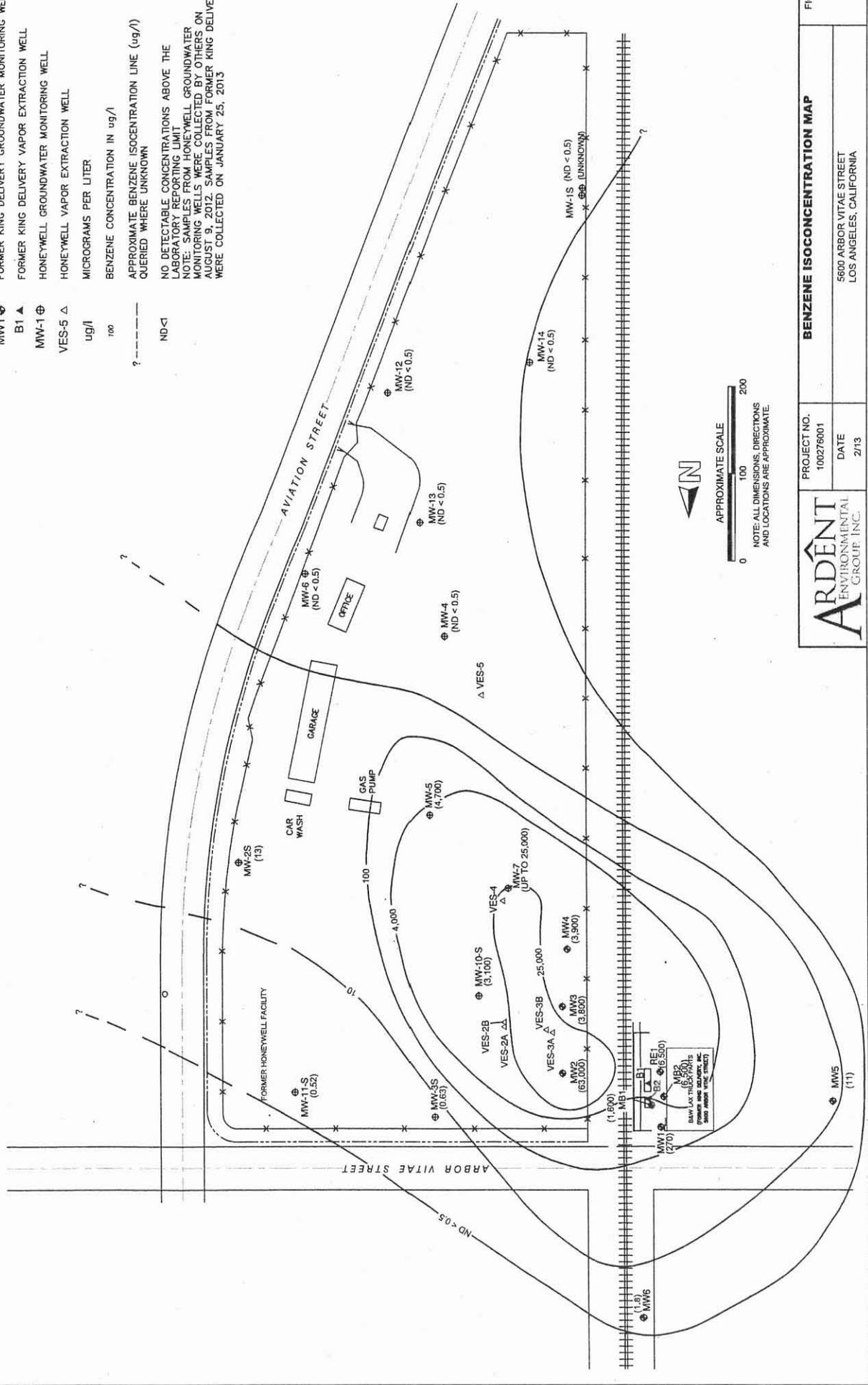
**GROUNDWATER CONCENTRATIONS ON 1/25/13**  
5600 ARBOR VITAE STREET  
LOS ANGELES, CALIFORNIA

