



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

February 14, 2013

Mr. Joseph Lentini
Equilion Enterprises LLC
20945 South Wilmington Avenue
Carson, CA 90810

Certified Mail with Return Receipt
7012 1640 0000 6294 5236

**UNDERGROUND STORAGE TANK PROGRAM—DIRECTIVE TO TAKE CORRECTIVE ACTION AND GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR HEXAVALENT CHROMIUM IMPACTED SITES
FORMER SHELL SERVICE STATION
2471 BELLFLOWER BLVD, LONG BEACH
(FILE NO. 908150107; ORDER NO. R4-2007-0019-210; CI NO 9099)**

Dear Mr. Lentini:

We have received the letter dated February 3, 2012, from your consultant, Wayne Perry, Inc. containing the application for the coverage of the General Waste Discharge Requirements (R4-2007-0019-210) for your proposed RegenOx injection operations.

The subject site is an active Chevron gasoline retail station with one 15,000-gallon underground storage tank (UST), one 20,000-gallon UST and associated fuel dispensers and piping.

There are presently 14 groundwater monitoring wells: MW-1 through -13 and B-19 being monitored semiannually. Remedial actions at the site included free product removal from 1993 to 2000, dual phase extraction operation from 1999 to 2010, and periodical pump and treat of groundwater from 2004 to 2010. The groundwater data of the second semi-annual monitoring event in 2011 indicated TRPH was detected up to 28,000 µg/L, benzene 8,900 µg/L, MTBE 150 µg/L, and TBA 1,300 µg/L.

In the "Addendum to the January 15, 2002 Remedial Action Plan," (RAP) dated December 3, 2010, it is concluded the remedial actions taken so far have resulted in a substantial reduction in residual hydrocarbon impacts in soil and groundwater; however, none of these technologies would effectively treat residual hydrocarbon that remain beneath the site. As a result, RegenOx injection through six locations up-gradient of wells EW-5, EW-7, MW-5 and EW-8 utilizing direct push technology is proposed.

We have completed our review of the RAP and concur with the proposed amendment provided all the conditions required to implement the Remedial Action Plan dated January 15, 2002 continue to be met.

We also completed review of your application and 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

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Compound and/or Hexavalent Chromium Impacted Sites (General WDRs)," adopted by the Los Angeles Regional Water Quality Control Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of the General WDRs R4-2007-0019 and Monitoring and Reporting Program No. CI-9909. This Waste Discharge Requirements shall not be terminated without Regional Board UST staff's prior approval.

When submitting technical monitoring reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-9099, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

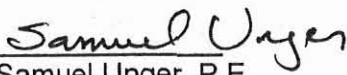
In accordance with regulations adopted by the State Board in September 2004 regarding electronic submittal of information, UST monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0603701987. To comply with the Monitoring and Reporting Program under this WDRs, You shall upload the WDRs monitoring reports to the Geotracker under the two Global ID T0603701987 (continuing) and WDR100002598 (new). For more information regarding the new Global ID under WDRs, please see ESI training video available 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.

If you have any questions, please contact Mr. Gregg Kwey at (213) 576-6702 or kwey@waterboards.ca.gov for issues regarding underground storage tanks, or Dr. Eric Wu at (213) 576-6683 or ewu@waterboards.ca.gov for issues regarding the WDRs.

Sincerely,


Samuel Unger, P.E.
Executive Officer

Enclosures:

1. General WDRs Order No. R4-2007-0019
2. Monitoring and Reporting Program No. CI-9909

cc: Ms. Kathy Jundt, SWRCB, Underground Tank Cleanup Fund
Ms. Carmen Piro, City of Long Beach, Department of Health and Human
Services
Ms. Phuong Ly, Water Replenishment Distruct of Southern California
Mr. John Huff, Wayne Perry, Inc.

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

MONITORING AND REPORTING PROGRAM NO. CI-9909

FOR

**FORMER SHELL SERVICE STATION
2471 BELLFLOWER BLVD, LONG BEACH
(REGENOX INJECTION FOR GROUNDWATER CLEANUP)
(ORDER NO. R4-2007-0019, SERIES NO. 210)**

I. REPORTING REQUIREMENTS

- A. Equilion Enterprises LLC (hereinafter Discharger) shall implement this monitoring program on the effective date of this Monitoring and Reporting Program (MRP). The first monitoring report under this program, for the period from the effective date of this MRP to June 30, 2013, shall be received at the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) by July 15, 2013. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January – June	July 15
July – December	January 15

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, Attention: Information Technology Unit.

