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By Alameda County Environmental Health 10:14 am, Oct 13, 2016

October 5, 2016

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: Kerry & Associates – Palace Garage
14336 Washington Avenue
San Leandro, California
ACEH Case No. RO0000208

Dear Mr. Detterman,

I declare, under penalty of perjury, that the information and/or recommendations contained in the **Third Quarter 2016 Groundwater Monitoring Report** is true and correct to the best of my knowledge.

Sincerely,

Mr. Jeffrey Kerry

October 5, 2016

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

RE: THIRD QUARTER 2016 GROUNDWATER MONITORING REPORT – PALACE GARAGE
14336 Washington Boulevard
San Leandro, California
ACEH Case # RO0000208, SFRWQCB Case # 01-1133

Dear Mr. Detterman:

On behalf of Kerry & Associates, INNOVEX Environmental Management Inc. (INNOVEX) has prepared this Third Quarter 2016 Groundwater Monitoring Report (Report) for the Palace Garage facility (the Site) located at 14336 Washington Avenue in San Leandro, California (Figure 1).

1.0 SITE BACKGROUND SUMMARY

A 550-gallon gasoline underground storage tank (UST) was removed from the Site in 1991. Subsequent investigations included the installation of three monitoring wells (MW-1 through MW-3) and the drilling of 15 borings (B-1 through B-15). Based on data obtained from the wells and borings, impacted unsaturated-zone soil is confined to the area of the former dispenser pad and UST. The primary groundwater flow direction is toward the southwest.

In December 2002, Professional Service Industries, Inc. (PSI) conducted a soil and groundwater investigation to evaluate the lateral extent of petroleum hydrocarbons in the soil and groundwater at the Site. Borings B-16 and B-17 were advanced to between 20 and 24 feet below ground surface (bgs). Boring B-16 was converted into monitoring well MW-4. Concentrations of total petroleum hydrocarbons as gasoline (TPHg) and gasoline related contaminants were detected only in soil from boring B-17 and groundwater from wells MW-1 and MW-2. The locations of the monitoring wells and soil borings are shown on Figure 2.

Closure Solutions, Inc. (Closure Solutions) conducted a Sensitive Receptor Survey to identify all water supply wells and sensitive receptors within a 2,000-foot radius of the Site. The closest water supply wells are two industrial wells approximately 450 feet northwest (cross-gradient) of the Site. The closest domestic well is approximately 1,500 feet southeast (cross-gradient) of the Site. The closest downgradient well is an irrigation well approximately 1,400 feet southwest of

the Site. No surface water bodies were identified within a 2,000 foot radius of the Site. Results of the survey were presented in the *Sensitive Receptor Survey* report dated August 27, 2008.

Closure Solutions prepared and submitted a *Site Conceptual Model* (SCM) dated September 30, 2008 for the Site. Alameda County Environmental Health (ACEH) requested the preparation of the SCM in their letter dated September 2, 2008.

In an email dated June 12, 2009, Mr. Steve Plunkett with the ACEH approved the reduction of groundwater monitoring frequency to a semi-annual basis conducted in second and fourth quarters. Mr. Plunkett also approved the recommendation to eliminate fuel oxygenates from the suite of laboratory analytes.

On October 15, 2009, Closure Solutions discussed the Site status with ACEH. Data gaps discussed in the SCM and other information that ACEH would require for Site closure were identified. Closure Solutions submitted a *Soil Vapor Probe and Additional Assessment Work Plan* on November 13, 2009 to address the work necessary to move the Site toward closure.

On May 14, 2010, Closure Solutions submitted a letter to the ACEH stating that they intended to proceed with the proposed scope of work pursuant to CCR Title 23, Division 3, Chapter 16, Section 2722 (e) which states, "Implementation of the proposed work plan may begin sixty (60) calendar days after submittal, unless the responsible party is otherwise directed in writing by the regulatory agency". On May 21, 2010, the ACEH responded to Closure Solutions' letter of intent via email explaining that the ACEH had been largely precluded from generating letters on cases due to the workload imposed by SWRCB Resolution 2009-0042, and they would attempt to shorten the review interval for the Site.

On July 26, 2010, a representative from Closure Solutions was on Site to oversee the installation and sampling of three temporary soil vapor probes (SV-1 through SV-3) and advancement of one down-gradient soil boring (SB-18). A *Soil Vapor Testing and Additional Assessment Report* describing field activities and discussing soil and soil vapor analytical results was submitted to the ACEH on August 30, 2010.

On January 24, 2012, Closure Solutions supervised the advancement of two soil borings, collection of additional soil and groundwater data, and installation of wells MW-5 and MW-6. The work was completed in order undertake further corrective actions at the Site. Collected soil and groundwater samples were analyzed for gasoline range organics (GRO), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Additionally, bio-attenuation parameters were analyzed for groundwater collected from well MW-5. A discussion of analytical results was presented in the *Groundwater Monitoring Well Installation Report* submitted on March 30, 2012.

After completing the monitoring well installation, a dual-phase extraction (DPE) pilot test was performed between February 21 and 25, 2012. The pilot test was conducted to evaluate whether DPE would be a viable technology to remediate soil and groundwater beneath the Site. High groundwater extraction rates were encountered during pilot testing conducted from MW-1. As a result, subsurface soils could not be effectively dewatered to allow remediation via vapor extraction. Pilot testing from well MW-6 produced average groundwater extraction rates that were roughly two-thirds less than those observed during testing from MW-1. Subsequently, the

technology was successful in lowering the groundwater table near well MW-6 and exposing the capillary fringe or "smear" zone. Based on the results of testing performed from MW-6, DPE appears to be a viable option for Site remediation. Results of the DPE test were presented in Closure Solutions' April 13, 2012 *Dual-Phase Extraction Pilot Test Report*.

On October 9, 2012, the well boxes for monitoring wells MW-1, MW-2, MW-5 and MW-6 were re-set as part of repaving activities conducted in the alley between the Site building and adjacent building. Boxes for MW-1, MW-2, and MW-6 were elevated an average of 1.5 inches to assure the boxes were above the new grade elevations. Well box MW-5 had to be lowered approximately 3 inches. Because of the elevation drop, the well casing had to be cut down 3 inches for it to fit inside the repositioned well box. The well top-of-casing elevation was re-surveyed on October 11, 2012 to assure future measured groundwater elevations are consistent with historical data.

On April 10, 2013, Closure Solutions submitted a *Revised Draft Corrective Action Plan Addendum* (Draft CAP Addendum) to the ACEH that presented an evaluation of hydrocarbon impacts to soil and groundwater beneath the Site, and evaluated and compared remedial alternatives to address cleanup of the impacts. DPE was selected as the most effective remedial alternative. Details and procedures for the installation, operation, and evaluation of a temporary DPE system were included in the Draft CAP Addendum.

On May 29, 2013, the ACEH issued a letter requesting a *Data Gap Investigation Work Plan and Focused Site Conceptual Model* (Work Plan) to be prepared. The Work Plan was requested to address data gaps identified during an ACEH review of the environmental case under the State Water Resource Control Board's Low Threat Underground Storage Tank Case Closure Policy (LTCP). On June 28, 2013, Closure Solutions submitted the Work Plan as directed. Closure Solutions proposed advancing four soil borings within the source area to collect shallow soil and soil vapor samples. Fieldwork for the proposed investigation was completed in early October 2013.

On November 22, 2013, INNOVEX submitted a *Data Gap Investigation Report* that described investigation activities, evaluated data, and provided conclusions and recommendations. Based on soil data collected from zero to 10 feet bgs, concentrations of TPHg/GRO and naphthalene near the former dispenser island appear to increase with depth; however, BTEX concentrations are consistently low. A review of benzene, ethylbenzene, and naphthalene concentrations against LTCP criteria for vapor intrusion to indoor air indicated the constituents exceed their associated screening criteria for a commercial land use scenario with no bioattenuation zone. Additionally, soil data from zero to 10 feet bgs indicated benzene, ethylbenzene, and naphthalene are below the LTCP established criteria for direct contact and volatilization to outdoor air in commercial/industrial land use and utility worker scenarios.

