



## **Site Background**

Prior to development of the approximate 1.4 acre property into a CVS store and associated parking area, the property was developed with a residence, a liquor store, an auto body shop, a stereo store, and the Rolling Hills Car Wash. A Unocal gasoline station occupied the northeastern portion of the property between the 1940s and the 1970s. The USTs were removed in the late 1970s, and the station was demolished.

Three underground storage tanks (USTs) were located on the car wash property; a 10,000 gallon, an 8,000 gallon, and a 5,000 gallon UST of single-wall steel construction. An unauthorized release of gasoline was reported at the northern end of the 8,000 gallon UST in 1992, and an environmental case was opened. The previous investigations at the site are discussed below. The USTs were removed from the site in 1999 and a “No Further Action” letter was issued by the RWQCB in 2000. The onsite structures were demolished in approximately 2004. A CVS Pharmacy store was constructed on the site in approximately 2006, and is currently operating onsite.

## **Geology and Hydrogeology**

The following geologic and hydrogeologic description is referenced from a 2020 Phase II report for the active gasoline station located at 25808 Narbonne Avenue, prepared by ETIC. This property is east of the site across South Narbonne Avenue at approximately 120 feet above sea level.

*The Site lies in the West Coast Basin on the southern flank of the Torrance Plain, north of the Palos Verdes Hills at an elevation of approximately 120 feet above mean sea level (DWR, 1961). The Torrance Plain extends from the Ballona Gap southwest to the Dominguez Gap, parallel to the Newport-Inglewood uplifted hills and is a broad, featureless area with slight dissection by localized stream channels. The Site is underlain by the Upper Pleistocene marine and non-marine alluvial terrace deposits of the Lakewood Formation. In the area of the Site the Bellflower aquiclude is absent and aquifers present are in hydraulic continuity with the surface. The Gage Aquifer is known to outcrop at the surface in the Site vicinity. The Silverado Aquifer is merged with the Lynwood Aquifer in the vicinity of the Site and is estimated to be penetrated at a depth of approximately 225 feet bgs.*

*Based on previous soil borings advanced at the Site, soil beneath the Site consists of clays, sandy clays, sandy silts, and sands. From ground surface to approximately 8 to 15 feet bgs the*

*lithology primarily consists of clays. Below this clay the lithology consists primarily of a sandy clay with interbedded clays, sands, and silty sands to a depth of approximately 70 feet bgs. The sandy clay is underlain by a primarily sandy unit from approximately 70 feet bgs to the total depth explored, 140 feet bgs. Groundwater was encountered during this investigation at approximately 138 feet bgs. Groundwater flow direction in the vicinity is reportedly to the east (DWR 2014).*

### **Previous Environmental Investigations**

#### **Leak Detection Investigation and Tank Monitoring Program – Aqua Science Engineers, Inc., 1992**

Aqua Science Engineers, Inc. drilled two soil borings to 50 feet below ground surface (bgs), three borings to 20 feet bgs, and two borings to 5 feet bgs in the immediate vicinity of the onsite USTs using a hollow stem drill rig. The 50 foot and 20 foot borings were converted to 20 foot vadose monitoring wells. Soil samples were collected during the investigation and analyzed. No benzene was detected above laboratory reporting limits in any of the 23 collected soil samples. Total petroleum hydrocarbon (TPH), toluene, ethylbenzene, and xylene were detected at maximums of 389 milligrams per kilogram (mg/kg), 14.1 mg/kg, 14.8 mg, and 145 mg/kg, respectively. A vapor monitoring system was installed to detect any future releases from the UST system.

#### **Underground Storage Tank Removal and Closure Report – Blaes Environmental Management, 1999**

In September of 1999, the three onsite USTs (10,000 gallon, 8,000 gallon, and 5,000 gallon) were removed. Soil samples were collected beneath each end of the USTs, and one sample was collected at 4 feet bgs in the dispenser area. The soil sample from the north end of the 8,000 gallon UST contained 33 µg/kg of benzene, and 49 µg/kg of toluene. No other gasoline constituents were detected above laboratory reporting limits with the exception of lead. In August of 2000, the RWQCB issued a “No Further Action” letter for the site.

#### **Results of Geophysical Investigation – Shaw Environmental, 2005**

At the request of CVS, prior to development, a geophysical investigation was conducted at the former Unocal gasoline station site to identify potential USTs, clarifiers, or underground equipment. Two anomalies were detected; one near the northeastern corner of the site, and one near the northern edge of the site. Shaw recommended potholing the areas.