FIGURE 4

**LEGEND**

- MW1 ⊕ FORMER KING DELIVERY GROUNDWATER MONITORING WELL
- B1 ▲ FORMER KING DELIVERY VAPOR EXTRACTION WELL
- MW-1 ⊕ HONEYWELL GROUNDWATER MONITORING WELL
- VES-5 Δ HONEYWELL VAPOR EXTRACTION WELL
- ug/l MICROGRAMS PER LITER
- 100 BENZENE CONCENTRATION IN ug/l
- ? - - - - - APPROXIMATE BENZENE ISOCONCENTRATION LINE (ug/l) QUERIED WHERE UNKNOWN
- ND<1 NO DETECTABLE CONCENTRATIONS ABOVE THE LABORATORY REPORTING LIMIT

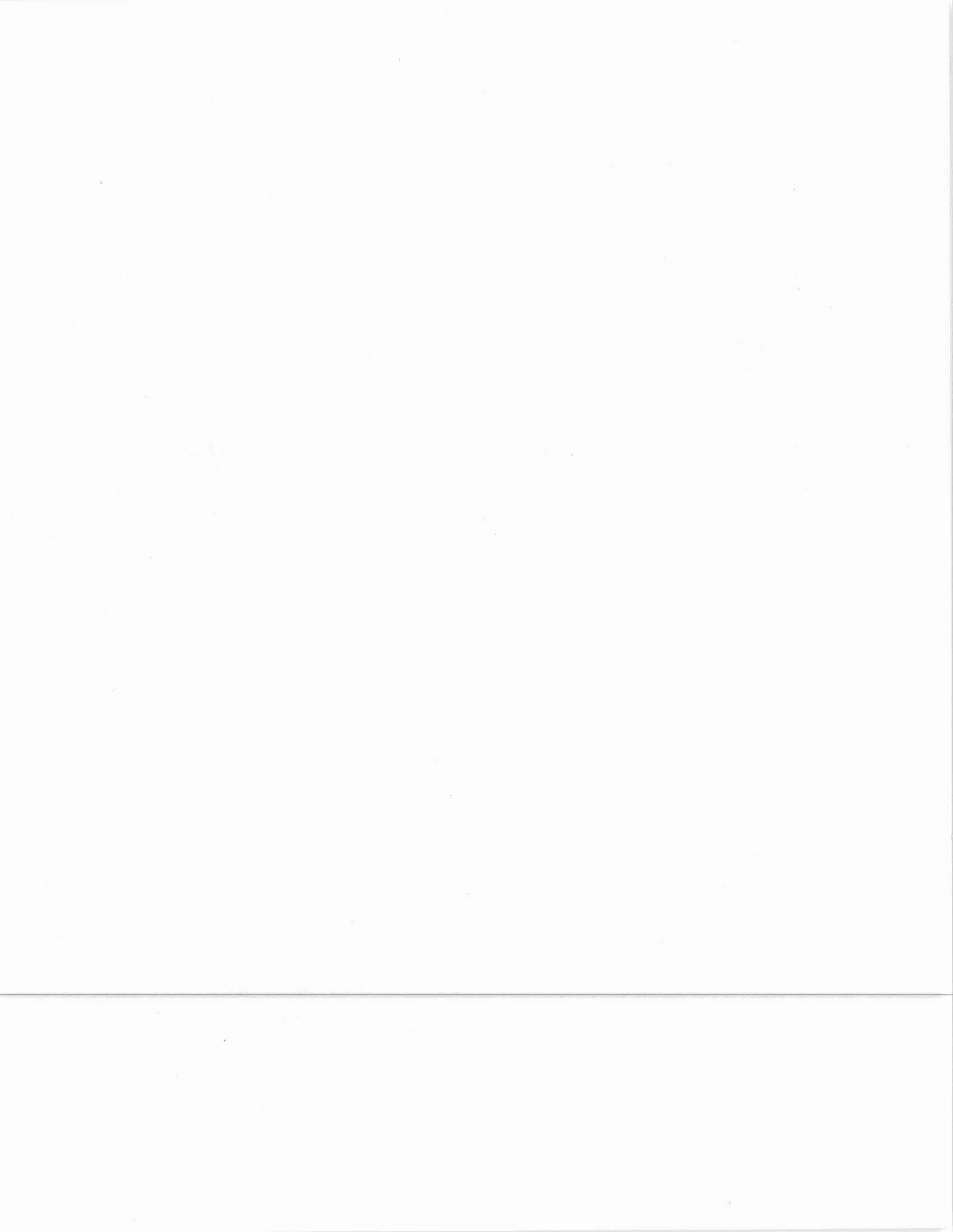
NOTE: SAMPLES FROM HONEYWELL GROUNDWATER MONITORING WELLS WERE COLLECTED BY OTHERS ON AUGUST 9, 2012. SAMPLES FROM FORMER KING DELIVERY WERE COLLECTED ON JANUARY 25, 2013