On January 21, 2014, the ACEH issued a letter directing preparation of a revised Draft Corrective Action Plan (CAP) and Fact Sheet for public notification of the Draft CAP based on results of the November 2013 investigation. A completion date of March 28, 2014 for submittal of the Draft CAP was established by ACEH. However, due to budget constraints and the denial of a budget increase change order request for fiscal year 2013/2014 by the State Underground Storage Tank

Cleanup Fund, the ACEH approved an extension on the Draft CAP submittal date with a new submittal date of September 2, 2014.

After approval of the budget change order in May 2014, Closure Solutions prepared and submitted an *Interim Remedial Action Plan* (IRAP) on June 30, 2014. The IRAP detailed a scope of work to perform secondary source area removal via excavation. ACEH staff indicated, as part of their June 11, 2014 directive letter, that Interim Remedial Actions appear appropriate in order to mitigate the risk of vapor intrusion and expeditiously move the Site towards closure. ACEH staff with some modifications on August 14, 2014 approved the IRAP.

Between May 15 and 29, 2015, interim remedial field activities were conducted at the Site to remove a secondary source of hydrocarbon impacted soil remaining in the vicinity of the former UST location and close data gaps in the LTCP closure review identified by ACEH staff. Field activities consisted of excavating hydrocarbon-impacted soil to the extent practicable within pre-defined limits. The total depth of the excavation was approximately 16 feet below ground surface (bgs).The open excavation was then backfilled with pre-approved aggregate base rock, and resurfaced to match existing Site conditions.

Analytical results from sidewall and floor confirmation soil samples collected post-excavation indicated that the bulk of the secondary source was removed, with minimal concentrations of petroleum hydrocarbons remaining at a depth of approximately 16 feet bgs. INNOVEX expects that residual hydrocarbon concentrations remaining in soil will attenuate within a reasonable period. Based on the results of the confirmation soil samples, the secondary source and risk of vapor intrusion to adjacent buildings has been mitigated. ACEH has indicated that upon completion of excavation activities and submittal of the IRAR, the environmental case associated with the Site would be evaluated for closure.

On September 24, 2015 and October 23, 2015 the ACEH issued letters directing semi-annual post-interim remedial action groundwater monitoring for one year to verify effective removal of the majority of contaminated soil. The letters also described concerns that a potential for vapor intrusion to the building at the subject Site may still exist. As such, the ACEH directed resampling of soil vapor probe SV-4 to verify recent interim remedial actions were successful. Since all Site soil vapor probes were destroyed during excavation field activities performed in May 2015, installation and sampling of two new sub-slab soil vapor probes within the building was completed in March 2016 to directly measure vapor intrusion to the building. Soil vapor concentrations were below the associated LTCP screening criteria for vapor intrusion to indoor air in a commercial/industrial land use. Based on the available data, the excavation of the hydrocarbon-impacted soil was successful in reducing threats to human health and the environment.

On May 5, 2016, the First Semi-Annual groundwater monitoring event was performed at the Site and groundwater samples were collected for the first time after soil excavation activities took place. Sample results indicated that hydrocarbon concentrations in all wells rose, including several wells in excess of an order of magnitude, above the previous semi-annual sampling event. The increase in hydrocarbon concentrations may be the result of the disturbance of soil from the May 2015 remedial excavation work, from a seasonal rise in groundwater elevation, or from a combination of these two factors.

On June 30, 2016, the ACDEH issued a letter acknowledging that based on the results of the sub-slab vapor sampling, soil vapor intrusion does not appear to be a concern at the Site. Furthermore, ACDEH recognized the increase in groundwater concentrations and indicated that the observed elevated concentration will need to be verified over subsequent sampling events. The results would help determine if additional contamination remains beneath the Site that will continue to influence groundwater. Therefore, ACDEH recommended the groundwater monitoring intervals be changed from semi-annual to quarterly for minimum of one quarter in order to observe contaminant concentration trends in groundwater. A copy of ACDEH's June 6, 2016 letter is included in Attachment A.

2.0 WORK PERFORMED AND WORK PROPOSED

Following is a summary of work performed during the Third Quarter 2016 and work proposed for the Fourth Quarter of 2016:

WORK PERFORMED THIS THIRD QUARTER:	
1	Performed the Third Quarter 2016 groundwater monitoring event on August 17, 2016.
2	Prepared and submitted this Third Quarter 2016 Groundwater Monitoring Report.
WORK PROPOSED FOR NEXT QUARTER:	
1	Perform a Fourth Quarter 2016 groundwater monitoring event.

3.0 DISCUSSION OF RECENT ACTIVITIES

The Third Quarter 2016 groundwater monitoring event took place on August 17, 2016. Gauging, purging, and sampling were conducted in accordance with INNOVEX's Standard Operating Procedures (included in Attachment B). The collected groundwater samples were submitted to SunStar Laboratories of Lake Forest, California (SunStar) for laboratory analysis under Chain-of-Custody protocols. The samples were analyzed for gasoline range organics (GRO), benzene, toluene, ethylbenzene and xylenes (BTEX), and naphthalene by EPA Method 8260B.

Following is a summary of the current status of the environmental program at the Site:

Current Phase Of Project:	**Monitoring**
Groundwater Monitoring & Sampling:	Third Quarter: MW-1 through MW-5, (MW-6 was destroyed on May 15, 2015)
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Excavation performed in May 2015

Following is a summary of this period's field and analytical data:

Average Depth to GW (in feet below top of casing):	14.91
Groundwater Elevation (in feet above mean sea level [msl):	22.04 (MW-5) to 22.62 (MW-1)
Groundwater Gradient (direction):	Southwest
Groundwater Gradient (magnitude):	0.004 feet per foot
Reported GRO concentration range:	ND <50 µg/L (MW-4, MW-5) to 7,900 µg/L (MW-2)
Reported benzene concentration range:	ND <0.50 µg/L (MW-3, MW-4, MW-5) to 82 µg/L (MW-2)
Reported toluene concentration range:	ND <0.50 µg/L (MW-3, MW-4, MW-5) to 4.2 µg/L (MW-2)
Reported ethylbenzene concentration range:	ND <0.50 µg/L (MW-4, MW-5) to 83 µg/L (MW-2)
Reported xylene concentration range:	1.3 µg/L (MW-3) to 30.7 µg/L (MW-1)
Reported naphthalene concentration range:	ND <1.0 µg/L (MW-3, MW-4, MW-5) to 8.2 µg/L (MW-2)

Laboratory procedures, chain of custody records, and the certified analytical reports are included as Attachment C. Groundwater elevation and analytical data are summarized on Figure 2 and Table 1.

Purge water generated during the monitoring and sampling event was stored onsite in a 55-gallon drum pending characterization and disposal. Water will be removed by a licensed waste transporter and disposed of at an appropriate treatment facility.

4.0 CONCLUSIONS AND RECOMMENDATIONS

INNOVEX notes that groundwater levels measured in Site wells during this most recent monitoring event decreased approximately 1.5 feet below the levels measured during the previous monitoring event conducted in May 2016. Petroleum hydrocarbon concentrations decreased by one to three orders of magnitude from those reported during the May 2016 event. The highest hydrocarbon concentrations were detected in MW-2, with concentrations decreasing significantly to very low to non-detectable levels downgradient of this well. This indicates that the plume is defined to the south, southwest, and northwest, and is stabilized and not migrating off site. INNOVEX recommends performing one more groundwater monitoring event at the Site during the Fourth Quarter 2016 to verify chemical concentration trends in response to seasonal groundwater elevation fluctuations. If the concentrations continue to exhibit decreases or, at least have stabilized, we will request that case closure be granted.

