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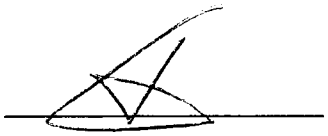
PERJURY STATEMENT

Subject: Fuel Lake Case No. Ro0002981 and Geotracker Clobal ID T1000000416, Red Hanger Cleaners, 6335-6339 College Ave., Oakland, CA 94618

" 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."



Ron Elvidge
College/Claremont Venture, LLC

LRM
consulting inc.

September 27, 2017

Keith Nowell
Alameda County Health Services Agency (County)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Supplemental Remedial Investigation Report
Former Red Hanger Kleaners, 6235-6239 College Ave., Oakland, CA
RO00002981

Dear Mr. Nowell:

This *Supplemental Remedial Investigation (RI) Letter Report* (report) has been prepared on behalf of Claremont College Venture, LLC (CCV) for the above-referenced property (site). The report was prepared in response to requests for supplemental RI sampling by the County documented in correspondences dated April 18, 2017 and April 20, 2017, and per the Supplemental RI Workplan (Workplan) (LRM, 2017)[1] and associated conditional approval by the County (2017)[2].

In accordance to the Workplan, the supplemental RI activities included:

- Installation and sampling of six groundwater monitoring wells (MW-1 through MW-6) as shown on Figure 1 to help establish the occurrence and flow of groundwater onsite, to establish the nature and extent of volatile organic compound (VOC) impacts in groundwater underlying the site, and to establish potential contribution of VOCs from suspected upgradient sources, including former Red Hangar and Kay cleaners (6251-6255 College Ave.) located immediately adjacent and upgradient of the site (see Figure 1). Groundwater sampling at the six monitoring well locations was supplemented by collection of soil samples in the soil boring for each of the six monitoring wells.

- Installation of four vapor monitoring wells (SG-12-7, SG-12-15, SG-13-7, and SG-13-14) and sampling of both newly installed and seven existing soil vapor wells (SG-2-17, SG-3-17, SG-4-17, SG-6-17, SG-7-17, SG-11-17, and SVE-4) in support of evaluating the current extent of VOC impacts in soil vapor, and determination of potential contribution of VOCs in soil vapor from the aforementioned potential offsite sources.

The field activities followed the standard operating procedures for drilling, sampling, and investigation derived waste (IDW) management as outlined in the Workplan (LRM, 2017), accounting from the County's comments (County, 2017). Deviations from the Workplan are specifically referenced herein.

[1] LRM, 2017. Supplemental Remedial Investigation Workplan, Former Red Hanger Kleaners, 6239 College Ave., Oakland, CA. June 8th.

[2] County, 2017. Conditional Work Plan Approval, Red Hanger Kleaners, 6235-6239 College Ave., Oakland, CA, June 30th.

Pre-Field Activities

Prior to initiation of supplemental RI field activities, a health and safety plan was prepared, a drilling permit was obtained from the Alameda County Department of Public Works (DPW), USA Dig Alert was contacted, a private utility survey of the proposed well locations was performed, and a site reconnaissance visit was performed with Cascade Drilling, the drilling contractor for the investigation activities. Based on these efforts and as a deviation from the Workplan, the location of groundwater monitoring well MW-2 was changed by moving it approximately 12 feet north in the alley located on the 6241-6247 property, adjacent to the 6235-6239 property, the 309 63rd street property, and the 6251-6255 property (see Figure 1). In addition, due to access and clearance limitations in the tight alleys targeted for drilling at the 6251-6255 and 6241-6247 properties, a dolly rig was mobilized to the site to perform direct push drilling in lieu of the standard limited access Geoprobe rig, which in turn was used for the remaining wells onsite.

Field Activities

Beginning on July 25th 2017 and continuing through July 28th, 2017, well installation activities were implemented in accordance to the Workplan. Following concrete coring and hand auger clearance for the top 5 feet, drilling of groundwater monitoring well MW-1 was initiated with a dolly rig; however, due to the tight, low-permeability soils encountered and the limited power inherent to dolly rigs, drilling of MW-2 and the two nested[3] vapor monitoring wells (SG-12 and SG-13) was performed by hand auguring each to the target depth. As a result, while shallow soil samples were collected via the use of acetate liners used in conjunction of the dolly rig at MW-1 (and via a standard Geoprobe rig at MW-3 through MW-6), soil samples collected from MW-2 were done so using Encore samplers for VOC analyses as part of hand-auguring of this well. Drilling activities onsite and beyond the referenced alleys commenced per the procedures outlined in the Workplan.

Per the Workplan, at all groundwater monitoring well borehole locations, soils were continuously logged (using the Unified Soil Classification System [USCS], subjected to PID screening (no PID detections were observed), and soil samples were collected at 5, 10, 15, 20, and 25 feet bgs. An additional sample at 3.5 feet bgs was collected in the boring of well MW-5, with 5-foot bgs samples along the western property boundary serving as those at approximately the bottom elevation of the nearest sewer line as requested by the County. Soil samples collected at 10 and 20 feet bgs were placed on hold in case elevated detections were observed in any of the adjoining sample depths; as discussed later herein, analysis of these samples was not triggered by the results of the analyzed soil samples.

Logs and well construction details for each of the monitoring wells are included as Attachment A herein. As indicated on the logs, wells MW-1 through MW-4 were screened from 17 to 27 feet bgs, while MW-5 and MW-6 were screened from 18 to 28 feet bgs, with sand placed from approximately 2 feet above the top of the screen interval to one foot below the screen. Two to three feet of bentonite was placed above the top of the sand, above which grout was poured up to 2 feet bgs. The wells were completed with flush-mounted boxes.

In concert with the County's comments (County, 2017), groundwater monitoring wells MW-1 and MW-2 were installed, with water levels allowed to equilibrate prior to installation of the adjoining

[3] Nested vapor monitoring wells each targeted shallow (7 feet bgs) and deep (14 to 15 feet bgs) zones.

deep soil vapor monitoring points SG-12-15 and SG-13-14. Based on the observations in the field and to avoid the potential for groundwater rising into the soil vapor wells, both deep vapor wells were completed slightly above the originally targeted depth of 17 feet bgs, with SG-12 completed at 15 feet bgs and SG-13 completed at 14 feet bgs. Each nested probe was completed within one foot of sand, above which bentonite (hydrated at each lift) was placed.

In accordance with the Workplan and associated SOPs, groundwater monitoring wells were developed beginning on August 4th, 2017, and groundwater gauging and sampling was performed at all six wells more than 72 hours later on August 8th and 9th, 2017. Soil vapor sampling was conducted on August 7th and 8th, 2017 in accordance to the July 2015 Active Soil Gas Advisory prepared by the Department of Toxic Substances Control (DTSC); this work was conducted concurrent to groundwater monitoring well survey activities. Attachment B contains field sheets for both groundwater gauging/sampling and vapor sampling activities. Per the Workplan, soil and groundwater samples were analyzed for VOCs using US Environmental Protection Agency (USEPA) Method 8260, reporting the Method 8010 list of analytes, while vapor samples were analyzed for using Method TO-15. All samples were submitted to McCampbell Analytical, a National Environmental Laboratory Accredited Program (NELAP) certified laboratory.

Supplemental Investigation Results

As reflected on the boring logs included as Attachment A, soils encountered beneath the site generally consist of fine grained silts and clays extending down to the total explored depth of 29 feet bgs, with the following exceptions: at MW-2, a gravel-sand mixture was encountered from approximately 15 to 20 feet bgs, and at MW-5, a gravel-sand mixture was encountered from approximately 11 to 25 feet bgs. Groundwater, which was first encountered at depths ranging from 17 to 24 feet bgs across the site (see Attachment A), is under confining pressure, eventually equilibrating at approximately 16.15 to 17.8 feet bgs across the six monitoring wells installed (see Table 1 and Attachment A). Figure 2 includes the corresponding groundwater level elevations for each well, incorporating groundwater elevation contours which remain consistent with the previously projected (from nearby sites) direction of groundwater flow toward the southwest.

Table 2 summarizes the soil analytical results, while laboratory analytical reports are included as Attachment C. As indicated in Table 2, tetrachloroethene (PCE) was the sole chemical detected in soil, with only two reported detections: 0.009 mg/kg at 25 feet bgs in the boring for MW-2 on the 6241-6247 property, and 0.023 mg/kg at 15 feet bgs in the boring for MW-5. Both detections are well below both the residential and commercial soil Environmental Screening Levels (ESLs)[4] for PCE (see Table 2).

Tables 3 and 4 summarize the soil vapor sampling results, with the former outlining helium (used as leak-check compound) and the latter summarizing the VOC analytical results. Laboratory analytical results are included as Attachment C. As indicated in Table 3, helium remained below detection limits in 9 of the 11 vapor samples collected, with the two detections occurring at 0.15% (SG-2-17) and 0.086% (SG-6-17); both well below the 10% leakage threshold.

[4] Water Board, 2016. Environmental Screening Levels, Rev 3. Online at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml

Table 4 and Figure 3 summarize the results of the vapor sampling performed in August 2017, but further summarizes sampling results from prior rounds of sampling for existing vapor monitoring wells. As indicated in Table 3 and consistent with past sampling results, detections of VOCs in August 2017 samples remain largely focused on PCE, with select other VOCs, including trichloroethylene (TCE), carbon disulfide, chloroform, and select petroleum hydrocarbons (including benzene, toluene, and 2-hexanone) also detected at residual levels. It should be noted that the TCE detections, albeit limited to three detections below both residential and commercial ESLs, mark the first such detections in soil vapor beneath the site; this may be due to the consistently elevated TCE detection limits reported during prior rounds of vapor sampling (see Table 4). As reflected on Figure 4, and discussed later herein, PCE detections in soil gas continue their observed decline over time based on the three rounds of sampling at existing onsite vapor monitoring wells.

Table 5 and Figure 4 summarize the groundwater sampling results, with laboratory analytical reports included as Attachment C. As indicated in Table 5 and on Figure 4, PCE detections in groundwater were limited to offsite upgradient well MW-1 (on 6251-6255 College Ave. property) at 1.2 ug/L, and in onsite downgradient well MW-5, at 1.9 ug/L; both detections of PCE were below the MCL of 5 ug/L, as is the case for the three other chemicals (chloroform, dibromochloromethane, bromodichloromethane) detected at least once in the groundwater samples collected.

It should be noted that liquid and soil investigation derived waste (IDW) generated as part of well installation and sampling activities was drummed, profiled, and disposed of offsite as non-hazardous waste by Belshire Environmental. A copy of the waste manifest is included herein as Attachment D.