- B. Laboratory analyses—all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health 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.
- C. The method limits (MLs) employed for analytical 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 from the Regional Board.

Monitoring and Reporting Program CI-9909

- D. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 Code of Federal Regulation Part 136. All QA/QC samples must be run on the dates when samples are actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request from the Regional Board.
- E. Each monitoring report must affirm in writing that "All analyses are conducted at a laboratory certified for such analyses by the California Department of Public Health and in accordance with current United States Environmental Protection Agency guideline procedures, or as specified in this MRP." Proper chain of custody procedure must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- F. Each monitoring report shall contain a separate section entitled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that are needed to bring the discharge into full compliance with Waste Discharge Requirements (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.
- G. 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.
- H. If the Discharger performs analyses on groundwater samples more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report.
- I. 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.
- J. The Discharger should not implement any changes to the MRP prior to receiving Executive Officer's written approval.
- K. In accordance with regulations adopted by the State Board in September 2004 regarding electronic submittal of information, Underground Storage Tank Program (UST) monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0603701987. To comply with the MRP under this WDRs, the Discharger shall upload the WDRs monitoring reports

to the Geotracker under the two Global ID T0603701987 (continuing) and WDR100002598 (new).

II. REGENOX INJECTION MONITORING REQUIREMENTS

The reports shall contain the following information regarding injection activities:

1. Written and tabular summary defining the quantity of RegenOx injected and a summary describing the days on which the injection system was in operation
2. Location map showing locations for RegenOx injection. Six injection locations (see Figure 2) within the treatment area are currently proposed. Additional locations are permitted with Regional Board staff concurrence. Additional injection locations shall be reviewed and approved by the Regional Board. Please note groundwater wells shall not be used as injection points to avoid reduction of groundwater monitoring network, data bias, screening clogging and alteration.

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site. Groundwater samples shall be collected from one up-gradient well, MW-4, and three down-gradient monitoring wells (MW-3, -6 and -8) on a semi-annual basis (see Figure 3 for groundwater flow direction and Figure 6 for representative groundwater benzene plume). Groundwater shall be monitored for the duration of the MRP in accordance with the following discharge monitoring program:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS ¹
Total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd)	µg/L	Grab	• Semi-Annually
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	µg/L	Grab	• Semi-Annually
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl ether (TAME), Di-isopropyl ether (DIPE), ether (ETBE), Naphthalene	µg/L	Grab	• Semi-Annually

Monitoring and Reporting Program CI-9909

Ethanol Formaldehyde Acetone	µg/L	Grab	• Semi-Annually
Total dissolved solids, Arsenic, Boron, Chloride, Bromide, Sulfate, Lead, Nickel, Cadmium, Manganese	mg/L	Grab	• Semi-Annually
Oxidation-reduction potential	millivolts	Grab	• Semi-Annually
Dissolved Oxygen	µg/L	Grab	• Semi-Annually
Dissolved ferrous iron	µg/L	Grab	• Semi-Annually
Total Chromium and hexavalent chromium ²	µg/L	Grab	• Semi-Annually
pH	pH units	Grab	• Semi-Annually
Temperature	⁰ F/ ⁰ C	Grab	• Semi-Annually
Groundwater Elevation	Feet, mean sea level and below ground surface	In situ	• Semi-Annually

¹. One week before injection and semi-annually thereafter.

². The Discharger is required to monitor for total chromium and hexavalent chromium in the baseline, second and fourth semi-annually 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

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following 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)