5.0 LIMITATIONS

This report is based on Site conditions, data, and other information available as of the date of the report, and the conclusions and recommendations herein are applicable only to the time frame in which the report was prepared. Background information used to prepare this report including, but

not limited to, previous field measurements, analytical results, Site plans and other data have been furnished to INNOVEX by Kerry & Associates and as available on the GeoTracker database. INNOVEX has relied on this information as furnished, and is neither responsible for nor has confirmed the accuracy of this information.

If you have any questions regarding this submission, please feel free to contact the undersigned at (925) 566-8567 or email Tom.Sparrowe@innovex.net.

Sincerely,

INNOVEX Environmental Management, Inc.

Thomas Sparrowe

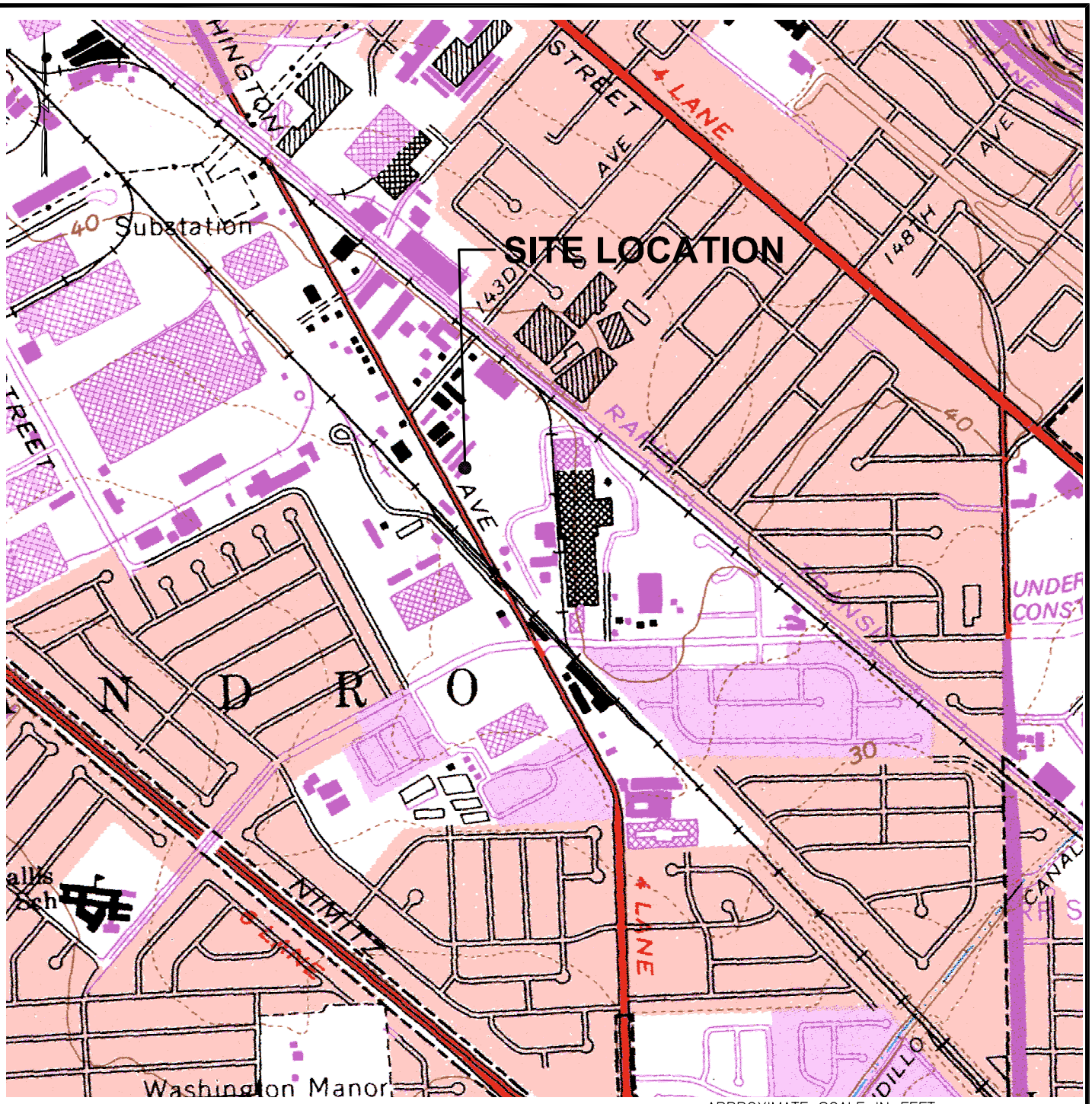
Thomas Sparrowe, PG
Principal Geologist

ATTACHMENTS:

Figure 1	Site Location Map
Figure 2	Third Quarter 2016 Groundwater Contour Map – August 17, 2016
Table 1	Groundwater Elevation and Analytical Data
Attachment A	ACEH Correspondence
Attachment B	Field Procedures and Field Data Sheets
Attachment C	Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records

cc: Mr. Jeff Kerry, Kerry & Associates
Mr. Gerald Donnelly

FIGURES



REFERENCE:
USGS 7.5 MIN QUAD MAP TITLED:SAN LEANDRO, CALIFORNIA DATED: 1959 REV: 1980

FIGURE 1

SITE LOCATION MAP

PALACE GARAGE
14336 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

INNOVEX
ENVIRONMENTAL MANAGEMENT, INC.
3900 Lennane Drive • Suite 130
Sacramento • California •95834
Phone: (800) 988-7880

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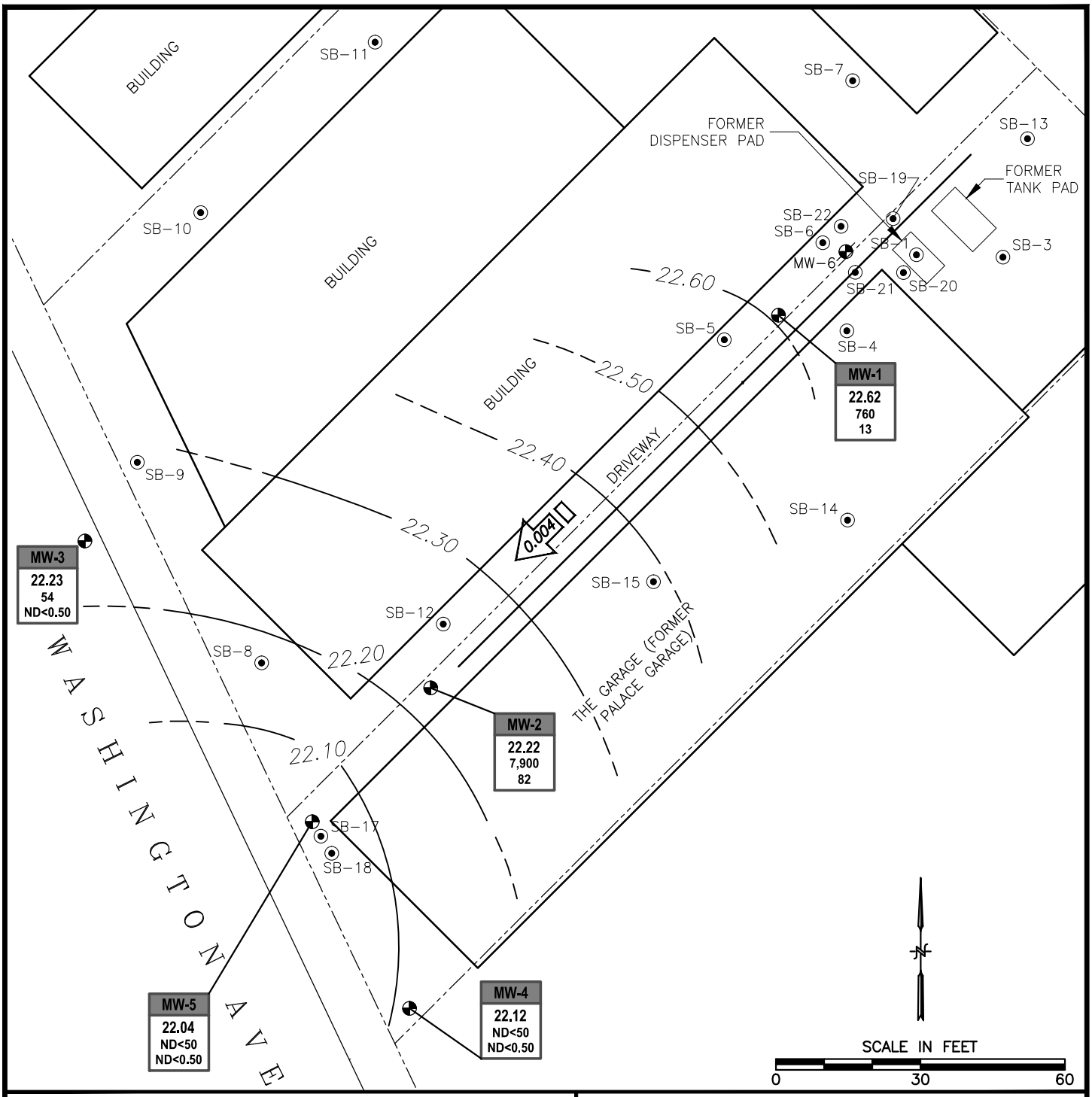