Discussion

The supplemental RI investigation confirms that PCE is the primary chemical of potential concern (COPC) in the subsurface underlying the site. PCE occurs primarily in soil vapor, with limited residual impacts occurring in groundwater and sporadic detections in soils near the groundwater potentiometric surface. The results of this subsurface investigation combined with prior data continue to suggest that the primary release mechanism at the site is likely to have been associated with sewer lines receiving PCE-contaminated discharges by the historical dry cleaning operations at 6235-6239 College Ave., and at 6251-6255 College Ave. properties; this is supported by the absence of distinct “hot spots” in all subsurface media, in addition to the low groundwater concentrations which suggest PCE in groundwater is not an ongoing source of PCE in overlying soil vapor.

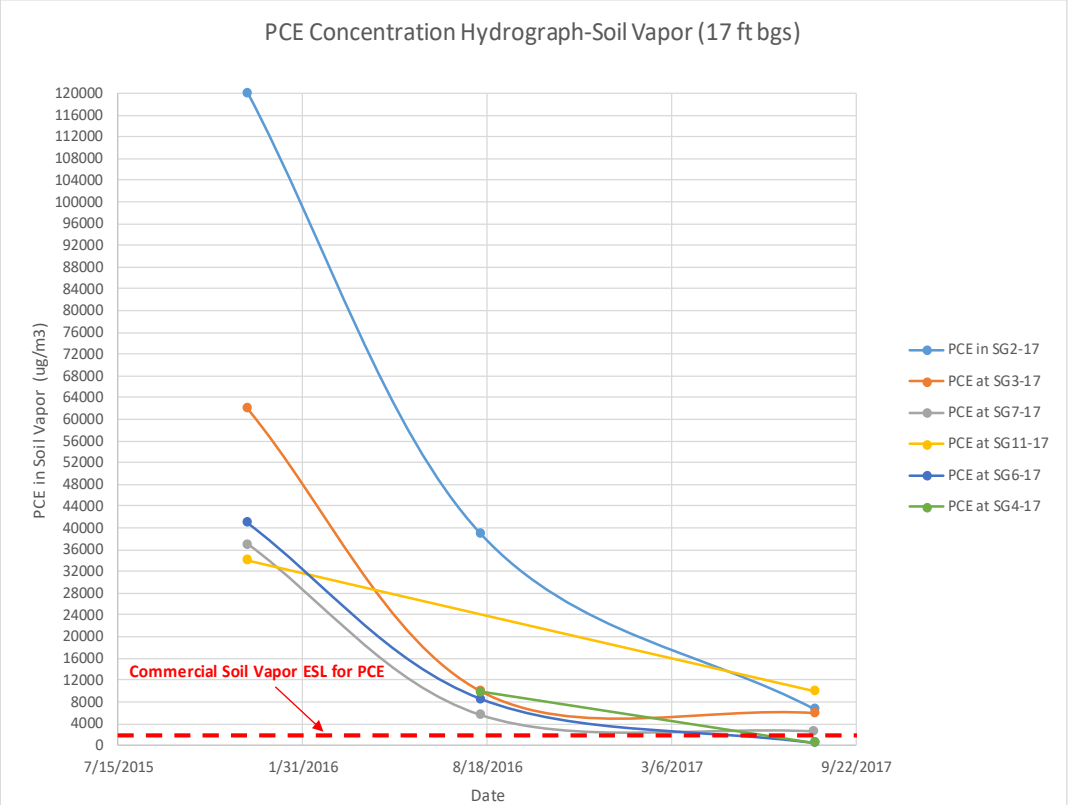
The presence of PCE in deep soil vapor and groundwater at low levels within the limited sampling area at the 6251-6255 property suggests the possible occurrence of historical releases from past dry cleaning operations at this property.

The presence of PCE in soil vapor (at levels above residential soil gas screening levels) and low levels in deep soils in the alley on the 6241-6247 property also suggests the potential for localized releases/disposals at this property. While the 6241-6247 property was not used for dry cleaning operations, its owners were operators of the Red Hanger Kleaners located at both 6251-6255 College Ave. property and at the 6235-6239 College Ave., property.

Based on this investigation, PCE remains at above relevant ESLs at various existing vapor monitoring locations on the 6235-6239 property, with limited detections in soils (a low concentration below residential ESL detected in deep soils at MW-5) and groundwater (a low concentration below the MCL detected at MW-6). Importantly, soil vapor concentrations across the 6235-6239 property continue to decline over time, with several locations declining to levels below the commercial soil vapor ESL. Worth noting is that the soil vapor ESL corresponds to a sample depth of 5 feet bgs, whereas the concentrated soil vapor detections occur at 17 feet bgs. Therefore, the use of the ESL based on a source at 5 feet bgs is far too conservative for screening of the 17-foot bgs soil vapor detections. Development of a deeper soil vapor screening level and/or the use of shallower soil vapor samples from existing shallow wells (i.e 7-foot bgs) to screen the site data may be more appropriate and should be considered for future screening efforts.

The screening level change notwithstanding, the continued decline in soil vapor concentrations has rendered the vapor monitoring well SG11-17 as the current most concentrated well, with the PCE concentration reducing from 34,000 ug/m^3 in August 2016 to 10,000 ug/m^3 in August 2017 (see Figure 3); this well is located on the edge of the 309 63rd Street property. It is important to note that there is no data available farther east on the 309 63rd Street property to determine the extent of PCE impacts in this area, including potential contributions from the 6251-6255 College Ave., property. It should be noted that attempts were made as part of this investigation to access and sample soil vapor and groundwater at the 309 63rd Street property, but the owners requested an indemnity covering any future investigation and cleanup costs as a condition of access; this was unacceptable to the CCV.

As depicted in the soil vapor concentration hydrograph below, significantly greater declines in PCE soil vapor concentrations are observed along the western boundary of the 6235-6239 College Ave., property, where PCE was historically detected at its peak concentration (e.g., at SG-120,000 ug/m^3 in December 2015 reducing to 39,000 ug/m^3 in August 2016, and further reducing to 6,600 ug/m^3 in August 2017).



At SG3-17), similar significant reductions were observed (from 62,000 ug/m^3 in December 2015 to 5,900 ug/m^3 in August 2017). Lastly, at SG6-17 and SG4-17 PCE declines in August 2017 reached levels below the commercial ESL (see Figure 3).

Overall, the largest declines in PCE soil vapor concentrations appear to occur at or near locations where SVE operations have been in effect since June 2016. Lesser reductions occur along the norther portion of the site, along the 309 63rd Street property (i.e., at SG11-17 as shown on Figure 3).

Conclusions and Recommendations

Based on the observations summarized above, the following conclusions and recommendations have been set forth for the site:

1. PCE remains the primary COPC at the site, predominantly occurring in soil vapor and likely the result of discharges to drains and sewer lines from historical dry cleaning operations at 6235-6239 College Ave., and at 6251-6255 College Ave. properties;

2. PCE in soil and groundwater occur sporadically and at low levels which do not warrant remediation. These detections suggest the potential for direct historical releases at the 6251-6255 College Ave., property, and portions of the 6241-6247 College Ave., property;

3. Further investigations at 6251-6255 College Ave. property consistent with the former dry cleaning configuration and drain lines at that property should be considered to determine the magnitude and extent of such a release, and whether a release at this location may be the source of elevated soil vapor impacts along the western boundary of the 309 63rd Street property;

4. It is recommended that semi-annual vapor sampling from all existing wells, including those installed as part of this supplemental investigation, be initiated beginning in December 2017, allowing for determination of changes in vapor concentrations across seasonal conditions in the winter and summer. This target sampling date is contingent upon approval of the recommendation below (see item 5), seeking immediate partial shutdown of the SVE system (i.e., while maintaining extraction from the soil vapor and subslab extraction wells within the footprint of the onsite building); a three-month SVE shutdown period is recommended prior to the comprehensive round of vapor sampling;

5. The consistent decline in PCE soil vapor concentrations in existing vapor monitoring wells since December 2015 suggests that the ongoing SVE operations, despite the absence of measurable mass at or above 1 parts per million (ppm) in the influent vapor stream to the SVE system, may remain beneficial to further reducing vapor concentrations in existing monitoring wells to levels below the commercial ESLs. To test the benefit of current SVE system operations and identify specific enhancements, if any, to the SVE system, it is recommended that vapor extraction be terminated from all existing extraction wells, with the exception of those operated within the footprint of the onsite building at 6235-6239 College Ave. (i.e with the exception of SVE-3, SVE-6, SVE-7, and subslab extraction well SSE-5). Immediate termination of extraction from all other vapor extraction wells, in conjunction with resampling of all vapor monitoring wells in December 2017 (i.e, three months after the proposed partial termination of the SVE

operations) will allow for a determination as to whether the observed declining trend in concentrations across most of the onsite vapor monitoring wells will continue despite the absence of SVE operations at these locations, or whether measurable rebound in concentration may occur. The magnitude and location of any such rebound, including at locations away from existing extraction wells such as at monitoring well SG11-17, will help determine the need, if any, and specific recommendations for SVE system enhancement. Importantly, the continued operation of vapor extraction at SVE-3, SVE-6, SVE-7, and SSE-5 within the onsite building will help maintain depressurized conditions within the building subslab and ensure that indoor air quality is protected.

Based on the proposed (partial) termination of the SVE system and the first round of comprehensive semi-annual vapor sampling estimated to occur three months after SVE system termination, recommendations will be set forth for enhancements (if any) to and operation of the existing SVE system, including potential addition of vapor extraction wells and/or system augmentation to manage groundwater recovered by the system due to increased vacuum during operations; and

6. Two additional rounds of groundwater monitoring at newly installed monitoring wells are also recommended; one in February 2018 and the second in August 2018, providing data to help confirm the preliminary conclusion stated herein that groundwater impacts across the various properties remain insignificant and do not warrant remediation.

Closing

LRM appreciates the County's review and input on this document, and for its oversight and support of this project. If you have any questions, please contact Mehrdad Javaherian at 415-706-8935 or at mehrdad@lrm-consulting.com.

LRM Consulting, Inc.