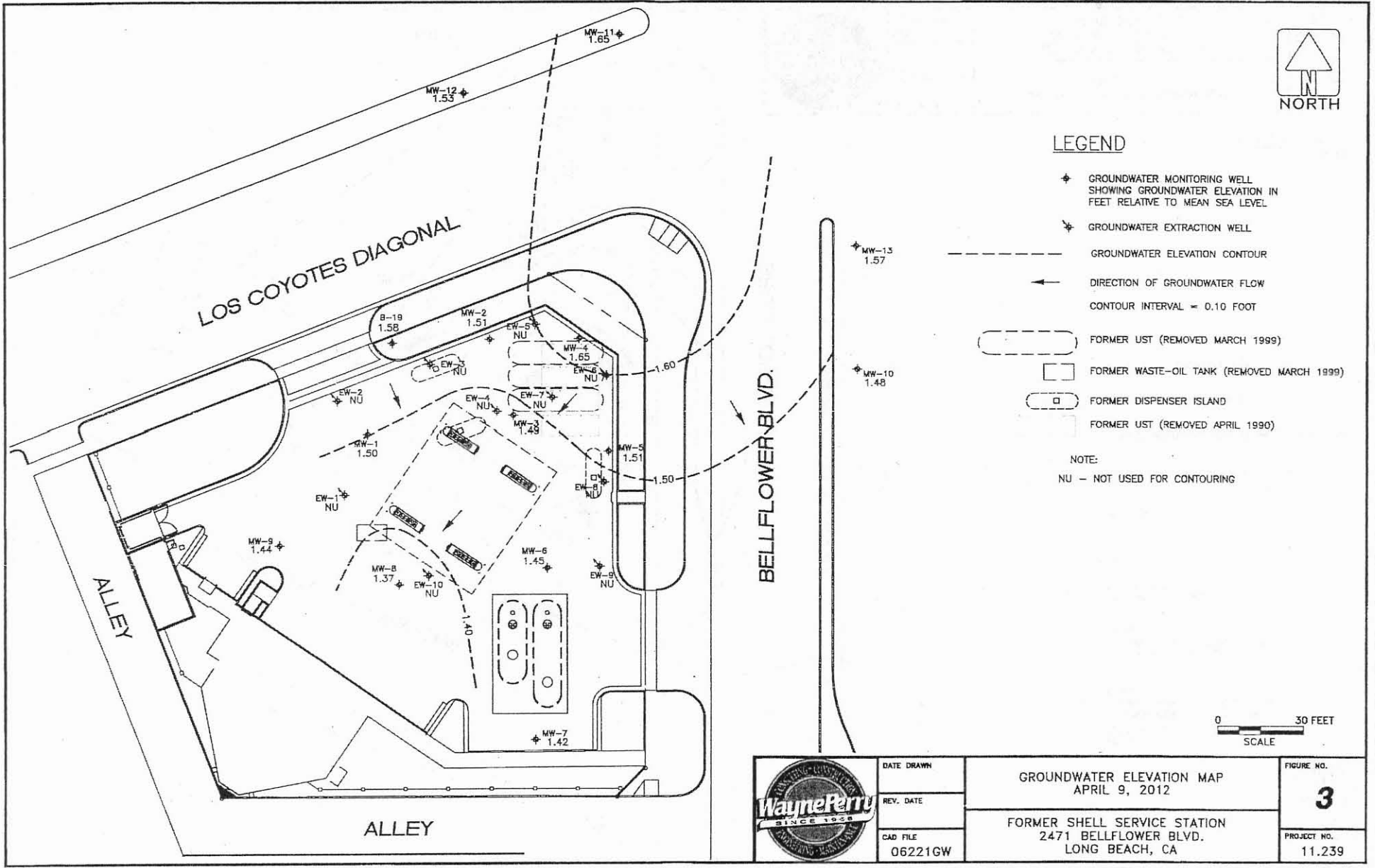
_____ (Title)"

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during normal business hours at the the Regional Board.

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

Date: February 14, 2013



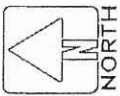
LEGEND

- ◆ GROUNDWATER MONITORING WELL SHOWING GROUNDWATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
- ✦ GROUNDWATER EXTRACTION WELL
- - - GROUNDWATER ELEVATION CONTOUR
- ← DIRECTION OF GROUNDWATER FLOW
- CONTOUR INTERVAL = 0.10 FOOT
- (dashed) FORMER UST (REMOVED MARCH 1999)
- (dashed) FORMER WASTE-OIL TANK (REMOVED MARCH 1999)
- (solid) FORMER DISPENSER ISLAND
- (dashed) FORMER UST (REMOVED APRIL 1990)

NOTE:
NU - NOT USED FOR CONTOURING



	DATE DRAWN	GROUNDWATER ELEVATION MAP APRIL 9, 2012	FIGURE NO.
	REV. DATE		3
	CAD FILE	06221GW	FORMER SHELL SERVICE STATION 2471 BELLFLOWER BLVD. LONG BEACH, CA



LEGEND

GROUNDWATER MONITORING WELL
SHOWING BENZENE CONCENTRATION
IN ug/L

GROUNDWATER EXTRACTION WELL
SHOWING BENZENE CONCENTRATION
IN ug/L

--- LINE OF EQUAL BENZENE
CONCENTRATION

NOTES:

ND - NOT DETECTED

NS - NOT SAMPLED

○ FORMER UST (REMOVED MARCH 1999)

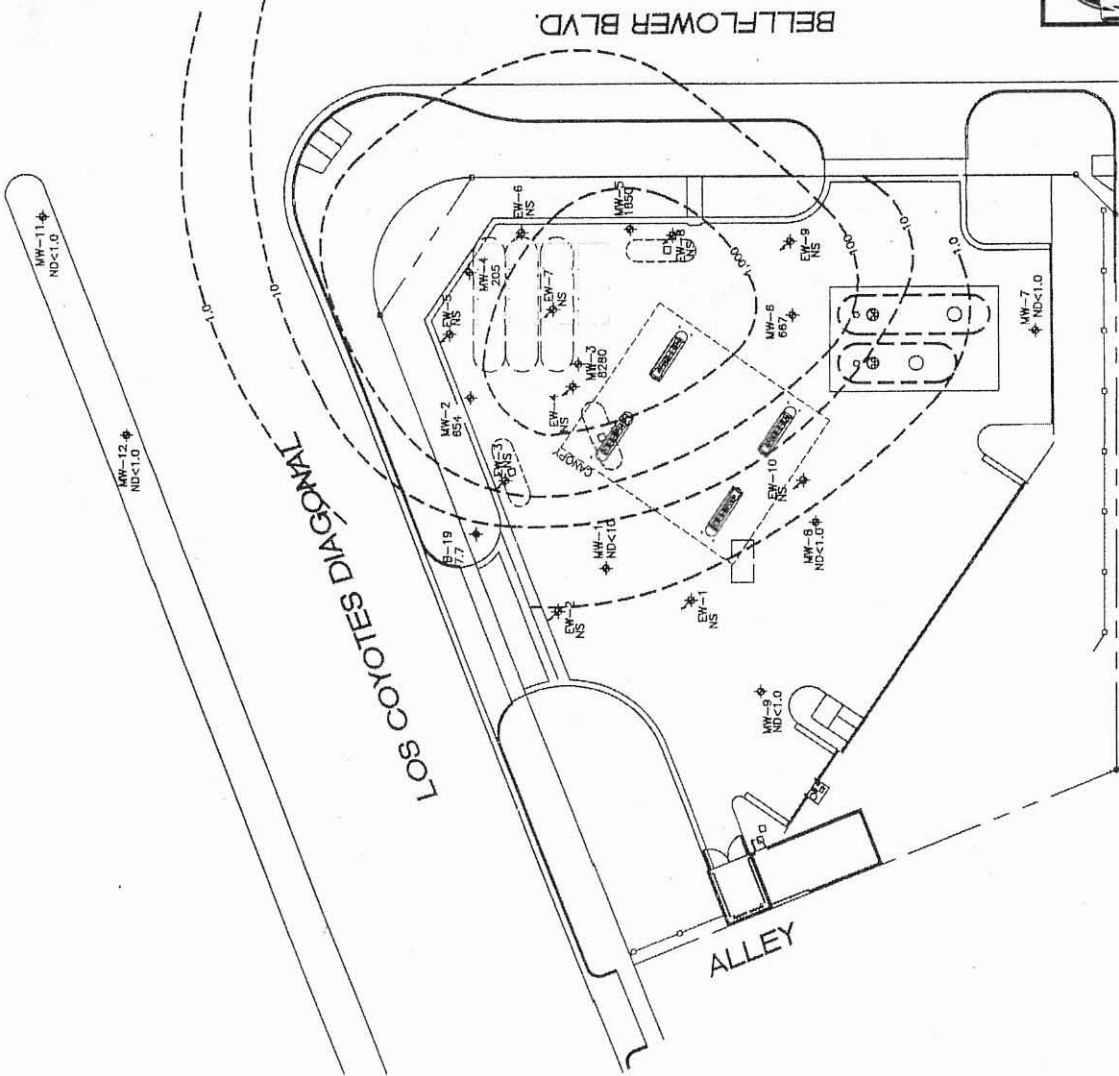
□ FORMER WASTE-OIL TANK (REMOVED MARCH 1999)

□ FORMER DISPENSER ISLAND

□ FORMER UST (REMOVED APRIL 1990)