#### **Follow-up to Geophysical Investigation – Shaw Environmental, 2006**

In January of 2006, under the oversight of Shaw Environmental (Shaw), Moine Bros. excavated area of the two anomalies to a depth of four feet using a backhoe. No underground structures

were found, and no odors were detected in the excavated soil.

### **Phase I Environmental Site Assessment Update – Shaw Environmental, 2006**

In January of 2006, Shaw Environmental completed a Phase I report for CVS in connection with redevelopment of the site into a CVS pharmacy and associated parking area. Several Recognized Environmental Conditions were identified at the site including:

- Reviewed records indicated that four USTs were originally located at the car wash site. The site owner stated that the fourth UST (500 gallon waste oil) never existed. The three known USTs were removed in 1999. An application for the removal of a 1,200 gallon dirt and grease separator was also found in the files. The site owner stated that the separator was removed in November of 2004 in compliance with Los Angeles County Department of Public Works, and no sampling was required.
- The former auto body shop contained a spray paint booth. The booth was properly permitted, and Shaw recommended demolition of the shop according to local regulations.
- The empty asphalt lot located in the northeastern portion of the site was formerly a Unocal gasoline station from approximately 1941 to 1978. According to PCH Lomita, LLC., the station was demolished and the three USTs were removed in the 1970s. Shaw conducted potholing on the property in suspect areas identified by a geophysical survey. No USTs or other underground equipment were found. A Tune-Up Masters auto repair shop operated at site up until 2000. One 550 gallon waste oil UST operated at the site until it was removed in 1990. A “No Further Action” letter was issued in 1990. The building which included one hydraulic lift was demolished in 2000.

### **Opinion**

Soil borings were advanced to a maximum of 50 feet bgs at the site as part of a vapor monitoring program in the early 1990s. No benzene was detected above laboratory reporting limits in any of the collected soil samples. As indicated in the discussion above, the gasoline USTs were removed from the site over 20 years ago. One soil sample collected beneath a UST contained trace concentrations of benzene (33 µg/kg) and toluene (49 µg/kg). The detected contaminants do not likely present a significant risk to groundwater, reported at approximately 140 feet bgs in the site area.

The site is located at an approximate elevation of 120 feet above sea level. According to Google Earth, a widely available map program, Lomita Well No. 5 and its associated storage tank are located at an elevation of approximately 190 feet above sea level and 1,380 feet south-southwest

of the site, over ¼ mile away from Lomita Well No. 5.

A site assessment was conducted at an active gasoline station located at 25808 South Narbonne Avenue. The station is across the street from the former car wash site. According to a 2020 report, benzene was detected at 70 feet bgs at a maximum concentration of 130 mg/kg, and the grab groundwater sample contained 62 µg/L of benzene. Depth to first groundwater was approximately 140 feet, and the flow direction in the site vicinity was easterly as reported by the Department of Water Resources in 2014. The consultant recommended installation of a groundwater monitoring well at the site.

The Lomita Sheriff Station, located at 26123 Narbonne Avenue, is an active environmental case. Several USTs were removed from the site in the 1980s and 1990s. Currently there is a 12,000 gallon gasoline/diesel UST and associated dispenser onsite. In December of 2019 as part of a site assessment, a soil boring was advanced to 155 feet bgs about 250 feet east of Lomita Well No. 5 (Figure 2 – TPHg and Benzene Soil Concentration Map). Benzene was detected in eight soil samples above laboratory reporting limits. It is LECs opinion that this site could have impacted Lomita Well No. 5.

The former Chandler Landfill, located at 26311 East Palos Verdes Drive in Rolling Hills Estates, was a 110-acre Inert Debris Engineered Fill Operation on the former site of the Chandler's Palos Verdes Sand & Gravel Company (quarry) from 1969 until operations ceased on 15 June 2015. Typical inert waste includes earth, rock, gravel, broken concrete, asphalt pavement fragments, glass, plaster products (excluding plasterboard), brick, clay and clay products, and inert plastic. Groundwater monitoring was performed at the site between 1988 and 2018. Wells monitored included WRD-1, located approximately 480 feet south-southeast of Lomita Well No. 5. Benzene was not detected in the monitored Former Chandler's Landfill groundwater monitoring wells. Benzene was detected in a sample of water from a spring located upgradient from the Former Chandler's Landfill at a concentration of 0.008 mg/kg in 1988.