Mehrdad Javaherian, Ph.D., MPH, PE, LEED®GA

Enclosures

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Table 1. Groundwater Elevations

Former Red Hanger Kleaners, Oakland, CA

Sample ID	Gauging Date	TOC Elevation (ft-msl)	Depth to Groundwater (ft)	Groundwater Elevation (ft msl)
MW-1	8/9/2017	209.64	17.6	192.04
MW-2	8/9/2017	209.23	17.4	191.83
MW-3	8/8/2017	209.13	17.67	191.46
MW-4	8/8/2017	207.79	16.15	191.64
MW-5	8/8/2017	207.98	16.55	191.43
MW-6	8/8/2017	208.66	17.8	190.86

TOC = Top of casing

ft-msl = feet above mean sea level

Table 2. Soil Analytical Results

Former Red Hanger Kleaners, Oakland, CA

Sample ID	Sample Depth (ft)	Sample Date	PCE
MW-1 @ 5	5	7/25/2017	<0.005
MW-1 @ 15	15	7/25/2017	<0.005
MW-1 @ 25	25	7/26/2017	<0.005
MW-2 @ 5	5	7/27/2017	<0.005
MW-2 @ 15	15	7/27/2017	<0.005
MW-2 @ 25	25	7/27/2017	0.009
MW-3 @ 5	5	7/28/2017	<0.005
MW-3 @ 15	15	7/28/2017	<0.005
MW-3 @ 25	25	7/28/2017	<0.005
MW-4 @ 5	5	7/27/2017	<0.005
MW-4 @ 15	15	7/27/2017	<0.005
MW-4 @ 25	25	7/27/2017	<0.005
MW-5 @ 3.5	3.5	7/26/2017	<0.005
MW-5 @ 5	5	7/26/2017	<0.005
MW-5 @ 15	15	7/26/2017	0.023
MW-5 @ 25	25	7/26/2017	<0.005
MW-6 @ 5	5	7/25/2017	<0.005
MW-6 @ 15	15	7/25/2017	<0.005
MW-6 @ 25	25	7/25/2017	<0.005
ESL Residential Soil			0.6
ESL Commercial/Industrial Soil			2.7

All concentrations in mg/kg

PCE = tetrachloroethene

Table 3. Helium Concentrations in Soil Vapor

Former Red Hanger Kleaners, Oakland, CA

Sample ID	Sample Date	Helium (%)
SG-2-17	8/7/2017	0.15%
SG-3-17	8/8/2017	<0.05%
SG-4-17	8/8/2017	<0.05%
SG-6-17	8/8/2017	0.086%
SG-7-17	8/7/2017	<0.05%
SG-11-17	8/8/2017	<0.05%
SG-12-7	8/7/2017	<0.05%
SG-12-15	8/7/2017	<0.05%
SG-13-7	8/8/2017	<0.05%
SG-13-14	8/8/2017	<0.05%
SVE-4	8/8/2017	<0.05%
Allowable Leak Threshold		10%

Table 4. Soil Vapor Analytical Results

Former Red Hanger Kleaners, Oakland, CA

Well ID	Date	PCE	TCE	Carbon Disulfide	Chloroform	Benzene	Toluene	2-Hexanone
SG-2-17	12/2/2015	**120000**	<810	ND	ND	<480	<570	ND
	8/10/2016	**39000**	<68	ND	**74**	<41	<48	ND
	8/8/2017	**6600**	4.6	2.6	18	2	<1.9	9.4
SG-3-17	12/2/2015	**62000**	<130	ND	ND	**130**	<90	ND
	8/10/2016	**10000**	<65	ND	ND	<39	<46	ND
	8/8/2017	**5900**	<2.8	2.3	17	1.8	2.3	9.7
SG-4-17	8/10/2016	**9800**	<64	ND	ND	<38	<54	ND
	8/8/2017	**480**	<2.8	<1.6	<2.4	<1.6	<1.9	<2.1
SG-6-17	12/2/2015	**41000**	<110	ND	ND	**140**	170	ND
	8/10/2016	**8600**	<69	ND	ND	<41	<49	ND
	8/8/2017	**420**	<2.8	<1.6	35	<1.6	<1.9	<2.1
SG-7-17	12/2/2015	**37000**	<200	ND	ND	<120	<140	ND
	8/10/2016	**5700**	<66	ND	ND	<39	<46	ND
	8/7/2017	**2600**	3	2.9	**66**	2.4	3.1	12
SG-11-17	12/2/2015	**34000**	<1200	ND	ND	<750	<1200	ND
	8/8/2017	**10000**	37	<1.6	**62**	1.7	2	<2.1
SG-12-7	8/7/2017	<2.8	<2.8	68	6.4	2.1	6.3	<2.1
SG-12-15	8/7/2017	3.9	<2.8	29	5.9	1.7	4.6	<2.1
SG-13-7	8/8/2017	**930**	<2.8	22	<2.4	1.9	4.5	10
SG-13-14	8/8/2017	**560**	<2.8	4.6	<2.4	<1.6	<1.9	6.3
SVE-4	8/8/2017	**1200**	<2.8	<1.6	5	<1.6	<1.9	7.8
ESL (residential)		240	240	NA	61	48	160000	NA
ESL (commercial)		2100	3000	NA	530	420	1300000	NA

All concentrations in ug/m3

NA = Not Available

PCE = Tetrachloroethene

TCE = Trichloroethene

Notes:

Bolded concentrations denote exceedance of residential ESL, bolded and shaded concentrations denote exceedance of both residential and commercial ES

Acetone was detected at SG-7-17 (200 ug/m3) and at SG-3-17 (75 ug/m3) in August 2017

Ethylbenzene (2.5 ug/m3) was detected at SG-12-7 in August 2017

Methyl ethyl ketone (100 ug/m3) was detected at SG7-17 in August 2017

Tert butyl alcohol (130 ug/m3) was detected at SG7-17 in August 2017

Ethyl acetate was detected at SG-7-17 (5.9 ug/m3) and at SG-13-7 (3 ug/m3) in August 2017

Methyl tert-butyl ether was detected at SG-7-17 (2.1 ug/m3) in August 2017

Tetrahydrofuran was detected at SG-7-17 (3.5 ug/m3) and at SG-13-7 (3.3 ug/m3) in August 2017

1,2,4-Trimethylbenze was detected at SG-7-17 (3.1 ug/m3) and at SG-13-14 (7 ug/m3) in August 2017

1,2-Dibromo-3-chloropropane was detected at SVE-4 (0.41 ug/m3) in August 2017

Cyclohexane was detected at SG-4-17 (200 ug/m3) and at SG-11-17 (44 ug/m3) in August 2017

Hexane was detected at SG-4-17 (49 ug/m3) in August 2017

Dichlorodifluoromethane was detected at SG-11-17 (2.7 ug/m3) in August 2017

Naphthalene was detected at SG-13-14 (9.8 ug/m3) in August 2017

1,3,5-Trimethylbenze was detected at SG-13-14 (3.3 ug/m3) in August 2017

1,1,1-Tricholoroethane was detected at SG-2-17 (5.1 ug/m3) in August 2017

Table 5. Groundwater Analytical Results

Former Red Hanger Kleaners, Oakland, CA

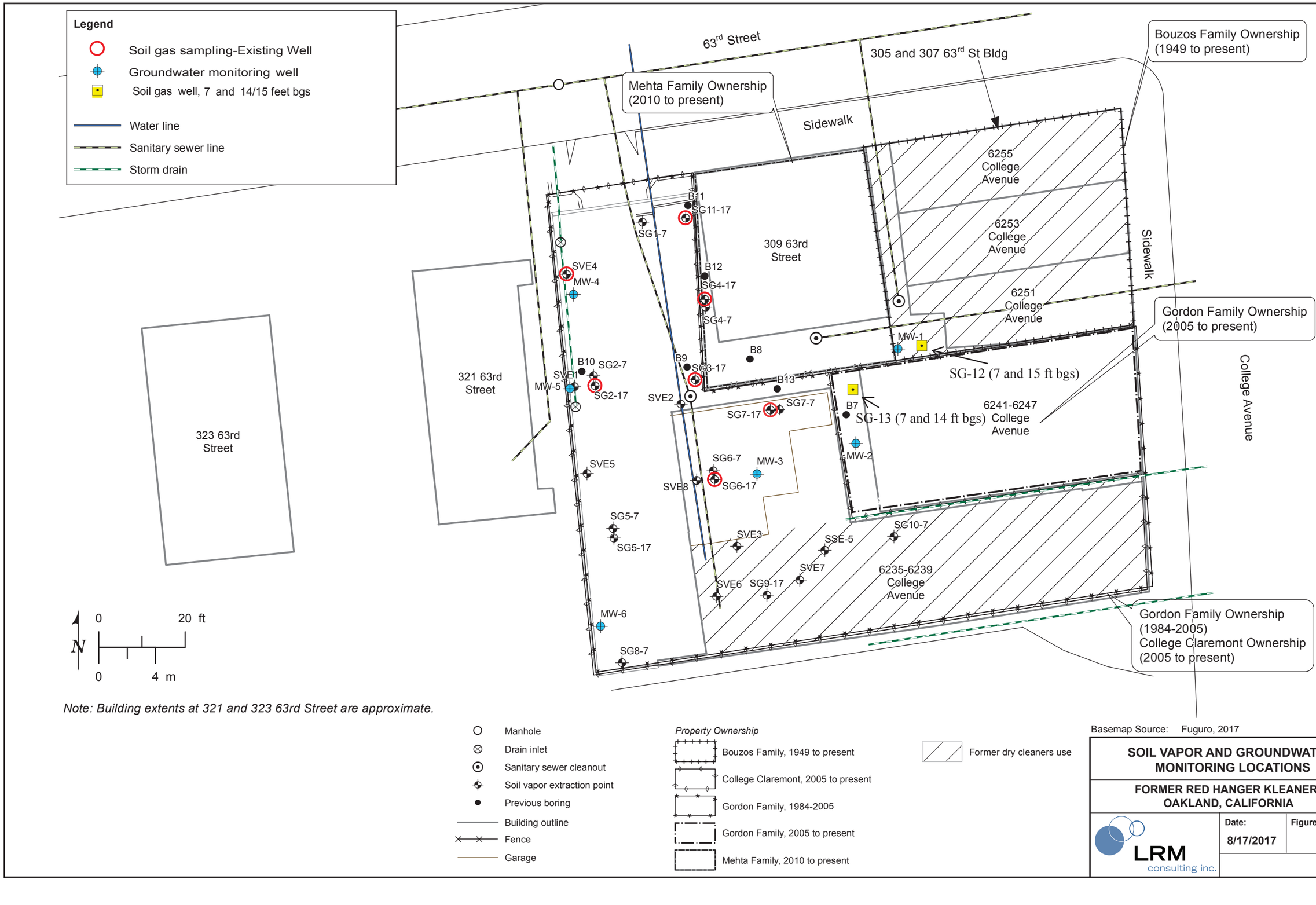
Sample ID	Sample Date	PCE	Chloroform	Bromodichloromethane	Dibromochloromethane
MW-1	8/9/2017	1.2	<0.5	<0.5	<0.5
MW-2	8/9/2017	<0.5	0.64	<0.5	<0.5
MW-3	8/8/2017	<0.5	0.64	<0.5	<0.5
MW-4	8/8/2017	<0.5	14	0.64	0.54
MW-5	8/8/2017	<0.5	1.9	<0.5	<0.5
MW-6	8/8/2017	1.9	0.68	<0.5	<0.5
MCL		5	80	80	80

All concentrations in ug/L

PCE = Tetrachlorethene

MCL = Maximum Contaminant Level Drinking Water Standard

FIGURES



Note: Building extents at 321 and 323 63rd Street are approximate.