MW-13
39.1

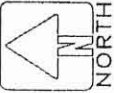
MW-10
16



DATE DRAWN
REV. DATE
CAD FILE
06221BEN

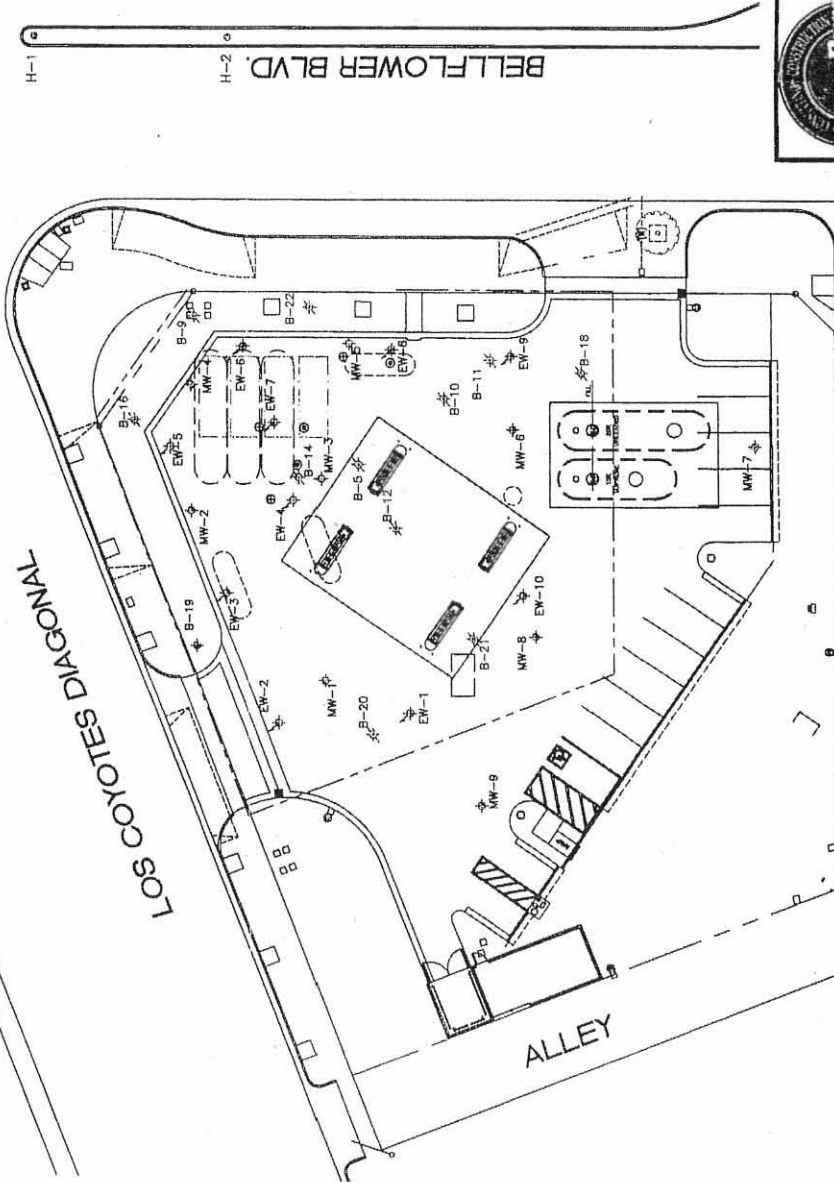
BENZENE CONCENTRATION MAP
APRIL 9, 2012
FORMER SHELL SERVICE STATION
2471 BELFLOWER BLVD.
LONG BEACH, CA

FIGURE NO. **6**
PROJECT NO. 11.239



LEGEND

- B-19 GROUNDWATER MONITORING WELL
- EW-1 GROUNDWATER EXTRACTION WELL
- H-4 GROUNDWATER SAMPLE
- B-20 ABANDONED GROUNDWATER MONITORING WELL
- ⊙ PROPOSED INJECTION POINTS TO 25 FEET
- ⊗ PROPOSED INJECTION POINTS TO 35 FEET
- FORMER UST (REMOVED MARCH 1999)
- FORMER WASTE-OIL TANK (REMOVED MARCH 1999)
- FORMER DISPENSER ISLAND
- FORMER UST (REMOVED APRIL 1990)



DATE DRAWN	REV. DATE
CAO FILE	09567PP

FIGURE NO. **2**

PLOT PLAN

FORMER SHELL SERVICE STATION
2471 BELLFLOWER BLVD.
LONG BEACH, CA

PROJECT NO. 09.567