LEGEND:

- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- WELL DESIGNATION
- GROUNDWATER ELEVATION (FT ABOVE MSL)
- GRO, BENZENE, and MTBE CONCENTRATIONS (µg/L)
- 20.0 GROUNDWATER ELEVATION CONTOURS (FEET ABOVE MEAN SEA LEVEL– NAVD 88)
- 0.01 GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/FT)
- < NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIITS

WELL
ELEV
GRO
BENZENE

NOTES:

1. BASEMAP SOURCE: MORROW SURVEYING 02/05/03

FIGURE 2

THIRD QUARTER 2016 GROUNDWATER CONTOUR MAP AUGUST 17, 2016

PALACE GARAGE
14336 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

INNOVEX
ENVIRONMENTAL MANAGEMENT, INC.
2300 Clayton Road ● Suite 1435
Concord ● California ● 94520
Phone: (800) 988-7880

TABLES

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg/ GRO (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)
MW-1	12/31/2002	37.59	13.62	23.97	48,000	1,030	2,380	1,690	9,220	---
	9/22/2006		13.33	24.26	44,000	870	2,200	720	9,700	---
	12/21/2006		13.94	23.65	17,000	240	980	180	5,000	---
	3/29/2007		13.71	23.88	2,000	30	85	23	550	---
	9/27/2007		15.53	22.06	540	14	3.9	44	87	---
	12/20/2007		15.69	21.90	280	4.3	1.3	15	37	---
	2/21/2008		13.72	23.87	19,000	300	150	1,100	4,900	---
	5/15/2008		14.60	22.99	7,200	140	50	370	2,040	---
	8/7/2008		15.62	21.97	820	13	3.1	44	100	---
	11/13/2008		16.14	21.45	670	10	2.1	31	110	---
	6/19/2009		15.15	22.44	1,490	85.8	13.4	164	310	---
	11/3/2009		15.98	21.61	75	6.0	0.70	12	40.5	---
	5/4/2010		13.40	24.19	18,000	300	61	880	4,070	---
	11/8/2010		15.83	21.76	170	4.9	ND<0.50	7.7	24	---
	4/22/2011		12.34	25.25	3,800	250	48	810	3,260	---
	12/15/2011		14.77	22.82	1,500	21	0.88	29	4.6	---
	5/9/2012		13.56	24.03	20,000	190	27	810	3,150	---
	11/8/2012		15.68	21.91	630	2.8	1.4	30	51.9	---
	2/7/2013		13.99	23.60	---	---	---	---	---	---
	5/2/2013		14.65	22.94	2,000	79	13	580	1,780	180
	9/6/2013		15.96	21.63	---	---	---	---	---	---
	2/7/2014		16.75	20.84	740	3.0	ND<0.50	19	31	3.7
	9/16/2014		17.01	20.58	590	6.7	ND<0.50	18	24	3
	11/10/2015		16.95	20.64	1,300	32.0	3.0	82	47.4	18
	5/5/2016		13.40	24.19	24,000	100	23	1,800	3,850	580
	8/17/2016		**14.97**	**22.62**	**760**	**13**	**0.88**	**32**	**30.7**	**5.5**

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg/ GRO (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)
MW-2	12/31/2002	37.12	13.38	23.74	1,670	1,030	11.00	23	16.4	---
	9/22/2006		13.25	23.87	1,800	53	1.40	14	7.5	---
	12/21/2006		13.89	23.23	--	--	--		--	---
	3/29/2007		13.57	23.55	2,100	51	1.30	--	4.5	---
	9/27/2007		15.37	21.75	1,600	58	0.99	12	3.7	---
	12/20/2007		15.40	21.72	1,500	63	1.1	16	4.9	---
	2/21/2008		13.60	23.52	710	23	ND<0.50	6.2	1.1	---
	5/15/2008		14.47	22.65	1,600	84	1.4	28	9.8	---
	8/7/2008		15.48	21.64	2,100	86	1.6	22	9.0	---
	11/13/2008		15.99	21.13	2,300	46	1.1	15	4.5	---
	6/19/2009		15.03	22.09	931	60.1	ND<2.0	30	3.1	---
	11/3/2009		15.87	21.25	220	22	0.55	9.4	5.05	---
	5/4/2010		12.92	24.20	950	14	0.57	9.1	13.2	---
	11/8/2010		15.71	21.41	1,900	45	1.6	44	9.28	---
	4/22/2011		12.27	24.85	1,400	30	1.2	29	5.78	---
	12/15/2011		14.86	22.26	4,300	160	26	480	790	---
	5/9/2012		13.44	23.68	4,300	21	0.65	23	7.77	---
	11/8/2012		15.54	21.58	1,700	68	2.6	63	14.4	---
	2/7/2013		13.90	23.22	---	---	---	---	---	---
	5/2/2013		14.55	22.57	2,700	140	2.9	130	9.34	790
	9/6/2013		15.81	21.31	---	---	---	---	---	---
	2/7/2014		16.68	20.44	1,100	78	1.2	28	30	190
	9/16/2014		16.90	20.22	1,500	46	ND<0.50	18	1.2	26
	11/10/2015		16.85	20.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	5/5/2016		13.30	23.82	10,000	27	1.0	17	ND<1.5	8.0
	8/17/2016		**14.90**	**22.22**	**7,900**	**82**	**4.2**	**83**	**6.1**	**8.2**

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg/ GRO (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)
MW-3	12/31/2002	37.01	13.29	23.72	<50	<0.5	<0.5	<0.5	<1.0	---
	9/22/2006		13.14	23.87	<50	<0.5	<0.5	<0.5	<1.5	---
	12/21/2006		--	--	--	--	--	--	--	---
	3/29/2007		13.47	23.54	<50	<0.5	<0.5	<0.5	<1.5	---
	9/27/2007		15.29	21.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	12/20/2007		15.30	21.71	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	2/21/2008		---	---	---	---	---	---	---	---
	5/15/2008		14.35	22.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
	8/7/2008		15.39	21.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	11/13/2008		15.90	21.11	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	6/19/2009		14.94	22.07	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<2.0	---
	11/3/2009		15.76	21.25	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
	5/4/2010		13.20	23.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	11/8/2010		15.62	21.39	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	4/22/2011		12.17	24.84	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	12/15/2011		14.63	22.38	150	1.5	ND<0.50	3.0	12.2	---
	5/9/2012		13.36	23.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	11/8/2012		15.48	21.53	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	2/7/2013		13.79	23.22	---	---	---	---	---	---
	5/2/2013		14.41	22.60	75	ND<0.50	ND<0.50	ND<0.50	ND<1.50	ND<1.0
	9/6/2013		15.74	21.27	---	---	---	---	---	---
	2/7/2014		16.50	20.51	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	9/16/2014		16.76	20.25	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	11/10/2015		17.70	19.31	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	5/5/2016		13.20	23.81	460	ND<0.50	ND<0.50	ND<0.50	ND<1.5	2.2
	8/17/2016		**14.78**	**22.23**	**54**	**ND<0.50**	**ND<0.50**	**0.67**	**1.3**	**ND<1.0**