Basemap Source: Fuguro, 2017

SOIL VAPOR AND GROUNDWATER MONITORING LOCATIONS

FORMER RED HANGER KLEANERS
OAKLAND, CALIFORNIA

LRM consulting inc.

Date: 8/17/2017

Figure: 1

Legend

- Soil gas sampling-Existing Well
- Groundwater monitoring well
- Soil gas well, 7 and 14/15 feet bgs
- Water line
- Sanitary sewer line
- Storm drain

63rd Street

305 and 307 63rd St Bldg

Bouzos Family Ownership (1949 to present)

Mehta Family Ownership (2010 to present)

Sidewalk

309 63rd Street

6255 College Avenue

6253 College Avenue

6251 College Avenue

6241-6247 College Avenue

6235-6239 College Avenue

Sidewalk

College Avenue

Gordon Family Ownership (2005 to present)

Gordon Family Ownership (1984-2005)
College Claremont Ownership (2005 to present)

321 63rd Street

323 63rd Street

192.0

191.5

191.0

B11 SG11-17 SG1-7

B12 SG4-17 SG4-7

B8

B9 SG3-17

B10 SG2-7

B13

B7

SVE4 MW-4 191.64

SVE1 MW-5 191.43 SG2-17

SVE2

SG7-17 SG7-7

MW-1 192.04

SG-12 (7 and 15 ft bgs)

SG-13 (7 and 14 ft bgs)

MW-2 191.83

SVE5

SG6-7 MW-3 191.46

SVE8 SG6-17

SG5-7 SG5-17

SVE3

SSE-5

SG10-7

SVE7

SVE6 SG9-17

MW-6 190.86

SG8-7

0 20 ft

N

0 4 m

Note: Building extents at 321 and 323 63rd Street are approximate.

- Manhole
- Drain inlet
- Sanitary sewer cleanout
- Soil vapor extraction point
- Previous boring
- Building outline
- Fence
- Garage

Property Ownership

- Bouzos Family, 1949 to present
- College Claremont, 2005 to present
- Gordon Family, 1984-2005
- Gordon Family, 2005 to present
- Mehta Family, 2010 to present

- Former dry cleaners use
- 190.86 Groundwater Elevation (ft-MSL)
- Groundwater Elevation Contour (ft-MSL)
- Groundwater flow Direction (August, 2017)

Basemap Source: Fuguro, 2017

GROUNDWATER ELEVATION CONTOURS AUGUST 2017

FORMER RED HANGER KLEANERS OAKLAND, CALIFORNIA

LRM consulting inc.

Date:	Figure:
8/23/2017	2

Legend

- Soil gas sampling-Existing Well
- Groundwater monitoring well
- Soil gas well, 7 and 14/15 feet bgs
- Water line
- Sanitary sewer line
- Storm drain

Well ID	Date	PCE	TCE
SG 11-17	8/10/2016	**34000**	<1200
	8/8/2017	**10000**	37

Well ID	Date	PCE	TCE
SVE 4	8/8/2017	**1200**	<2.8

Well ID	Date	PCE	TCE
SG 3-17	12/2/2015	**62000**	<130
	8/10/2016	**10000**	<65
	8/8/2017	**5900**	<2.8

Well ID	Date	PCE	TCE
SG 2-17	12/2/2015	**120000**	<810
	8/10/2016	**39000**	<68
	8/8/2017	**6600**	4.6

Well ID	Date	PCE	TCE
SG 6-17	12/2/2015	**41000**	<110
	8/10/2016	**8600**	<69
	8/8/2017	**420**	<2.8

Well ID	Date	PCE	TCE
SG 4-17	8/10/2016	**9800**	<64
	8/8/2017	**480**	<2.8

Well ID	Date	PCE	TCE
SG 12-7	8/7/2017	<2.8	<2.8
SG 12-15	8/7/2017	3.9	<2.8

Well ID	Date	PCE	TCE
SG13-7	8/8/2017	**930**	<2.8
SG13-14	8/8/2017	**560**	<2.8

Well ID	Date	PCE	TCE
SG 7-17	12/2/2015	**37000**	<200
	8/10/2016	**5700**	<66
	8/7/2017	**2600**	3

63rd Street
Sidewalk
Mehta Family Ownership (2010 to present)
305 and 307 63rd St Bldg
Bouzos Family Ownership (1949 to present)
College Avenue
6253
6251 College Avenue
Gordon Family Ownership (2005 to present)
College Avenue
309 63rd Street
321 63rd Street
6241-6247 College Avenue
6235-6239 College Avenue
SG-12 (7 and 15 ft bgs)
SG-13 (7 and 14 ft bgs)
Gordon Family Ownership (1984-2005)
College Claremont Ownership (2005 to present)

B11 SG11-17 SG1-7 B12 SG4-17 SG4-7 B8 B9 SG3-17 B13 B10 SG2-7 SG2-17 SVE1 MW-5 SVE2 SG7-17 SG7-7 B7 MW-1 MW-2 SVE4 MW-4 SVE5 SG6-7 MW-3 SVE8 SG6-17 SG5-7 SG5-17 SVE3 SSE-5 SG10-7 SVE7 SVE6 SG9-17 MW-6 SG8-7

0 20 ft
N
0 4 m

Note: Building extents at 321 and 323 63rd Street are approximate.

- Manhole
- Drain inlet
- Sanitary sewer cleanout
- Soil vapor extraction point
- Previous boring
- Building outline
- Fence
- Garage

Property Ownership

- Bouzos Family, 1949 to present
- College Claremont, 2005 to present
- Gordon Family, 1984-2005
- Gordon Family, 2005 to present
- Mehta Family, 2010 to present

Former dry cleaners use

5900 PCE concentrations in ug/m3
Bolded detections reflect exceedance of residential ESL of 240 ug/m3
Bolded and shaded detections reflect exceedance of both residential ESL and commercial/industrial ESL (2,100 ug/m3)

Basemap Source: Fuguro, 2017

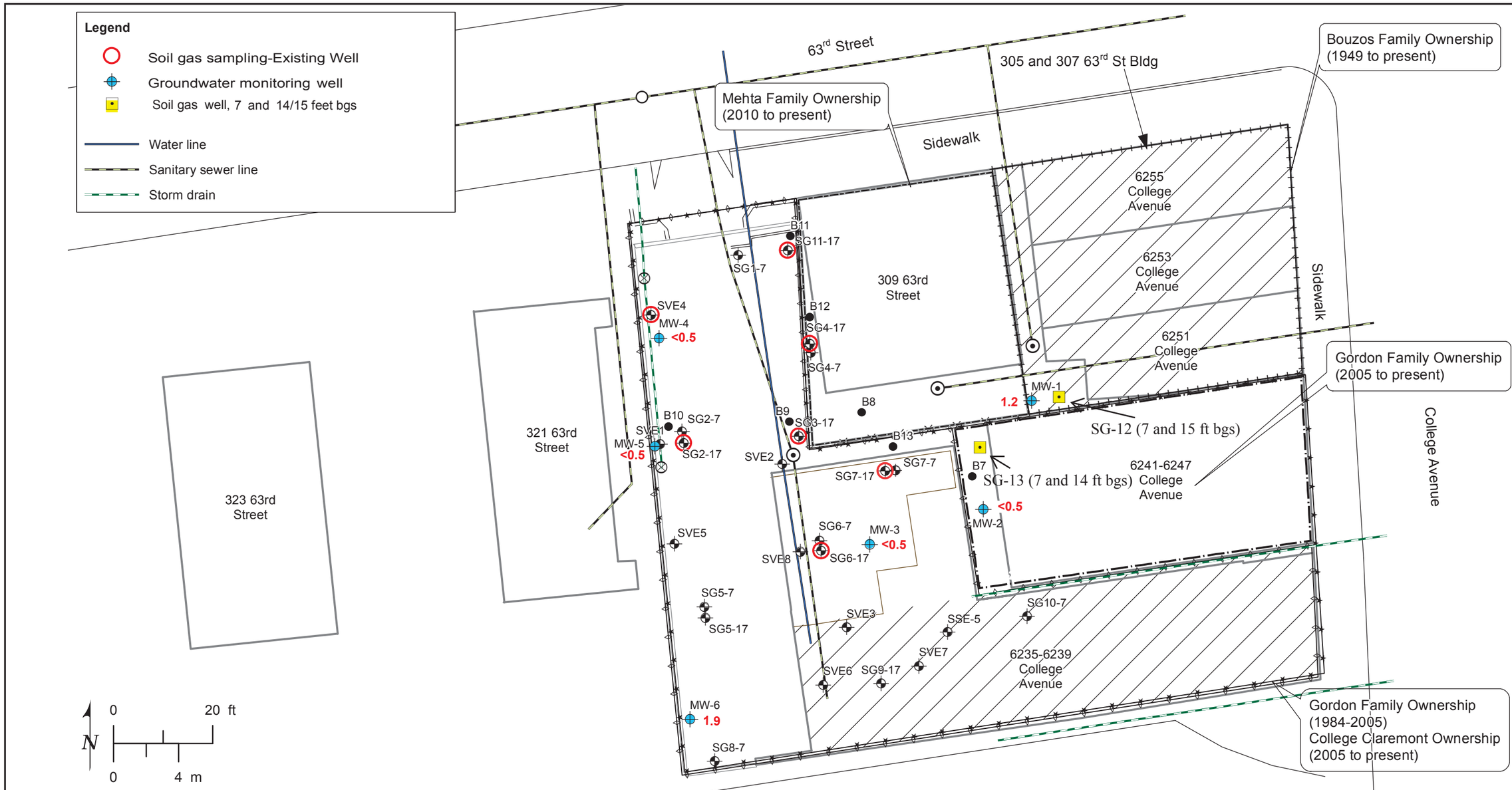
PCE AND TCE CONCENTRATIONS IN SOIL VAPOR - 2015-2017

FORMER RED HANGER KLEANERS OAKLAND, CALIFORNIA

LRM consulting inc.