	PROJECT NO. 100276001	FIGURE <b>5</b>
	DATE 2/13	5600 ARBOR VITAE STREET LOS ANGELES, CALIFORNIA

BENZENE ISOCONCENTRATION MAP

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.



STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
MONITORING AND REPORTING PROGRAM NO. CI-9945  
FOR  
FORMER KING DELIVERY, INCORPORATED  
5600 ARBOR VITAE STREET, LOS ANGELES  
ENROLLMENT UNDER REGIONAL BOARD ORDER NO. R4-2007-0019, SERIES NO. 223

I. REPORTING REQUIREMENTS

- A. Izzy Eichenstein/The Oakstone Company (hereinafter Discharger) shall implement this monitoring program on the effective date of the enrollment under Regional Board Order No. R4-2007-0019. The first monitoring report under this program, for October - December 2013, shall be received at the Regional Board by **January 15, 2014**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Reporting Period</u>	<u>Sampling Period</u>	<u>Report Due Date</u>
January – June	April – June	July 15 <sup>th</sup>
July – December	October – December	January 15 <sup>th</sup>

- B. If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board.
- C. By March 1 of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall explain the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDR).
- D. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
- E. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Regional Board Executive Officer (Executive Officer). The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Regional Board.

- F. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.
- G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- H. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
- I. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- J. If the Discharger performs analyses on any groundwater samples more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report.
- K. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- L. The Discharger should not implement any changes to the Monitoring and Reporting Program prior to receiving Executive Officer's written approval.
- M. In accordance with regulations adopted by the State Water Resource Control Board (State Board) in September 2004 regarding electronic submittal of information (ESI), the Discharger has been electronically submitting Underground Storage Tank Program (UST) technical reports to the State Board GeoTracker system under the UST Global ID T0603701040. To comply with this Monitoring & Reporting Program (MRP), the Discharger shall upload the MRP monitoring reports to the Geotracker under the two Global IDs T0603701040 (continuing) and WDR 100006423 (new). For more information regarding the WDR Global ID, please see the ESI training video at: <https://waterboards.webex.com/waterboards/ldr.php?AT=pb&SP=MC&rID=44145287&rKey=7dad4352c990334b>.

II. DISCHARGE MONITORING REQUIREMENTS

The semi-annual reports shall contain the following information regarding the injection activities.

1. Location map showing injection points used for the injection activities.
2. Written and tabular summary defining:
  - Depth of injection points;
  - Quantity of sodium persulfate injected at each injection point;
  - Days on which the injection system was in operation; and
  - Total amount of sodium persulfate injected at the site.
3. Semi-annual visual inspection at each injection well shall be conducted to evaluate the well casing integrity after each injection. The semi-annual report shall include a summary of the visual inspection.
4. To avoid groundwater monitoring network reduction, data bias, and well screen clogging or alteration, no groundwater monitoring wells shall be used as injection points during the proposed injection. Separate injection points/wells must be installed at the site for the proposed injection. Additional injection points shall be reviewed and approved by the Regional Board.