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg/ GRO (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)
MW-4	12/31/2002	37.09	13.45	23.64	<50	<0.5	<0.5	<0.5	<1.0	---
	9/22/2006		13.40	23.69	<50	<0.5	<0.5	<0.5	<1.5	---
	12/21/2006		13.86	23.23	<50	<0.5	<0.5	<0.5	<1.5	---
	3/29/2007		13.69	23.40	<50	<0.5	<0.5	<0.5	<1.5	---
	9/27/2007		15.48	21.61	ND<50	1.5	ND<0.50	0.71	0.74	---
	12/20/2007		15.28	21.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	2/21/2008		13.56	23.53	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
	5/15/2008		14.58	22.51	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
	8/7/2008		15.57	21.52	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	11/13/2008		16.09	21.00	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
	6/19/2009		15.15	21.94	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<2.0	---
	11/3/2009		16.03	21.06	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---
	5/4/2010		13.11	23.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	11/8/2010		15.89	21.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	4/22/2011		12.40	24.69	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	12/15/2011		15.03	22.06	86	ND<0.50	ND<0.50	ND<0.50	1.3	---
	5/9/2012		13.51	23.58	ND<50	ND<0.50	0.84	ND<0.50	ND<1.5	---
	11/8/2012		15.64	21.45	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	---
	2/7/2013		13.98	23.11	---	---	---	---	---	---
	5/2/2013		14.61	22.48	68	ND<0.50	ND<0.50	ND<0.50	ND<1.50	ND<1.0
	9/6/2013		15.90	21.19	---	---	---	---	---	---
	2/7/2014		16.69	20.40	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	9/16/2014		16.97	20.12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	11/10/2015		16.89	20.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	5/5/2016		13.40	23.69	570	0.59	1.0	1.8	4.1	2.3
	8/17/2016		**14.97**	**22.12**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<1.5**	**ND<1.0**

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg/ GRO (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)
MW-5	2/2/2012	37.27	15.06	22.21	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.50	---
	5/9/2012		13.68	23.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.50	---
	resurvey 10/11/12	36.96								---
	11/8/2012		15.62	21.34	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.50	---
	2/7/2013		13.91	23.05	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.50	ND<1.5
	5/2/2013		14.56	22.40	82	ND<0.50	ND<0.50	ND<0.50	ND<1.50	ND<1.5
	9/6/2013		15.87	21.09	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.50	ND<1.5
	2/7/2014		16.70	20.26	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	9/16/2014		16.96	20.00	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	11/10/2015		16.88	20.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	5/5/2016		13.34	23.62	1,000	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<1.0
	8/17/2016		**14.92**	**22.04**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<1.5**	**ND<1.0**
MW-6	2/2/2012	37.34	14.63	22.71	17,000	340	57	1,900	2,100	---
	5/9/2012		13.26	24.08	34,000	170	310	1,700	3,920	---
	11/8/2012		15.36	21.98	9,700	210	270	2,800	3,320	---
	2/7/2013		13.63	23.71	7,700	250	240	2,800	4,790	1,100
	5/2/2013		14.35	22.99	16,000	82	36	1,200	1,050	490
	9/6/2013		15.64	21.70	19,000	130	61	1,900	1,480	830
	2/7/2014		16.62	20.72	13,000	46	13	550	224	290
	9/16/2014		16.70	20.64	5,400	78	14	780	282	410
					Destroyed May 15, 2015					

Table 1
Groundwater Elevation and Analytical Data
Palace Garage
14336 Washington Avenue
San Leandro, California

Well ID	Date Sampled	Casing Elevation (Feet MSL)	Depth To Water (Feet)	Groundwater Elevation (Feet)	TPHg (mg/L)	B (mg/L)	T (mg/L)	E (mg/L)	X (mg/L)	Naphthalene (mg/L)

ABBREVIATIONS:

TPHg/ GRO	total petroleum hydrocarbons as gasoline. Gasoline range organics
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
mg/L	Micrograms per liter (parts per billion [ppb])
---	Not analyzed/measured/applicable
ND<	Not detected at or above specified laboratory reporting limit
Bold	Current sampling event
MSL	mean sea level

LIMITATIONS:

Background information, including but not limited to previous field measurements, analytical results, Site plans, and other data have been obtained from previous consultants, and/or third parties, in the preparation of this report. Closure Solutions has relied on this information as furnished. Closure Solutions is not responsible for, nor has it confirmed the accuracy of data collected or generated by others.

ATTACHMENT A
ACDEH CORRESPONDENSE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 30, 2016

Mr. Jeff Kerry
Kerry & Associates
151 Callan Avenue, Suite 300
San Leandro, CA 94577
(sent via electronic mail to:
djkerry1@aol.com)

Mr. Jeffery Kerry
Jeffery & Dolores Kerry Trust & Jame Donnelley et. al.
19655 North Ripon Road
Ripon, CA 95366

Subject: Groundwater Monitoring and EDF Submittals; Fuel Leak Case No. RO00000208; Palace Garage (Global ID #T0600101043), 14336 Washington Avenue, San Leandro, CA 94578

Dear Mr. Kerry:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the *Sub-Slab Soil Vapor Investigation Report,* dated April 22, 2016, and the *Semi-Annual 2016 Groundwater Monitoring Report – Palace Garage,* dated June 10, 2016. The reports were submitted on your behalf by Innovex Environmental Solutions, Inc (Innovex). Thank you for submitting them.

Due to site specific limitations sub-slab vapor sampling was conducted in lieu of the installation of vapor sampling points at a depth of five feet below the building foundation as called for in the State Water Board's Low Threat Closure Policy. However, the results of the sub-slab vapor points indicates that soil vapor intrusion, including risk of explosion related to methane concentrations produced as the result of the degradation of hydrocarbons in the subsurface, does not appear to be a concern at the site.

Conversely, groundwater concentrations in all wells rose, including several wells in excess of an order of magnitude, above the previous semi-annual sampling event. Groundwater concentrations in well MW-1 rose from 1,300 milligrams per liter (µg/l) Total Petroleum Hydrocarbons as gasoline (TPHg) to 24,000 µg/l. The *Technical Justification for Vapor Intrusion Media-Specific Criteria*, March 21, 2012, State Water Board), indicates that concentrations of this magnitude are indirect evidence of Light Non-Aqueous Phase Liquid (LNAPL). Additionally, the highest previous concentration in downgradient well MW-5 was 80 µg/l TPHg; however, the TPHg concentration rose to 1,000 µg/l in the last groundwater monitoring event. Thus the extent of the groundwater plume is now not defined.

ACDEH recognizes that groundwater concentrations can rise substantially as the result of an excavation, and anticipates that groundwater concentrations are likely to decline again. However, the substantial change in the depth to groundwater may also factor into the substantial increase in groundwater concentrations. Groundwater elevations rose approximately 3.5 to 4.5 feet above the depths documented in the November 2015 event. Similar concentrations were documented the last time groundwater levels were this high in May 2012 (20,000 µg/l TPHg). To verify that additional, potentially undocumented, contamination does not remain beneath the site that will continue to substantially impact groundwater, it appears reasonable to request additional verification monitoring of groundwater at the site. It also appears reasonable to change the monitoring interval to quarterly in an attempt to observe contaminant concentrations when groundwater levels may remain higher than normal.

Finally, a review of Geotracker indicates that, except for the EDF submittal associated with the recent groundwater monitoring report, EDF submittals for the site are lacking since second 2014 semi-annual groundwater monitoring event in October 2014. It is appropriate to populate Geotracker with all required data at this time.