Date: 8/17/2017

Figure: 3



Note: Building extents at 321 and 323 63rd Street are approximate.

Manhole
Drain inlet
Sanitary sewer cleanout
Soil vapor extraction point
Previous boring
Building outline
Fence
Garage

Property Ownership

Bouzos Family, 1949 to present
College Claremont, 2005 to present
Gordon Family, 1984-2005
Gordon Family, 2005 to present
Mehta Family, 2010 to present

Former dry cleaners use

1.9 PCE concentration in (ug/L)

Basemap Source: Fuguro, 2017

PCE IN GROUNDWATER AUGUST 2017

FORMER RED HANGER KLEANERS OAKLAND, CALIFORNIA

LRM consulting inc.

Date: 8/23/2017

Figure: 4

ATTACHMENT A

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	**Gravels** (More than half of coarse fraction > no. 4 sieve size)	**GW**	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	**SW**	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine -Grained Soils (more than half of soil < no. 200 sieve size)	**Silts and Clays** LL = < 50	**ML**	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	**MH**	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		**PT**	Peat and other highly organic soils

GRAIN SIZE CHART

Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	**Grain Size in Millimeters**
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel	3" to No. 4	76.2 to 4.76
coarse	3" to 3/4"	76.2 to 19.1
fine	3/4" to No. 4	19.1 to 4.76
Sand	No. 4 to No. 200	4.76 to 0.075
coarse	No. 4 to No. 10	4.76 to 2.00
medium	No. 10 to No. 40	2.00 to 0.420
fine	No. 40 to No. 200	0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

Unstabilized groundwater level

Stabilized groundwater level

SAMPLE DESIGNATIONS/SYMBOLS

Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered

Classification sample taken with Standard Penetration Test sampler

Undisturbed sample taken with thin-walled tube

Disturbed sample

Sampling attempted with no recovery

Core sample

Analytical laboratory sample

Sample taken with Direct Push sampler

Sonic

SAMPLER TYPE

C Core barrel

CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter

D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube

O Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube

PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube

S&H Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter

SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter

ST Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

CLASSIFICATION CHART

6239 COLLEGE AVENUE
Oakland, California

LRM consulting inc.

Project No.: TM Red Hanger

Figure: A-7

PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-1

Boring location: See Site Plan, Figure 1

Logged by: M. Hachey
Drilled By: Cascade

Date started: 7/25/17 | Date finished: 7/26/17

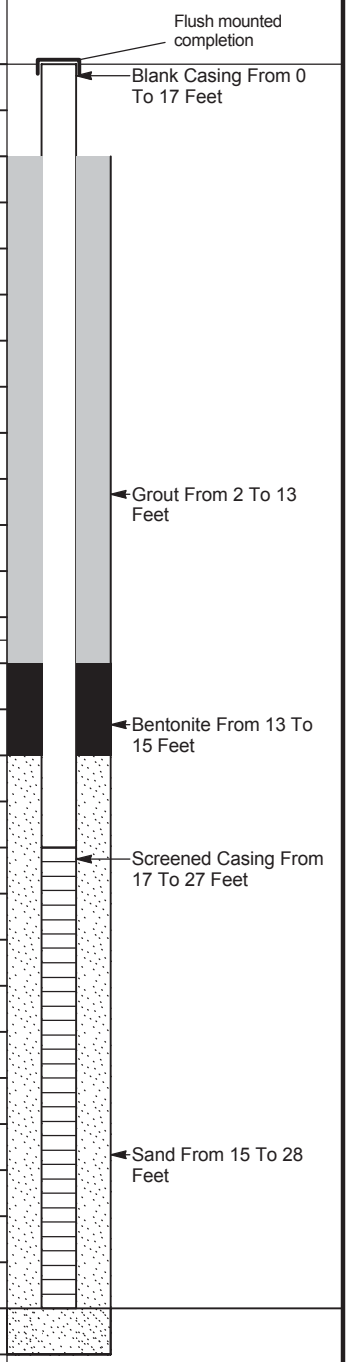
Drilling method: Direct Push

Permit No.: N/A | Permit Issued by: N/A

Sampling: Geoprobe - limited access

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1							24 inches of concrete slab
2					0.0		
3							CLAY (CL) moderate brown, moist, very lean clay with sand
4							
5						CL	
6					0.2		becoming more moist
7							
8							
9							CLAY (CL/CH) mixed variable brown with iron staining, slightly moist, sandy lean to fat clay with some fine gravel
10					0.1	CL/ CH	
11							
12					0.0		
13							CLAY (CL/CH) moderate brown, slightly moist, lean to fat clay with sand becoming gray-brown, more coarse, moist to very moist
14					0.2		
15							
16					0.2		
17							
18					0.2		becoming very moist, more lean, less sandy
19							
20						CL/ CH	
21							▽ becoming more sandy, gravelly saturated, lean clay (CL)
22					0.1		
23							
24					0.1		becoming less gravelly and sandy, lean to fat (CL/CH), saturated
25							
26							
27							
28							
29							
30							

Well Completion Details



Boring terminated at a depth of 27 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 21 feet during drilling.

LRM consulting inc.

Project No.: TM Red Hanger

Figure: A-1

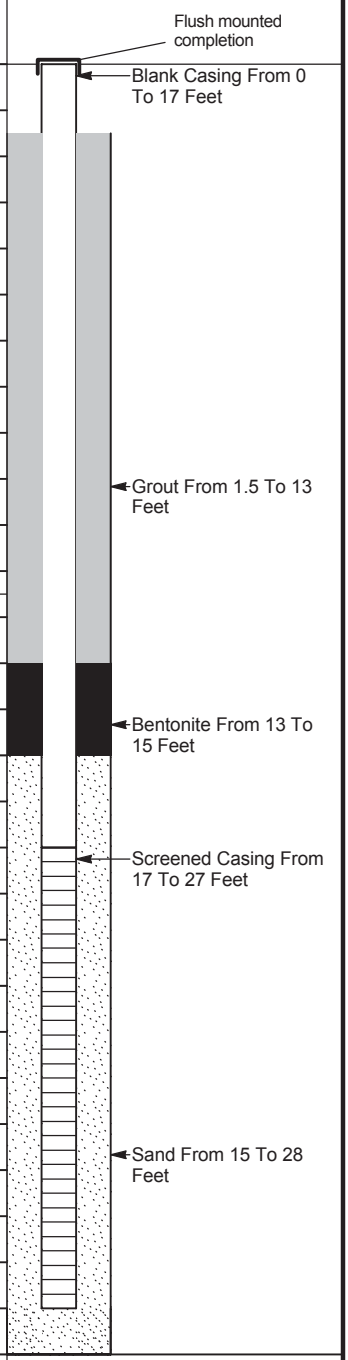
PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-2

Boring location: See Site Plan, Figure 1
Logged by: M. Hachey
Drilled By: Cascade
Date started: 7/27/17
Date finished: 7/27/17
Drilling method: Direct Push
Permit No.: N/A
Permit Issued by: N/A
Sampling: Geoprobe

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1–5							CLAY (CL) dark brown, moist, sandy lean clay
6					0.3		
7–8						CL	becoming gray-brown with iron and black staining, slightly moist, with some fine gravel
9–10					0.2		
11–12						CH	CLAY (CH) moderate to gray-brown, slightly moist, sandy fat clay
13–14					0.3		same with iron and black staining, slightly moist to moist, more sandy, leaner clay
15–16						SW/GW	SAND/GRAVEL (SW/GW) variable brown, slightly moist, clayey, well-graded gravelly sand to sandy gravel
17					0.3		
18–19							
20					0.5		~6 inch thick zone of moderate brown lean clay (CL)
21–22						SC/CL	SAND/CLAY (SC/CL) moderate brown, saturated, sandy lean clay to clayey sand
23–24						SP	SAND (SP) moderate brown, saturated, poorly graded, medium to coarse sand with trace fines
25–26						CL	CLAY (CL) mottled gray and orange brown, moist, lean clay with fine sand
27–30							

Well Completion Details



Boring terminated at a depth of 28 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 20 feet during drilling.

LRM consulting inc

Project No.: TM Red Hanger
Figure: A-2

PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-3

Boring location: See Site Plan, Figure 1

Logged by: M. Hachey
Drilled By: Cascade

Date started: 7/28/17 | Date finished: 7/28/17

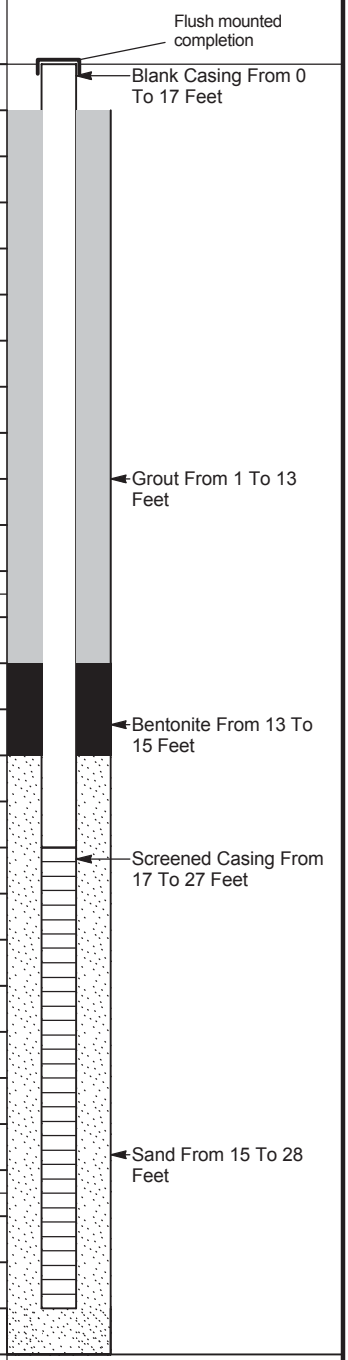
Drilling method: Direct Push

Permit No.: N/A | Permit Issued by: N/A

Sampling: Geoprobe

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1–8					0.1	ML/CL	SILT/CLAY (ML/CL) dark brown, dry silt to lean clay with sand becoming moderate brown, more clayey, slightly moist to moist
8–11					0.0	SC/CL	SAND/CLAY (SC/CL) variable brown, slightly moist, gravelly sandy clay to clayey sand
11–20					0.0	CL/CH	CLAY (CL/CH) moderate brown, slightly moist, sandy lean to fat clay becoming variable brown, mostly gray-brown with orange and black staining, slightly moist to moist, gravelly, sandy lean clay
20–24					0.1	CH	becoming mottled gray and orange-brown, moist, fat clay with some sand ▽ ~6 inch thick zone of saturated coarse sand to fine gravel (SP/GP)
25–28					0.1	CL	CLAY (CL) mostly moderate brown, very moist to wet, sandy lean clay with gravel, some zones of clayey sand (SC)
29–30							

Well Completion Details



Boring terminated at a depth of 28 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 23 feet during drilling.