Based on the lack of significant benzene concentrations, distance from Lomita Well No. 5, and the reported groundwater flow direction, LEC concludes that the site was not likely a contributor to the benzene contamination detected in Lomita Well No. 5. However, benzene has been documented in the groundwater at sites much closer to Lomita Well No. 5, which had a higher probability of having impacted the well.

### **Recommendation**

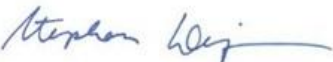
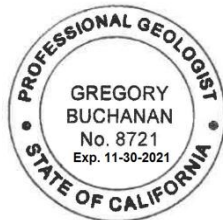
For the reasons outlined above, LEC respectfully requests removal of the former car wash site located at 25825 South Narbonne Avenue from the list of potential responsible parties.

Please let us know if you have any questions regarding this letter.

Sincerely,



Greg Buchanan, P.G.  
Senior Geologist



Stephen Defibaugh, P.G., C.H.G.  
Senior Project Manager

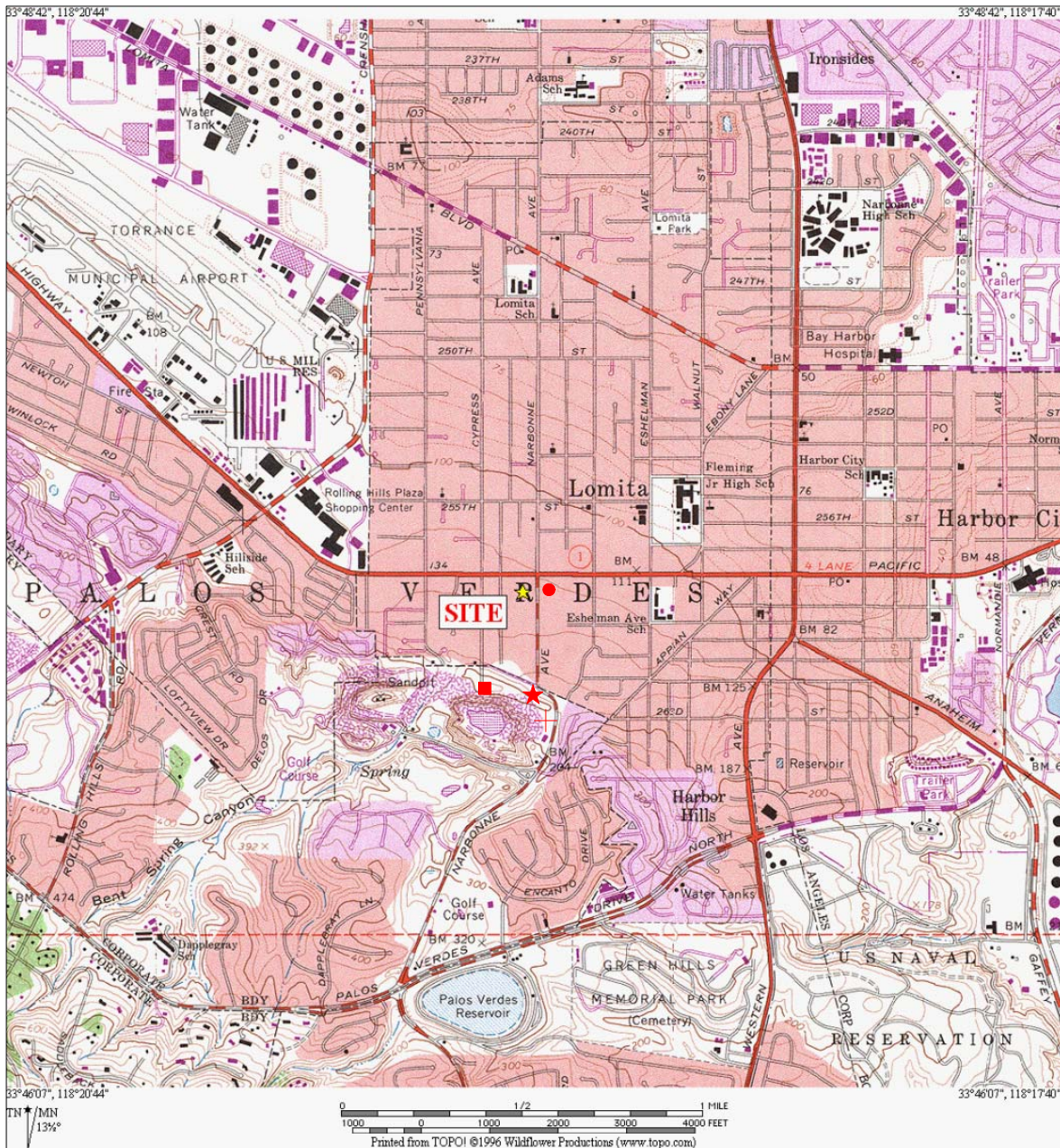
Attachments:

Figure 1 – Site Location Map

Figure 2 – TPH-g and Benzene Soil Concentration Map (Lomita Sheriff Station)

Cc: David Conway (CVS), Fabio Minervini (Terracon)





- Lomita Well No. 5
- Former Mobil Station
- ★ Lomita Sheriff Station
- ✚ Former Chandler Landfill

**Leymaster Environmental Consulting, LLC**

5500 E. Atherton Street, Suite 210  
Long Beach, California 90815

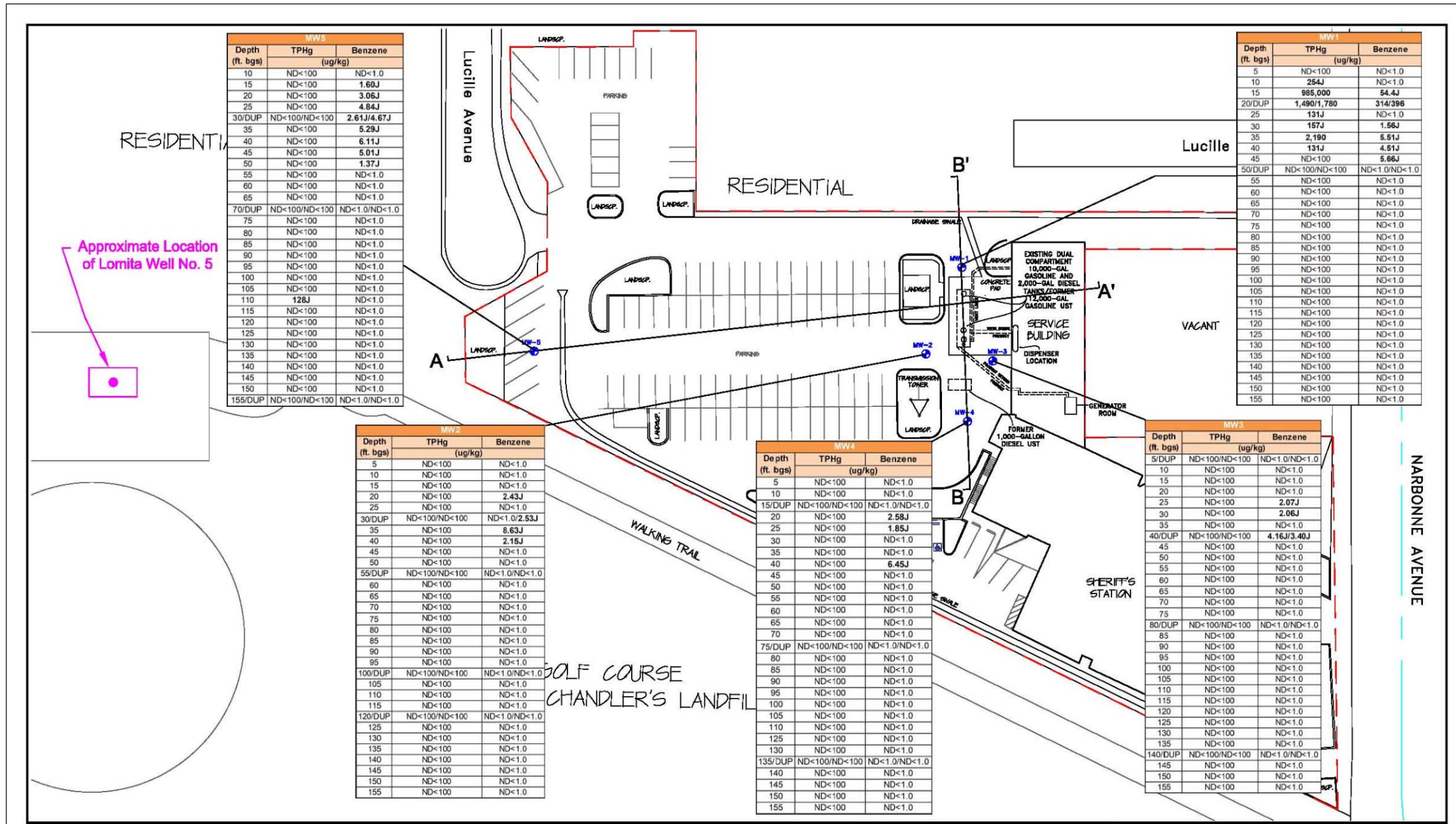
Site Location Map

25825 Narbonne Avenue  
Lomita, California 90717

Figure 1

July 7, 2020





MW5		
Depth (ft. bgs)	TPHg (ug/kg)	Benzene (ug/kg)
10	ND<100	ND<1.0
15	ND<100	1.60J
20	ND<100	3.06J
25	ND<100	4.84J
30/DUP	ND<100/ND<100	2.61J/4.67J
35	ND<100	5.29J
40	ND<100	6.11J
45	ND<100	5.01J
50	ND<100	1.37J
55	ND<100	ND<1.0
60	ND<100	ND<1.0
65	ND<100	ND<1.0
70/DUP	ND<100/ND<100	ND<1.0/ND<1.0
75	ND<100	ND<1.0
80	ND<100	ND<1.0
85	ND<100	ND<1.0
90	ND<100	ND<1.0
95	ND<100	ND<1.0
100	ND<100	ND<1.0
105	ND<100	ND<1.0
110	128J	ND<1.0
115	ND<100	ND<1.0
120	ND<100	ND<1.0
125	ND<100	ND<1.0
130	ND<100	ND<1.0
135	ND<100	ND<1.0
140	ND<100	ND<1.0
145	ND<100	ND<1.0
150	ND<100	ND<1.0
155/DUP	ND<100/ND<100	ND<1.0/ND<1.0

MW1		
Depth (ft. bgs)	TPHg (ug/kg)	Benzene (ug/kg)
5	ND<100	ND<1.0