Thus, based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below.

TECHNICAL COMMENTS

1. **Quarterly Verification Groundwater Monitoring** – As indicated above, please alter the groundwater monitoring interval to quarterly at the site for a minimum of one groundwater monitoring event, in order to determine groundwater concentrations in the near future. This is requested in an effort to verify that there are no unexpected residual contaminant sources at the site, and to verify the affect of groundwater elevations on contaminant concentrations at the site. Please submit reports by the dates identified below.
2. **Electronic Report and Data Upload Compliance** – A review of the case file and the State's Geotracker database indicates that the site is not in compliance with previous directive letters. Compliance is a State requirement for reimbursement. Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the UST or LUST program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs, including SLIC programs. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites was required in GeoTracker. At present missing data and documents include, but may not be limited to older EDF submittals, GEO_MAPS, and some GEO_WELL data. Please see Attachment 1 for limited additional details, and the state GeoTracker website for full details. ACEH requests notification of, and a list of, the documents uploaded to Geotracker. Please upload all submittals to GeoTracker by the date specified below.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with Attachment 1 and the following specified file naming convention and schedule:

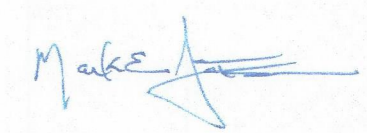
- **August 1, 2016** – Geotracker Compliance Uploads
  Please email your case worker
- **October 14, 2016** – Quarterly Groundwater Monitoring Report
  File to be named: RO208_GWM_R_yyyy-mm-dd
- **January 27, 2017** – Quarterly Groundwater Monitoring Report
  File to be named: RO208_GWM_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm.

If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,



Digitally signed by Mark Detterman
DN: cn=Mark Detterman, o=ACEH, ou=ACEH, email=mark.detterman@acgov.org, c=US
Date: 2016.06.30 09:47:59 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations and Electronic Report Upload (ftp) Instructions

cc: Rick Marment, 9748 Weddington Circle, Granite Bay, CA 95746,
(Sent via electronic mail to: r.mar@shorewest.net)

Thomas Sparrowe, Closure Solutions, Inc, 4600 Northgate Blvd, Suite 230, Sacramento, CA 95834
(Sent via electronic mail to: tsparrowe@innovex.net)

Dilan Roe (Sent via electronic mail to: dilan.roe@acgov.org)
Mark Detterman (Sent via electronic mail to: mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

ATTACHMENT B
FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD DATA SHEET-DEPTH TO WATER DATA

SITE INFORMATION

Site Information

Project Name	Date	Project Number
Palace Garage	8/17/16	1601 07 01

Address	City	State
14336 Washington Ave.	San Leandro	CA

Water Level Equipment

[x] Electronic Indicator
[ ] Oil Water Interface Probe
[ ] Other (specify) _

Event: 3Q 2016

DEPTH TO WATER DATA

DTW Order	Well ID	Time (24:00)	DTW (toc)	Total Depth (toc)	Depth to SPH / Thickness	Notes:
5	MW-1	956	14.97	23.25	N/A	
4	MW-2	953	14.90	23.64		
1	MW-3	946	14.78	23.06		
2	MW-4	948	14.97	21.85		
3	MW-5	951	14.92	17.6		
—	MW-6		—	—		Well Destroyed
						< 1 full Drum on Site - blue Poly >

Closure Solutions INC.

GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name: Palace Garage **Date:** Aug. 17, 2016

Sample No.: MW-1

Samplers Name:

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Sample Equipment:

X Disposable Bailer
_____ 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Analyses Requested (circle all that apply): **Number and Types of Bottle Used:**

TPH-G / BTEX / Naphtalene	*3 voa's w/hc*

Well Number: MW-1 **Well Diameter:** 2" **with Casing Volume of:**

Depth to Water: 14.97 TOC — 2" = (0.16 Gallon/Feet)

Well Depth: 23.25 BGS or TOC — 4" = (0.65 Gallon/Feet)

Height W-Column: 8.28 feet (well depth - depth to water) — 5" = (1.02 Gallon/Feet)

Volume in Well: 1.32 gallons (casing volume X height) — 6" = (1.47 Gallon/Feet)

Gallons to purge: 3.97 gallons (volume X 3) — 3/4" = (.0625 Gallon/Feet)

Lab: *SunStar* **Transportation:**

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	TDS (ppm)	Turbidity: Color - Fines	Micropurge Paramaters Stabilized
1238	Start							
1240	1.5	18.4	.733	1.01	6.48	—	999: Hazy gray many	
1243	3	18.3	.731	.96	6.43	—	863: ↓ ↓	
1246	4.5	18.3	.731	.91	6.40	—	716: ↓ ↓	
Stop	Purge	Complete						

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.28 x 0.8 = 6.62 (Well Depth) 23.25 = Depth to water 16.62

Time: 1258 1st measured depth to water, 14.99 feet below TOC. Is well within 80% of original well casing volume: Yes X No____

Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Sample Well

Time: 1300 Sample ID: MW-1 Depth: 14.99

Comments: Moderate Hc odor - No Sheen

Well Condition: Good —

GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name: Palace Garage **Date:** Aug. 17, 2016

Sample No.: MW-2

Samplers Name:

Purge Equipment:

- ____ Bailer: Disposable or Acrylic
- X 12 v. Pump -
- ____ Bladder Pump
- ____ Foot Valve

Sample Equipment:

- X Disposable Bailer
- ____ 12 v. Pump -
- ____ Bladder Pump
- ____ Foot Valve

Analyses Requested (circle all that apply):

TPH-G / BTEX / Naphtalene	3 voa's w/hc

Number and Types of Bottle Used:

Well Number: MW-2

Depth to Water: 14.90 TOC

Well Depth: 23.64 BGS or TOC

Height W-Column: 8.74 feet (well depth - depth to water)

Volume in Well: 1.39 gallons (casing volume X height)

Gallons to purge: 4.19 gallons (volume X 3)

Well Diameter: 2" **with Casing Volume of:**

- 2" = (0.16 Gallon/Feet)
- 4" = (0.65 Gallon/Feet)
- 5" = (1.02 Gallon/Feet)
- 6" = (1.47 Gallon/Feet)
- 3/4" = (.0625 Gallon/Feet)

Lab: *SunStar*

Transportation:

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	TDS (ppm)	Turbidity: Color - Fines	Micropurge Paramaters Stabilized
1203	Start							
1205	1.5	18.9	.754	0.98	7.22	—	999: Brown, may	
1209	3		.779	0.86	7.26	—	862: ↓ ↓	
1213	4.25	18.8	.778	0.71	7.29	—	714:	
Stop	Purge Complete							
		15						

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.74 x 0.8 = 6.99 - (Well Depth) 23.64 = Depth to water 16.65

Time: 1221 1st measured depth to water, 14.96 feet below TOC. Is well within 80% of original well casing volume: Yes X No___

Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No___

Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No___

Sample Well

Time: 1223 Sample ID: MW-2 Depth: 14.96

Comments: NO odor - no Sheen

Well Condition: Good

GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name: Palace Garage **Date:** *Aug. 17, 2016*

Sample No.: MW-3

Samplers Name:

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Sample Equipment:

X Disposable Bailer
_____ 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Analyses Requested (circle all that apply):

	Number and Types of Bottle Used:
TPH-G / BTEX / Naphtalene	*3 voa's w/hc*

Well Number: MW-3
Depth to Water: 14.78 TOC
Well Depth: 23.06 BGS or TOC
Height W-Column: 8.28 feet (well depth - depth to water)
Volume in Well: 1.32 gallons (casing volume X height)
Gallons to purge: 3.97 gallons (volume X 3)

Well Diameter: 2" **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
3/4" = (.0625 Gallon/Feet)

Lab: *SunStar*

Transportation:

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	TDS (ppm)	Turbidity: Color - Fines	Micropurge Paramaters Stabilized
1012	START							
1015	1.5	19.0	.502	1.03	6.77	/	129: Hazy brown mod	
1017	3	19.0		.78	6.73	/	103: ↓ ↓	
1019	4.5	19.0	.500	.74	6.73	/	86: ↓ ↓	

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.28 x 0.8 = 6.62 - (Well Depth) 23.0 = Depth to water 16.44

Time: 1030 1st measured depth to water, 14.83 feet below TOC. Is well within 80% of original well casing volume: Yes X No____
Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____
Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Sample Well

Time: 1030 Sample ID: MW-3 Depth: 14.83

Comments: NO odor - NO Sheen

Well Condition: Good -

GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name: Palace Garage **Date:** *Aug. 17, 2016*

Sample No.: MW-4

Samplers Name: KD

Purge Equipment:

_____ Bailer: Disposable or Acrylic
_____ 12 v. Pump -
_____ Bladder Pump
X Foot Valve

Sample Equipment:

_____ Disposable Bailer
_____ 12 v. Pump -
_____ Bladder Pump
X Foot Valve

Analyses Requested (circle all that apply):

	Number and Types of Bottle Used:
TPH-G / BTEX / Naphtalene	***3 voa's w/hc***

Well Number: MW-4
Depth to Water: 4.97 TOC
Well Depth: 21.85 BGS or TOC
Height W-Column: 6.88 feet (well depth - depth to water)
Volume in Well: 0.43 gallons (casing volume X height)
Gallons to purge: 1.29 gallons (volume X 3)

Well Diameter: 3/4 **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
(3/4") = (.0625 Gallon/Feet)

Lab: *SunStar* **Transportation:**

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	TDS (ppm)	Turbidity: Color - Fines	Micropurge Paramaters Stabilized
1041	Start							
1045	1.50	18.8	0.786	4.28	7.31	—	S12: Hazy Brown mod	
1050	1.00	18.5	0.761	3.71	7.26	—	496: ↓	
1100	1.29	18.1	0.754	3.73	7.25	—	483: ↓	
Stop:	Purge Complete							
		KD						

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 6.88 x 0.8 = 5.50 - (Well Depth) 21.85 = Depth to water 16.34

Time: 1115 1st measured depth to water, 15.59 feet below TOC. Is well within 80% of original well casing volume: Yes X No____
Time: ____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____
Time: ____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Sample Well

Time: 1117 Sample ID: MW-4 Depth: 15.59

Comments: NO odor - NO sheen

Well Condition: Good

GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name: Palace Garage **Date:** *Aug. 17, 2016*

Sample No.: MW-5

Samplers Name:

Purge Equipment:

_____ Bailer: Disposable or Acrylic
__X__ 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Sample Equipment:

__X__ Disposable Bailer
_____ 12 v. Pump -
_____ Bladder Pump
_____ Foot Valve

Analyses Requested (circle all that apply):

TPH-G / BTEX / Naphtalene	*3 voa's w/hc*

Number and Types of Bottle Used:

Well Number: MW-5
Depth to Water: 14.92 TOC
Well Depth: 17.60 BGS or TOC
Height W-Column: 2.68 feet (well depth - depth to water)
Volume in Well: 0.42 gallons (casing volume X height)
Gallons to purge: 1.28 gallons (volume X 3)

Well Diameter: 2" **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
3/4" = (.0625 Gallon/Feet)

Lab: *SunStar*

Transportation:

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	TDS (ppm)	Turbidity: Color - Fines	Micropurge Paramaters Stabilized
1129	Start							
1131	1.00	19.8	.548	1.09	6.83	—	36: clear min	
1133	1.75	19.7	.541	1.10	6.71	—	10: ↓ ↓	
1136	3.00	19.7	.540	1.04	6.63	—	10: ↓ ↓	
Stop:	Purge	complete						

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 2.68 x 0.8 = 2.14 - (Well Depth) 17.60 = Depth to water 15.46

Time: 1150 1st measured depth to water, 14.93 feet below TOC. Is well within 80% of original well casing volume: Yes X No____
Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____
Time: _____ 1st measured depth to water, _____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Sample Well

Time: 1150 Sample ID: MW-5 Depth: 14.93

Comments: no odor - no sheen
Water → strong flow → water clear

Well Condition: Good

ATTACHMENT C
LABORATORY PROCEDURES, CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

24 August 2016

Tom Sparrowe
Innovex Environmental Management, Inc.
2300 Clayton Rd. Suite 1435
Concord, CA 94520

RE: Palace Garage

Enclosed are the results of analyses for samples received by the laboratory on 08/19/16 09:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine RunningCrane
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	T161975-01	Water	08/17/16 13:00	08/19/16 09:40
MW-2	T161975-02	Water	08/17/16 12:23	08/19/16 09:40
MW-3	T161975-03	Water	08/17/16 10:30	08/19/16 09:40
MW-4	T161975-04	Water	08/17/16 11:17	08/19/16 09:40
MW-5	T161975-05	Water	08/17/16 11:50	08/19/16 09:40

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Katherine RunningCrane, Project Manager

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

DETECTIONS SUMMARY

Sample ID: MW-1 **Laboratory ID:** T161975-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Naphthalene	**5.5**	1.0	ug/l	EPA 8260B	
Benzene	**13**	0.50	ug/l	EPA 8260B	
Toluene	**0.88**	0.50	ug/l	EPA 8260B	
Ethylbenzene	**32**	0.50	ug/l	EPA 8260B	
m,p-Xylene	**29**	1.0	ug/l	EPA 8260B	
o-Xylene	**1.7**	0.50	ug/l	EPA 8260B	
C6-C12 (GRO)	**760**	50	ug/l	EPA 8260B	

Sample ID: MW-2 **Laboratory ID:** T161975-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Naphthalene	**8.2**	1.0	ug/l	EPA 8260B	
Benzene	**82**	0.50	ug/l	EPA 8260B	
Toluene	**4.2**	0.50	ug/l	EPA 8260B	
Ethylbenzene	**83**	0.50	ug/l	EPA 8260B	
m,p-Xylene	**4.9**	1.0	ug/l	EPA 8260B	
o-Xylene	**1.2**	0.50	ug/l	EPA 8260B	
C6-C12 (GRO)	**7900**	50	ug/l	EPA 8260B	

Sample ID: MW-3 **Laboratory ID:** T161975-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	**0.67**	0.50	ug/l	EPA 8260B	
m,p-Xylene	**1.3**	1.0	ug/l	EPA 8260B	
C6-C12 (GRO)	**54**	50	ug/l	EPA 8260B	

Sample ID: MW-4 **Laboratory ID:** T161975-04

No Results Detected

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

Sample ID: MW-5 **Laboratory ID:** T161975-05

No Results Detected

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Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

MW-1

T161975-01 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	**5.5**	1.0	ug/l	1	6081930	08/19/16	08/19/16	EPA 8260B	
Benzene	**13**	0.50	"	"	"	"	"	"	
Toluene	**0.88**	0.50	"	"	"	"	"	"	
Ethylbenzene	**32**	0.50	"	"	"	"	"	"	
m,p-Xylene	**29**	1.0	"	"	"	"	"	"	
o-Xylene	**1.7**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	**760**	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*89.8 %*	*81-136*		"	"	"	"	
Surrogate: Toluene-d8		*111 %*	*88.8-117*		"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

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Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

MW-2

T161975-02 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	**8.2**	1.0	ug/l	1	6081930	08/19/16	08/19/16	EPA 8260B	
Benzene	**82**	0.50	"	"	"	"	"	"	
Toluene	**4.2**	0.50	"	"	"	"	"	"	
Ethylbenzene	**83**	0.50	"	"	"	"	"	"	
m,p-Xylene	**4.9**	1.0	"	"	"	"	"	"	
o-Xylene	**1.2**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	**7900**	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*87.5 %*	*81-136*		"	"	"	"	
Surrogate: Toluene-d8		*111 %*	*88.8-117*		"	"	"	"	