LRM consulting inc.

Project No.: TM Red Hanger

Figure: A-3

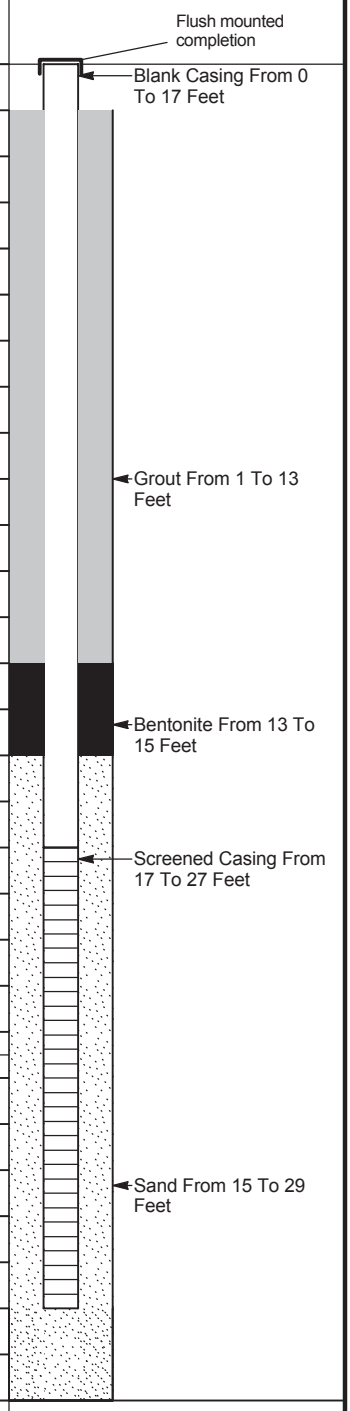
PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-4

Boring location: See Site Plan, Figure 1
Logged by: M. Hachey
Drilled By: Cascade
Date started: 7/28/17
Date finished: 7/28/17
Drilling method: Direct Push
Permit No.: N/A
Permit Issued by: N/A
Sampling: Geoprobe

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1–4						CL	CLAY (CL) mostly dark brown, moist, lean clay with sand
4–5					0.0	SP	SAND (SP) orange-brown, dry, gravelly medium to coarse sand
5–10						CL	CLAY (CL) dark brown, very moist, sand lean clay with trace fine gravel becoming mixed brown, mostly gray-brown and orange brown, moist, gravelly sandy lean to fat clay (CL/CH)
10–15					0.1	CL	CLAY (CL) moderate brown, moist to very moist, sandy lean clay with some fine, subangular gravel
15–20					0.2	CL	becoming gray-brown with iron staining, less sandy and gravelly, very moist becoming mostly moderate brown, very moist, lean clay with sand and zones of trace fine gravel
20–23					0.3	CH	CLAY (CH) moderate and gray-brown with orange and black staining, slightly moist, sandy, fat clay with gravel
23–25						CH ▽	gravelly, sandy clayey, saturated zone between ~22 - 23 feet
25–27					0.4	CL/CH	CLAY (CL/CH) moderate brown, slightly moist, lean to fat clay with some sand and fine gravel
27–30						CL/CH	becoming leaner, moist, fine sandy lean clay (CL)

Well Completion Details



Boring terminated at a depth of 29 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 23.5 feet during drilling.

LRM consulting inc

Project No.: TM Red Hanger
Figure: A-4

PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-5

Boring location: See Site Plan, Figure 1

Logged by: M. Hachey
Drilled By: Cascade

Date started: 7/26/17 | Date finished: 7/26/17

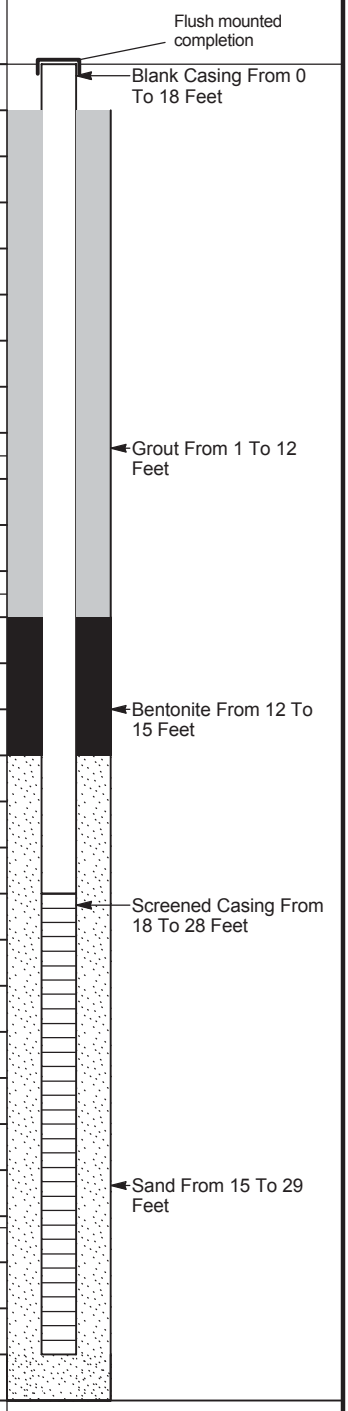
Drilling method: Direct Push

Permit No.: N/A | Permit Issued by: N/A

Sampling: Geoprobe

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1–4					0.0	CL	CLAY (CL) mostly dark brown, dry to slightly moist, sandy lean clay
5–8						CL	becoming very moist
9–11					0.0	SC/CL	SAND/CLAY (SC/CL) mixed brown, dry to moist, gravelly sandy lean clay to clayey sand
12–17					0.0	GW/SC	GRAVEL (GW/SC) mixed variable brown, dry to moist, clayey, sandy, subangular, fine to coarse gravel ▽
18–23					0.1	GW/SC	becoming mostly wet with zones of visible saturation becoming saturated, gravelly, coarse sand with clay (SP)
24–25					0.3	GW/SC	
26–29						CL	CLAY (CL) moderate to orange brown, moist to very moist, sandy lean clay
30							

Well Completion Details



Boring terminated at a depth of 29 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 16.5 feet during drilling.

LRM consulting inc.

Project No.: TM Red Hanger

Figure: A-5

PROJECT: **6239 COLLEGE AVENUE**
Oakland, California

Monitoring Well MW-6

Boring location: See Site Plan, Figure 1

Logged by: M. Hachey
Drilled By: Cascade

Date started: 7/26/17 | Date finished: 7/26/17

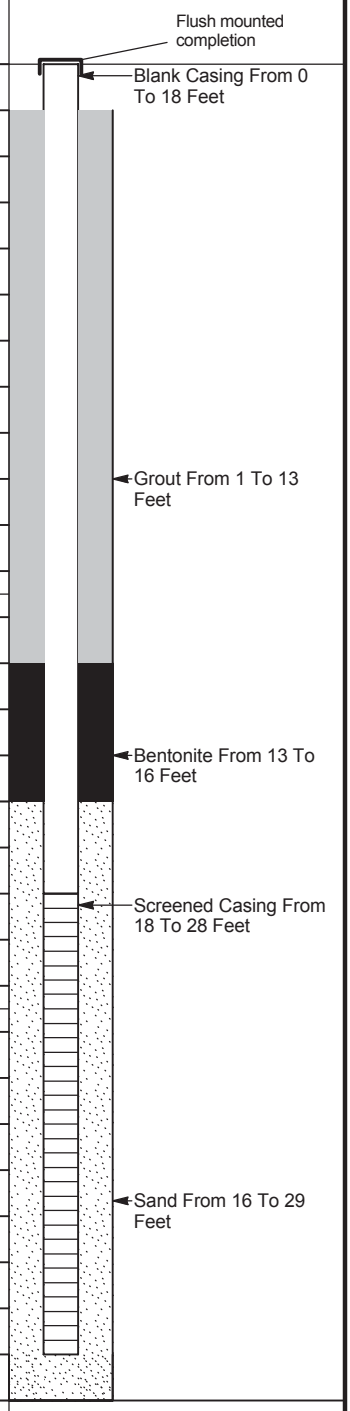
Drilling method: Direct Push

Permit No.: N/A | Permit Issued by: N/A

Sampling: Geoprobe

DEPTH (feet)	SAMPLES: Sample Number	Sample	Blow Count	Recovery (feet)	PID (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
1–5						ML/CL	SILT/CLAY (ML/CL) gray to dark brown, dry, sandy silt to lean clay
5–6					0.1	ML/CL	becoming mostly gray-brown with iron staining, more sandy with some fine gravel
6–10					0.6	ML/CL	
10–12						SC/CL	SANDY/CLAY (SC/CL) mixed but mostly moderate brown, slightly moist, with zones of wet, gravelly clayey sand to sandy clay
12–16					0.1	SC/CL	
16–17					0.1	CL	CLAY (CL) ▽ moderate with orange brown, very moist, sandy lean clay
17–18						CL	becoming very moist to wet (CL)
18–20						CL	~6 inch zone of dark gray to gray-brown, dry, gravelly sand
20–21						CL	CLAY (CL) moderate brown, wet, sandy lean clay
21–22					0.2	CL	
22–24						CL	becoming mottled gray, orange and dark brown, cemented, sandy, slightly moist, fat clay (CH)
24–25						CL	zone of sandier, saturated clay (CL) ~1 inch thickness
25–29						CL	becoming sandy lean to fat clay (CL/CH)

Well Completion Details



Boring terminated at a depth of 29 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 17 feet during drilling.

LRM consulting inc.