10	254J	ND<1.0
15	985,000	54.4J
20/DUP	1,490/1,780	314/398
25	131J	ND<1.0
30	157J	1.56J
35	2,190	5.51J
40	131J	4.51J
45	ND<100	5.66J
50/DUP	ND<100/ND<100	ND<1.0/ND<1.0
55	ND<100	ND<1.0
60	ND<100	ND<1.0
65	ND<100	ND<1.0
70	ND<100	ND<1.0
75	ND<100	ND<1.0
80	ND<100	ND<1.0
85	ND<100	ND<1.0
90	ND<100	ND<1.0
95	ND<100	ND<1.0
100	ND<100	ND<1.0
105	ND<100	ND<1.0
110	ND<100	ND<1.0
115	ND<100	ND<1.0
120	ND<100	ND<1.0
125	ND<100	ND<1.0
130	ND<100	ND<1.0
135	ND<100	ND<1.0
140	ND<100	ND<1.0
145	ND<100	ND<1.0
150	ND<100	ND<1.0
155	ND<100	ND<1.0

MW2		
Depth (ft. bgs)	TPHg (ug/kg)	Benzene (ug/kg)
5	ND<100	ND<1.0
10	ND<100	ND<1.0
15	ND<100	ND<1.0
20	ND<100	2.43J
25	ND<100	ND<1.0
30/DUP	ND<100/ND<100	ND<1.0/2.53J
35	ND<100	8.63J
40	ND<100	2.15J
45	ND<100	ND<1.0
50	ND<100	ND<1.0
55/DUP	ND<100/ND<100	ND<1.0/ND<1.0
60	ND<100	ND<1.0
65	ND<100	ND<1.0
70	ND<100	ND<1.0
75	ND<100	ND<1.0
80	ND<100	ND<1.0
85	ND<100	ND<1.0
90	ND<100	ND<1.0
95	ND<100	ND<1.0
100/DUP	ND<100/ND<100	ND<1.0/ND<1.0
105	ND<100	ND<1.0
110	ND<100	ND<1.0
115	ND<100	ND<1.0
120/DUP	ND<100/ND<100	ND<1.0/ND<1.0
125	ND<100	ND<1.0
130	ND<100	ND<1.0
135	ND<100	ND<1.0
140	ND<100	ND<1.0
145	ND<100	ND<1.0
150	ND<100	ND<1.0
155	ND<100	ND<1.0