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

MW-3

T161975-03 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	1.0	ug/l	1	6081930	08/19/16	08/19/16	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**0.67**	0.50	"	"	"	"	"	"	
m,p-Xylene	**1.3**	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	**54**	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*83.0 %*	*81-136*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*88.8-117*		"	"	"	"	

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

MW-4

T161975-04 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	1.0	ug/l	1	6081930	08/19/16	08/19/16	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	ND	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*87.2 %*	*81-136*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*88.8-117*		"	"	"	"	

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Katherine RunningCrane, Project Manager

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

MW-5

T161975-05 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	1.0	ug/l	1	6081930	08/19/16	08/19/16	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	ND	50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*82.8 %*	*81-136*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*88.8-117*		"	"	"	"	

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

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25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6081930 - EPA 5030 GCMS										
Blank (6081930-BLK1)				Prepared & Analyzed: 08/19/16						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6081930 - EPA 5030 GCMS										
Blank (6081930-BLK1)				Prepared & Analyzed: 08/19/16						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*8.09*		*"*	*8.00*		*101*	*83.5-119*			
Surrogate: Dibromofluoromethane	*6.73*		*"*	*8.00*		*84.1*	*81-136*			
Surrogate: Toluene-d8	*8.71*		*"*	*8.00*		*109*	*88.8-117*			
LCS (6081930-BS1)				Prepared & Analyzed: 08/19/16						
Chlorobenzene	19.3	1.0	ug/l	20.0		96.3	75-125			
1,1-Dichloroethene	23.3	1.0	"	20.0		116	75-125			
Trichloroethene	20.4	1.0	"	20.0		102	75-125			
Benzene	20.8	0.50	"	20.0		104	75-125			
Toluene	19.6	0.50	"	20.0		98.1	75-125			
Surrogate: 4-Bromofluorobenzene	*8.42*		*"*	*8.00*		*105*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.10*		*"*	*8.00*		*101*	*81-136*			
Surrogate: Toluene-d8	*7.91*		*"*	*8.00*		*98.9*	*88.8-117*			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6081930 - EPA 5030 GCMS										
LCS Dup (6081930-BSD1)				Prepared & Analyzed: 08/19/16						
Chlorobenzene	21.8	1.0	ug/l	20.0		109	75-125	12.3	20	
1,1-Dichloroethene	20.4	1.0	"	20.0		102	75-125	13.2	20	
Trichloroethene	23.6	1.0	"	20.0		118	75-125	14.3	20	
Benzene	23.0	0.50	"	20.0		115	75-125	9.78	20	
Toluene	22.7	0.50	"	20.0		113	75-125	14.4	20	
Surrogate: 4-Bromofluorobenzene	*8.11*		*"*	*8.00*		*101*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.76*		*"*	*8.00*		*110*	*81-136*			
Surrogate: Toluene-d8	*7.87*		*"*	*8.00*		*98.4*	*88.8-117*			

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25712 Commercentre Drive
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Innovex Environmental Management, Inc.	Project: Palace Garage	
2300 Clayton Rd. Suite 1435	Project Number: 1601 07 01	**Reported:**
Concord CA, 94520	Project Manager: Tom Sparrowe	08/24/16 15:05

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager

SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

T161975

Client: INNOVEX
Address: 2300 CLAYTON Rd., Suite 1435, CONCORD, CA
Phone: _____ Fax: _____
Project Manager: TOM SPARROWE

Date: 8/18/16 Page: 1 Of 1
Project Name: PALACE GARAGE
Collector: K. Dolan Client Project #: 1601 0701
Batch #: 3Q 2016 EDF #: T0600101043

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 GTPH-g/BTEX	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	NAPHTHALENE 8260			Laboratory ID #	Comments/Preservative	Total # of containers
MW-1	8/17/16	1300	GW	3 VOAS W/ HCl	X										X			01		
MW-2		1223																02		
MW-3		1030																03		
MW-4		1117																04		
MW-5		1150																05		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/18/16 0950	[signature]	8/18/16 950
GSO 8.19.16 9:40		[signature] 8.19.16 9:40	

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 2.4

Turn around time: STD

Notes
results to:
Tom.Sparrowe@innovex.us
Kevin.Dolan@innovex.net

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

COC 150323

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: TR61975

Client Name: INNOVEX Project: PALACE GARAGE

Delivered by: ☐ Client ☐ SunStar Courier ☒ GSO ☐ FedEx ☐ Other

If Courier, Received by: _____ Date/Time Courier Received: _____

Lab Received by: SUNNY Date/Time Lab Received: 8.19.16 / 9:40

Total number of coolers received: 1

Temperature: Cooler #1	2.6 °C +/- the CF (- 0.2°C)	= 2.4	°C corrected temperature
Temperature: Cooler #2	°C +/- the CF (- 0.2°C)	=	°C corrected temperature
Temperature: Cooler #3	°C +/- the CF (- 0.2°C)	=	°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes**	☐ **No**
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☒ Yes	☐ No*	☐ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☒ Yes	☐ No*	☐ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: BL 8.19.16

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

T161975

SunStar Laboratories, Inc.

Client: Innovex Environmental Management, Inc.
Project: Palace Garage

Project Manager: Katherine RunningCrane
Project Number: 1601 07 01

Report To:
Innovex Environmental Management, Inc.
Tom Sparrowe
2300 Clayton Rd. Suite 1435
Concord, CA 94520
Phone: (925) 338-2360
Fax: ?

Invoice To:
Innovex Environmental Management, Inc.
Kate Waldo
2300 Clayton Rd. Suite 1435
Concord, CA 94520
Phone :(916) 760-7025
Fax: ?

Date Due: 08/24/16 17:00 (3 day TAT)

Received By: Sunny Lounethone
Date Received: 08/19/16 09:40
Logged In By: Sunny Lounethone
Date Logged In: 08/19/16 10:15

Samples Received at: **2.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
T161975-01 MW-1 [Water] Sampled 08/17/16 13:00 (GMT-08:00) Pacific Time (US &				
8260	08/24/16 15:00	3	08/31/16 13:00	GRO, BTEX, Napthalene
T161975-02 MW-2 [Water] Sampled 08/17/16 12:23 (GMT-08:00) Pacific Time (US &				
8260	08/24/16 15:00	3	08/31/16 12:23	GRO, BTEX, Napthalene
T161975-03 MW-3 [Water] Sampled 08/17/16 10:30 (GMT-08:00) Pacific Time (US &				
8260	08/24/16 15:00	3	08/31/16 10:30	GRO, BTEX, Napthalene
T161975-04 MW-4 [Water] Sampled 08/17/16 11:17 (GMT-08:00) Pacific Time (US &				
8260	08/24/16 15:00	3	08/31/16 11:17	GRO, BTEX, Napthalene
T161975-05 MW-5 [Water] Sampled 08/17/16 11:50 (GMT-08:00) Pacific Time (US &				
8260	08/24/16 15:00	3	08/31/16 11:50	GRO, BTEX, Napthalene

Reviewed By

Date

T161975

SunStar Laboratories, Inc.

Client:	**Innovex Environmental Management, Inc.**	**Project Manager:**	**Katherine RunningCrane**
Project:	**Palace Garage**	**Project Number:**	**1601 07 01**

VOC-MS RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
T161975-05	8260	Water	3	08/17/16 11:50	08/19/16 09:40	08/31/16 11:50	08/24/16 15:00
T161975-04	8260	Water	3	08/17/16 11:17	08/19/16 09:40	08/31/16 11:17	08/24/16 15:00
T161975-03	8260	Water	3	08/17/16 10:30	08/19/16 09:40	08/31/16 10:30	08/24/16 15:00
T161975-02	8260	Water	3	08/17/16 12:23	08/19/16 09:40	08/31/16 12:23	08/24/16 15:00
T161975-01	8260	Water	3	08/17/16 13:00	08/19/16 09:40	08/31/16 13:00	08/24/16 15:00

Reviewed By

Date