Project No.: TM Red Hanger

Figure: A-6

ATTACHMENT B

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-2-17** 8/8/17 -1223
Notes: He @ 125" of Vac for 4 min

Sub-Slab Probe ID:
Suma Can Serial #: 1923
Flow Controller #: 983
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length:	549	cm
Tubing inner diameter:	0.32	cm
Boring diameter:	15.2	cm
Sandpack height:	61	cm
Probe length:	2.54	cm
Probe diameter:	0.623	cm
Summa flow rate:	150	mL/min
Purge flow rate:	400	mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length = 44.1532 cm3
Probe volume = 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3
Single purge volume: 3919.0641 cm^3
Total purge volumes extracted: 3.1
Start Time: 1152
Total Purge Time: 30 min
Pi = 3.1416 1 inch = 2.54 cm 1 ml = 1 cm3 Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time -(min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1152		27.3	0	0					
1157		26.0	5	0	0				
1202		24.1	10	0	.1				
~~1205~~		~~22.0~~	~~15~~						ADDED He 29.8
1207		22.0	20 15	0	.1				
~~1212~~		28.1	25 20	0	.1				
1217		26.9	30 25	0	.2				
1222		24.0	30	0	.1				
1223		24.0							
1225		24.0							
1227		23.2							
1229		23.0		0	.1				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-3-17** 0831 - 8/8/17
Notes: Held 150" of H_2O for 3 min

Sub-Slab Probe ID:
Suma Can Serial #: 582
Flow Controller #: 989
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length:	549	cm
Tubing inner diameter:	0.32	cm
Boring diameter:	15.2	cm
Sandpack height:	61	cm
Probe length:	2.54	cm
Probe diameter:	0.623	cm
Summa flow rate:	150	mL/min
Purge flow rate:	400	mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length = 44.1532 cm3
Probe volume = 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3
Single purge volume: 3919.0641 cm^3
Total purge volumes extracted: 3.1
Pi = 3.1416
1 inch = 2.54 cm
1 ml = 1 cm3
Start Time: 0800
Total Purge Time: 30
Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	~~O_2~~ He (%)	CO_2 (%)	CH_4 (%)	Comments
0800		29.6	0	0	0	0			
0805		28.4	5	0	.1	0			
0810	-	27.7	10	.2	.2	0			
0815		26.9	15	.2	.2	0			
0820	-	24.0	20	.3	.3	0			
0825		21.9	25	.2	.2	0			ADDED He - 28.8
0830		28.0	30	0	.3	0			
0831		27.9							
0834		25.9							
0837		22.8							
0838		22.5		0	.2				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-7-17 – 1650**
Notes: Held 135" of H_2O for 3 min

Sub-Slab Probe ID:
Suma Can Serial #: 2598
Flow Controller #: ~~259~~ 985
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length: 549 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: 400 mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length
= 44.1532 cm3
Probe volume 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity
= 3874.1367 cm3
Single purge volume: 3919.0641 cm^3
Total purge volumes extracted: 3:1
Pi = 3.1416
1 inch = 2.54 cm
1 ml = 1 cm3
Est. max. porosity = 0.35

Start Time: 1618
Total Purge Time: 30

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1618		27.6	0	0	.0				
1623		27.4	5	0	.2				
1628		26.1	10	0	.3				
1633		24.3	15	0	.4				ADDED He 29.6
1638		28.9	20	0	.3				
1643		25.6	25	0	.3				
1648		25.2	30	0	.3				
1650		24.7							
1654		24.1							
1658		23.6							
1700		23.1		0	.2				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-12-7 – 1432**
Notes: Shut in test Held 8" Hg for

Sub-Slab Probe ID:
Suma Can Serial #: 2533
Flow Controller #: 981
Initial Vacuum: ~29
Final Vacuum: -4.5

Specifications

Tubing length: 244 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: 200 mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length = 19.623644 cm3
Probe volume 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3
Single purge volume: 3894.5346 cm^3
Start Time: 1331
Total purge volumes extracted: 3.1
Total Purge Time: 60min
Pi = 3.1416 1 inch = 2.54 cm Est. max. porosity = 0.35
1 ml = 1 cm3

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1300									
1331	?	28.3	0	0					
1341		18.7	10	0					Added He 35.1
1351		33	20	0	1.0				
1401		33	30	0	.9				
1411		25	40	0	.8				
1421		27	50	0	.8				
1431		24	60	0	.4				
1432	Start								23%
1435		21.2							
1436		21.2		0	.4				
1438									

ADVISOR / Active Soil Gas Investigation DTSC

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-12-15 - 1540**
Notes: Held 143" of H_2O @ 3 MW

Sub-Slab Probe ID:
Suma Can Serial #: 2576
Flow Controller #: 958
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length: 488 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: 400 mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length = 39.247289 cm3
Probe volume 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3
Single purge volume: 3914.1582 cm^3
Total purge volumes extracted: 3.1
Pi = 3.1416
1 inch = 2.54 cm
1 ml = 1 cm3
Start Time: 1508
Total Purge Time: 30
Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1508		21.7	0	0					
1513		21.0	5	0	.6				
1523		21.0	15	0	1.6				
1528		20.5	20	0	.6				
1538		20.4	30	0	.6				
									ADDED He
1540		21.5			16				ADDED He 26.3
1542		26.0							AD
1544		25.5							
1546		24.9							
1548		24.4		0	.6				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG=6-17 -1311 - 8/8/17**
Notes: Held 137" of H_2O for 3 min

Sub-Slab Probe ID:
Suma Can Serial #: 788
Flow Controller #: 1231
Initial Vacuum: 29
Final Vacuum: -4.5

Specifications

Tubing length: 549 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: 400 mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length = 44.1532 cm3
Probe volume 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3
Single purge volume: 3919.0641 cm^3
Total purge volumes extracted: 3.1
Pi = 3.1416 1 inch = 2.54 cm 1 ml = 1 cm3
Start Time: 1240
Total Purge Time: 30
Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1055				0	.1				500 SCFM
1103				0	.8				
1111				0	1.1				
1119					.8				Direct.
8/8/17									
1240		29.1	0	0					
1245	28.0	0	5	0	0.0				
1250		26.8	10	0	.1				
1255		25.9	15	0	.2				
1300		24.0	20	0	.2				
1305		22.3	25	0	.2				Added He 29.4
1310		29.0	30	0	.2				
1311		28.8							
1314		28.3							
1317		26.0							
1319		27.4		0	.3				

Soil Vapor Probe Purging/Sampling Log

Project Name: Reis Hanger
Job Number: Tim Reis Hanger
Date: 8/7/2017
Sampler(s): Scott Polston,
Sample ID and Time: SVE-4 - 1444 - 1450 8/8/17
Notes: ⊗ Extraction Well Hooked 2 System Sampled From Sample Port

Sub-Slab Probe ID:
Suma Can Serial #: ~~4004~~ 2588
Flow Controller #: 674
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length: 76.2 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 8.89 cm
Sandpack height: 22.86 cm
Probe length: 2.54 cm
Probe diameter: 1 cm
Summa flow rate: 150 mL/min
Purge flow rate: _____ mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack

Tubing = Pi * (inner diameter/2)^2 * length
= 6.1283676 cm3

Probe volume
1.994911335

Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity
= ~~496.6354~~ cm3

Single purge volume = ~~504.75868~~ cm^3

Total purge volumes extracted: _____

Pi = 3.1416 1 inch = 2.54 cm 1 ml = 1 cm3

Start Time: _____
Total Purge Time: _____
Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: ~~SG-4-17~~ SG-4-17 8/8/17 0848
Notes: Held 135" of Vac for 4 min

Sub-Slab Probe ID:
Suma Can Serial #: 2548
Flow Controller #: 984
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length:	244	cm
Tubing inner diameter:	0.32	cm
Boring diameter:	15.2	cm
Sandpack height:	61	cm
Probe length:	2.54	cm
Probe diameter:	0.623	cm
Summa flow rate:	150	mL/min
Purge flow rate:	400	mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack

Tubing = Pi * (inner diameter/2)^2 * length = 19.623644 cm3 — Probe volume 0.774282942

Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3

Single purge volume: ~~3894.5346~~ 3919 cm^3 Start Time: 0848

Total purge volumes extracted: Total Purge Time: 30

Pi = 3.1416 1 inch = 2.54 cm Est. max. porosity = 0.35

1 ml = 1 cm3

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
0848		28.9	0	0					
0853		28.0	5	0	.1				
0858	-	~~24~~ 24.1	10	0	.1				
0903	-	20.8	15	0	.2				ADDED He 29.1%
0908	-	27.5	20	0	.2				
0913		26.1	25	0	.2				
0918	-	24.6	30	0	.2				
0919		24.4							
0922		22.6							ADDED He 27.6%
0925		20.1		0	.1				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: ~~SG11-7~~ SG-11-17 ~ 8/8/17
Notes: Held 132" of H_2O for 3 min

Sub-Slab Probe ID:
Suma Can Serial #: 2589
Flow Controller #: 1225
Initial Vacuum: -29
Final Vacuum: -4.5

Specifications

Tubing length: 244 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: 400 mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack
Tubing = Pi * (inner diameter/2)^2 * length
= 19.623644 cm3
Probe volume 0.774282942
Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity
= 3874.1367 cm3
Single purge volume: ~~3894.5346~~ cm^3 391 ?
Total purge volumes extracted: 3.1
Pi = 3.1416
1 inch = 2.54 cm
1 ml = 1 cm3
Start Time: 0935
Total Purge Time: 30
Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
0935		28.9	0	0					
0940	~	27.0	~~05~~	0	.1				
0945	~	25.3	10	0	.2				
0950		24.0	15	0	.2				
0955	~	22.1	20	0	.2				ADDED He 27.5
1000		26.9	25	0	.2				
1005	~	26.0	30	0	.2				
1006		25.9		0					
1009		24.9		0					
1012		24.0		0	.2				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-13-7** — 1056 - 8/8/17
Notes: HeO 140" Vac for 4 min

Sub-Slab Probe ID:
Suma Can Serial #: 2597
Flow Controller #: 980
Initial Vacuum: -30
Final Vacuum: -4.5

Specifications

Tubing length: 244 cm
Tubing inner diameter: 0.32 cm
Boring diameter: 15.2 cm
Sandpack height: 61 cm
Probe length: 2.54 cm
Probe diameter: 0.623 cm
Summa flow rate: 150 mL/min
Purge flow rate: ______ mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack

Tubing = Pi * (inner diameter/2)^2 * length = 19.623644 cm3

Probe volume 0.774282942

Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3

Single purge volume: 3894.5346 cm^3

Start Time: 1025

Total purge volumes extracted: 8.1

Total Purge Time: 1055

Pi = 3.1416 | 1 inch = 2.54 cm | 1 ml = 1 cm3 | Est. max. porosity = 0.35

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1025		29.4	0	0					
1030		28.0	5	0	.1				
1035	-	26.7	10	0	.2				
1040		25.7	15	0	.2				
1045	-	25.0	20	0	.2				
1050		23.6	25		.2				
1055	-	21.2	30	0	.2				ADDED HE 28.0%
1056		28.0							
1059		26.7							
1101		26.0		0	.2				

Soil Vapor Probe Purging/Sampling Log

Project Name: **RED HANGER KLEANERS**
Job Number: **TMREDHANGER**
Date: **8/7/2017**
Sampler(s): **Scott Polston,**
Sample ID and Time: **SG-13-14** 8/8/17 1137
Notes: Heb 133" of H_2O for 4 min.