MW4		
Depth (ft. bgs)	TPHg (ug/kg)	Benzene (ug/kg)
5	ND<100	ND<1.0
10	ND<100	ND<1.0
15/DUP	ND<100/ND<100	ND<1.0/ND<1.0
20	ND<100	2.58J
25	ND<100	1.85J
30	ND<100	ND<1.0
35	ND<100	ND<1.0
40	ND<100	6.45J
45	ND<100	ND<1.0
50	ND<100	ND<1.0
55	ND<100	ND<1.0
60	ND<100	ND<1.0
65	ND<100	ND<1.0
70	ND<100	ND<1.0
75/DUP	ND<100/ND<100	ND<1.0/ND<1.0
80	ND<100	ND<1.0
85	ND<100	ND<1.0
90	ND<100	ND<1.0
95	ND<100	ND<1.0
100	ND<100	ND<1.0
105	ND<100	ND<1.0
110	ND<100	ND<1.0
125	ND<100	ND<1.0
130	ND<100	ND<1.0
135/DUP	ND<100/ND<100	ND<1.0/ND<1.0
140	ND<100	ND<1.0
145	ND<100	ND<1.0
150	ND<100	ND<1.0
155	ND<100	ND<1.0

MW3		
Depth (ft. bgs)	TPHg (ug/kg)	Benzene (ug/kg)
5/DUP	ND<100/ND<100	ND<1.0/ND<1.0
10	ND<100	ND<1.0
15	ND<100	ND<1.0
20	ND<100	ND<1.0
25	ND<100	2.07J
30	ND<100	2.06J
35	ND<100	ND<1.0
40/DUP	ND<100/ND<100	4.16J/3.40J
45	ND<100	ND<1.0
50	ND<100	ND<1.0
55	ND<100	ND<1.0
60	ND<100	ND<1.0
65	ND<100	ND<1.0
70	ND<100	ND<1.0
75	ND<100	ND<1.0
80/DUP	ND<100/ND<100	ND<1.0/ND<1.0
85	ND<100	ND<1.0
90	ND<100	ND<1.0
95	ND<100	ND<1.0
100	ND<100	ND<1.0
105	ND<100	ND<1.0
110	ND<100	ND<1.0
115	ND<100	ND<1.0
120	ND<100	ND<1.0
125	ND<100	ND<1.0
130	ND<100	ND<1.0
135	ND<100	ND<1.0
140/DUP	ND<100/ND<100	ND<1.0/ND<1.0
145	ND<100	ND<1.0
150	ND<100	ND<1.0
155	ND<100	ND<1.0

**LEGEND:**

- - - Approximate Site Boundary
- ⊕ Soil Boring Location (Alta Environmental, December, 2019)
- Approximate Location of Existing/Former Underground Fuel Storage Tanks (UST)

TPHg Total petroleum hydrocarbons as gasoline  
 ND<X Not detected at or above the MDL of "X"  
 ug/kg micrograms per kilogram  
 ft. bgs feet below ground surface

J Analyte was detected; However, concentration is an estimated value detected between the MDL and PQL

A A' Cross section line A - A'

**NORTH**  
 APPX. SCALE: 1" = 50'

**FIGURE 3: TPH-g and Benzene Soil Concentration Map**  
 CLIENT: County of Los Angeles Department of Public Works  
 DRAWN: BP APPROVED: BR  
 APPX. SCALE: 1"=50' Date: January 2020  
 SITE: Lomita Sheriff Station 26123 Narbonne Avenue Lomita, California  
 PROJECT NO.: LAPW-19-9116  
 ALTA ENVIRONMENTAL  
 3777 Long Beach Blvd., Annex Bldg., Long Beach CA 90807  
 P: (562) 485-5777 F: (562) 485-5877 E: alta@alton.com

SOURCE: ALTA ENVIRONMENTAL, JANUARY 2020

**Leymaster Environmental Consulting, LLC**  
 5500 East Atherton Street  
 Suite 210  
 Long Beach, California 90815

TPH-g and Benzene Soil Concentration Map  
 Lomita Sheriff Station  
 26123 Narbonne Avenue  
 Lomita, California  
 Figure 2 July 7, 2020