III. GROUNDWATER MONITORING PROGRAM

A groundwater-monitoring program shall be designed to detect and evaluate impacts associated with the injection activities. The monitoring well network must include onsite wells MW1, MB2, MB1, and RE-1 as upgradient wells; offsite wells MW2 and MW4 as crossgradient wells; and offsite wells MW-7 and MW-10S as downgradient wells (Figure 6). A baseline monitoring and sampling shall be conducted prior to the proposed injections. Baseline monitoring will establish the initial conditions with respect to the contaminant levels. These sampling stations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Executive Officer. The Discharger shall conduct a baseline sampling from all wells onsite one or two weeks prior to the proposed injection and regular sampling with the required frequencies from all the monitoring wells in the monitoring network for the following constituents:

<u>CONSTITUENT</u>	<u>UNITS</u> <sup>1</sup>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
pH <sup>2</sup>	pH units	grab	Semi-annually
Temperature <sup>2</sup>	°F	grab	Semi-annually
Oxidation-reduction potential <sup>2</sup>	Milivolts	grab	Semi-annually

Specific conductivity <sup>2</sup>	µmhos/cm	grab	Semi-annually
Ferrous iron	µg/L	grab	Semi-annually
Dissolved Oxygen <sup>2</sup>	µg/L	grab	Semi-annually
Total Petroleum Hydrocarbons (as gasoline)	µg/L	grab	Semi-annually
Benzene	µg/L	grab	Semi-annually
Ethylbenzene	µg/L	grab	Semi-annually
Toluene	µg/L	grab	Semi-annually
Total xylenes	µg/L	grab	Semi-annually
MTBE	µg/L	grab	Semi-annually
TBA	µg/L	grab	Semi-annually
TAME	µg/L	grab	Semi-annually
DIPE	µg/L	grab	Semi-annually
ETBE	µg/L	grab	Semi-annually
Ethanol	µg/L	grab	Semi-annually
Naphthalene	µg/L	grab	Semi-annually
Methane	µg/L	grab	Semi-annually
Formaldehyde	µg/L	grab	Semi-annually
Acetates	µg/L	grab	Semi-annually
Total organic carbon	µg/L	grab	Semi-annually
Total dissolved solids	mg/l	grab	Semi-annually
Arsenic	mg/L	grab	Semi-annually
Bromide	mg/L	grab	Semi-annually
Sulfate	mg/L	grab	Semi-annually
Chloride	mg/L	grab	Semi-annually
Boron	mg/L	grab	Semi-annually
Sodium	mg/L	grab	Semi-annually
Carbon dioxide	mg/L	grab	Semi-annually
Manganese	µg/L	grab	Semi-annually

Total iron	µg/L	grab	Semi-annually
Alkalinity	µg/L	grab	Semi-annually
Total chromium <sup>3</sup>	µg/L	grab	Semi-annually
Chromium six <sup>3</sup>	µg/L	grab	Semi-annually

<sup>1</sup> mg/L: milligrams per liter; µg/L: micrograms per liter; µmhos/cm: microohms per centimeter; °F: degree Fahrenheit.

<sup>2</sup> Field instrument may be used to measure this parameter.

<sup>3</sup> The Discharger is required to monitor for total chromium and chromium six in the baseline, second and fourth semi-annual sampling. If detected at any of these sampling events, the total chromium and chromium six must be monitored semi-annually thereafter.

All groundwater monitoring reports must include, at a minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Semi-annual observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment".

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Title)"

Former King Delivery, Inc.  
Monitoring and Reporting Program No. CI-9945

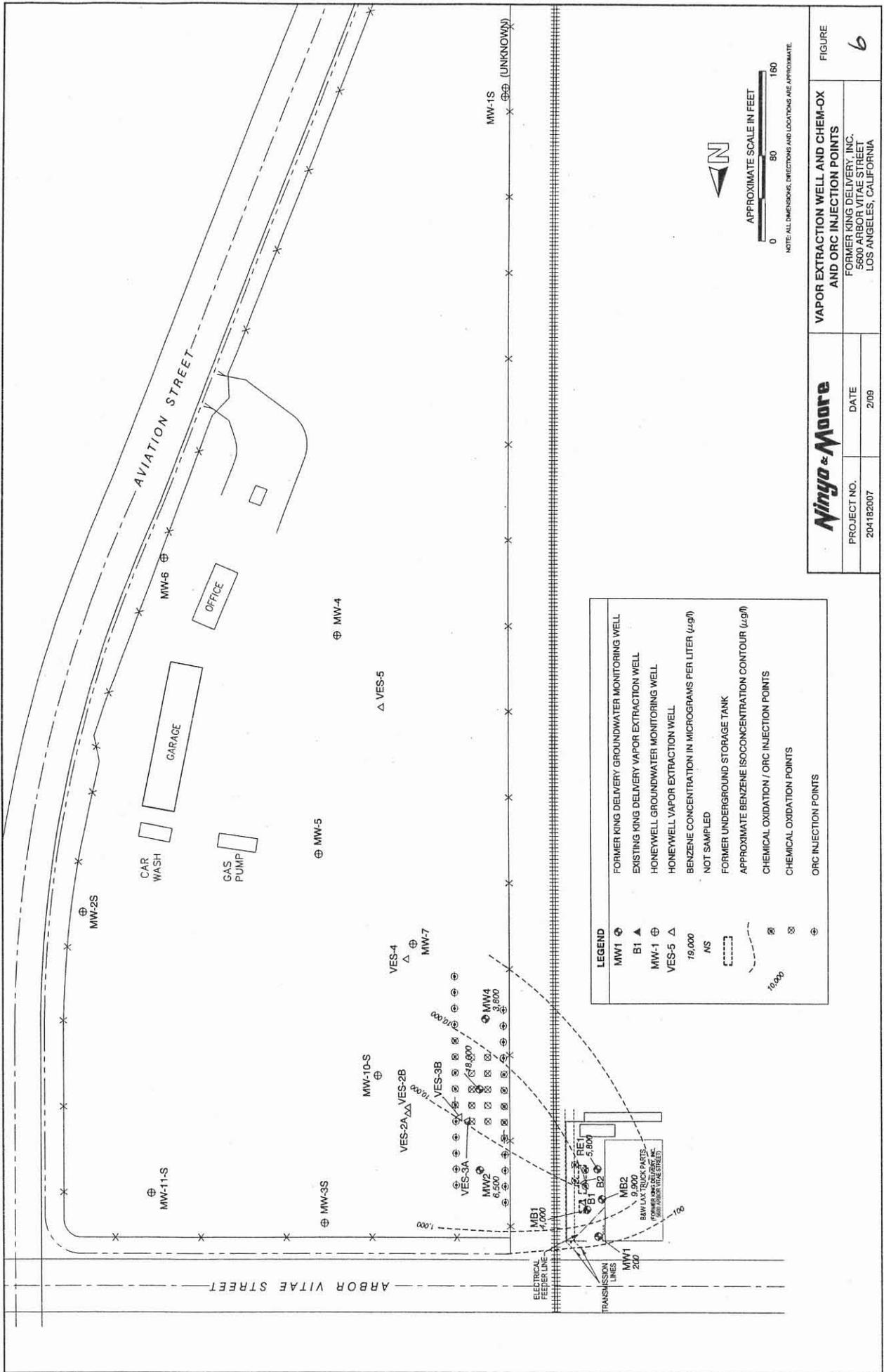
UST File No. 900450143  
Order No. R4-2007-0019

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region, upon request by interested parties.

Ordered by: Samuel Unger  
Samuel Unger, P.E.  
Executive Officer

Date: October 30, 2013



NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
MW1 ⊕	FORMER KING DELIVERY GROUNDWATER MONITORING WELL
B1 ▲	EXISTING KING DELIVERY VAPOR EXTRACTION WELL
MW-1 ⊕	HONEYWELL GROUNDWATER MONITORING WELL
VES-5 Δ	HONEYWELL VAPOR EXTRACTION WELL
19,000	BENZENE CONCENTRATION IN MICROGRAMS PER LITER (μg/l)
NS	NOT SAMPLED
---	FORMER UNDERGROUND STORAGE TANK
- - - -	APPROXIMATE BENZENE ISOCENTRATION CONTOUR (μg/l)
⊗	CHEMICAL OXIDATION / ORC INJECTION POINTS
⊗	CHEMICAL OXIDATION POINTS
⊕	ORC INJECTION POINTS

<b>Ninyo &amp; Moore</b>		<b>VAPOR EXTRACTION WELL AND CHEM-OX AND ORC INJECTION POINTS</b>		FIGURE <b>6</b>
		PROJECT NO. 204182007	DATE 2/09	