Sub-Slab Probe ID:
Suma Can Serial #: 2538
Flow Controller #: 1227
Initial Vacuum: 30
Final Vacuum: -4.5

Specifications

Tubing length:	457	cm
Tubing inner diameter:	0.32	cm
Boring diameter:	15.2	cm
Sandpack height:	61	cm
Probe length:	2.54	cm
Probe diameter:	0.623	cm
Summa flow rate:	150	mL/min
Purge flow rate:	400	mL/min

Purge Volume Calculation

Purge volume = tubing + sandpack

Tubing = Pi * (inner diameter/2)^2 * length = 36.754121 cm3

Probe volume = 0.774282942

Sandpack = Pi * (boring diameter/2)^2 * sandpack height * porosity = 3874.1367 cm3

Single purge volume: 3911.6651 cm^3

Total purge volumes extracted: 3.1

Pi = 3.1416 1 inch = 2.54 cm 1 ml = 1 cm3 Est. max. porosity = 0.35

Start Time: 1106

Total Purge Time: 30

Time	He Delivery Pressure (psi)	He in Shroud (% or ppm)	Purge Time (min./sec.)	He in Purge Sample (% or ppm)	VOCs (ppmv)	O_2 (%)	CO_2 (%)	CH_4 (%)	Comments
1106		27.5	0	0					
1111		26.3	5	0	.1				
1116		25.7	10	0	.1				
1121		24.0	15	0	.1				
1126		23.0	20	0	.2				
1131		21.0	25	0	.2				ADDED He-27.3
1136		26.9	30	0	.2				
1137		26.7		0					
1139		26.10		0					
1142		24.2		0	.1				

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	**Sampler:** SP	**Client:** Ellwood	
Well ID: mw-1	**Date:** 8/9/17	**Site:** Red Hanger	
Well Diameter: 2	**DTW:** 17.60	**Total Depth** 26.5'	
Purge Equipment BLADDER	**Tubing** (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		
Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW		

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____'

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
0715	6.64	17.3	623	170	3.07	208	0	17.5
0720	6.42	17.2	623	164	2.90	222		
0725	6.25	17.1	623	144	2.57	236		17.6
0730	6.24	17.1	621	147	2.50	241		17.6
0735	6.22	17.1	622	97	2.19	247		17.6
0740	6.18	17.0	621	39	2.10	250	18	
0747	6.17	17.1	619	32	1.93	247		
0752	6.17	17.0	618	27.0	1.90	245	~22	2.0

Well Dewater Yes (No) **Total Volume Removed:** ~22.0 **Gallons**

Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____

Sample Date: 8/9/17	**Sample Time:** 0758	**DTW at Sample:** 17.64
Sample ID: mw-1	**Lab:** MCL	**Number of Containers:** 3
Analysis: ~~TPH- Gas, BTEX, MTBE~~ → 8260		

Notes: purge @ 23'

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	Sampler: SP	Client: ELLWOOD	
Well ID: MW-2	Date: 8/9/17	Site: RED Hanger	
Well Diameter: ~~2~~ 1	DTW: 17.40	Total Depth 26.7	
Purge Equipment Reel	Tubing (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ X_____ = _____ Gallons 80% = _____'

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
0830	6.26	16.8	493	360	3.55	284	~~0~~	
0835	6.25	16.8	493	187	3.63	285		
0840	6.19	16.7	496	135	3.27	291		
0845	6.19	16.7	500	132.0	3.29	296		
0850	6.19	16.8	495	~~115~~	3.34	292		25
0855	6.19	16.8	495	~~117~~	3.35	294	1g	21
0900	6.18	16.8	496	32	3.32	295		~~5~~

Well Dewater	Yes / ~~No~~	Total Volume Removed: ~2	Gallons
Sample Method:	Disp Bailer (New Tubing)	Sample port	Other: _____
Sample Date: 8/9/17	Sample Time: 0902	DTW at Sample: 17.48	
Sample ID: MW-2	Lab: MCC	Number of Containers: 3	
Analysis: ~~TPH- Gas, BTEX, MTBE~~	8260		

Notes:

_____

_____

_____

_____

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	Sampler: GJ	Client: Ellwood
Well ID: MW-3	Date: 8/8/17	Site: Red Hanger
Well Diameter: 2	DTW: 17.67	Total Depth 28.0
Purge Equipment BLADDER	~~Tubing~~ (OD) 1/4	(New) Dedicated
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:	
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot	

Total Depth - DTW X Mulitplier = 1 casing vol. | 80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = 10.33' X____ = 1.65 Gallons 80% =______' µS/cm

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
12.51	6.71	18.3	528	1000	8.2	145.4	~~0~~	.25
1256	6.63	17.4	527	1000	6.4	140		.500 l/m
1301	6.53	17.3	523	>1000	8.1	131		
1307	6.36	17.2	519	>1000	5.86	115		
1312	6.29	17.1	517	>1000	5.36	121		
1317	6.24	17.1	519	>1000	5.24	111	1g	
1321	6.24	17.0	515	>1000	5.01	121		
1325	6.30	16.8	510	553	5.25	125		
1330	6.32	17.0	510	550	5.29	123		
1335	6.35	17.0	510	549	5.37	~~[illegible]~~	2	133 orp
1340	6.28	17.0	509	548	5.15	136		

Well Dewater Yes / (No)	Total Volume Removed: ~2 Gallons	
Sample Method: Disp Bailer (New Tubing) Sample port Other:____		
Sample Date: 8/8/17	Sample Time: 1342	DTW at Sample: 17.91
Sample ID: MW-3	Lab: MCC	Number of Containers:
Analysis: ~~TPH- Gas, BTEX, MTBE~~ 8260		

Notes:

Purging And Sampling Data Sheet

Job Number: Tim Ellwood	**Sampler:** SP	**Client:** Ellwood	
Well ID: MW-4	**Date:** 8/8/17	**Site:** RED Hoyer	
Well Diameter: 2.0	**DTW:** 16.15	**Total Depth** 28	
Purge Equipment Bladder	**Tubing** (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol Micro/low Flow Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		
Total Depth - DTW X Mulitplier = 1 casing vol.		80% Recovery = Total Depth -DTW X .20 + DTW	

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1401	6.85	18.2	441	>1000	6.81	255		
1410	6.48	18.1	430	>1000	6.75	252		
1415	6.85	18.2	427	1800	7.38	233		
1420	6.42	18.3	418	1400	6.85	251		ph-6.42
1425	6.42	18.3	406	733	6.82	256		
1430	6.37	18.3	396	426	6.88	259		
1435	6.28	18.3	383	159	6.41	258		
1440	6.28	18.3	384	150	6.37	[illegible]		260
1445	6.27	18.3	385	145	6.28	257		

Well Dewater Yes (No)	**Total Volume Removed:** 2	**Gallons**
Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____		
Sample Date: 8/8/17	**Sample Time:** 1446	**DTW at Sample:** 16.21
Sample ID: MW-4	**Lab:** MCL	**Number of Containers:** 3
Analysis: ~~TPH Gas, BTEX, MTBE~~ 8260		

Notes:

Job Number:	Sampler:	Client:
Well ID:	Date:	Site:
Well Diameter:	DTW:	Total Depth

Purging And Sampling Data Sheet

Job Number: TWRED Hangar	**Sampler:** SH	**Client:** ELLWOOD
Well ID: MW-5	**Date:** 8/8/17	**Site:** RED Hangar
Well Diameter:	**DTW:** 16.55	**Total Depth** 28.0
Purge Equipment Bladder	**Tubing** (OD) 1/4	**New** **Dedicated**
Purge Method	3- 5 Casing Vol Micro/low Flow Extraction Well Other:	
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot	

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1510	6.48	19.0	493	2000	7.96	252	~~0~~	
1515	6.24	18.2	524	1600	4.45	266		
1520	6.19	18.0	524	1500	4.12	271		
1525	6.26	18.0	524	1500	5.10	273		
1530	6.17	18.1	522	1527	4.19	278		
1535	6.16	18.1	520	1521	4.15	281		
1540	6.21	18.0	518	1520	4.21	283		

Well Dewater	**Yes / No**	**Total Volume Removed:** ~2	**Gallons**
Sample Method:	Disp Bailer New Tubing	**Sample port**	**Other:** _____
Sample Date: 8/8/17	**Sample Time:** 1541	**DTW at Sample:** 16.80	
Sample ID: MW-5	**Lab:** McC	**Number of Containers:** 3	
Analysis: ~~TPH-Gas, BTEX, MTBE~~ 8260			

Notes:

Purging And Sampling Data Sheet

Job Number: Tim Red Hanger	**Sampler:** SP	**Client:** Ellwood
Well ID: MW-6	**Date:** 8/8/17	**Site:** Red Hanger
Well Diameter: 2	**DTW:** 17.80	**Total Depth** 27.80
Purge Equipment Bladder	**Tubing** (OD) Y/T	(New) Dedicated
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:	
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot	

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1600	6.75	18.3	556	1100	6.99	~~249~~	0	
1605	6.53	18.2	551	1051	6.94	292		
1610	6.77	18.1	553	888	7.41	294		
1615	6.25	17.6	555	888	4.28	300		
1620	6.24	17.6	556	830	4.23	299		
1625	6.24	17.6	554	856	4.12	299		
1630	6.24	17.6	552	845	4.07	299		

Well Dewater Yes (No)	**Total Volume Removed:** ~2	**Gallons**
Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____		
Sample Date: 8/8/17	**Sample Time:** 1634	**DTW at Sample:**
Sample ID: MW-6	**Lab:** M²C	**Number of Containers:** 3
Analysis: ~~TPH Gas, BTEX, MTBE~~ 8260		

Notes:

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	**Sampler:** SP	**Client:** Ellwood	
Well ID: mw-1	**Date:** 8/9/17	**Site:** Red Hanger	
Well Diameter: 2	**DTW:** 17.60	**Total Depth** 26.5'	
Purge Equipment BLADDER	**Tubing** (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		
Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW		

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____'

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
0715	6.64	17.3	623	170	3.07	208	0	17.5
0720	6.42	17.2	623	164	2.90	222		
0725	6.25	17.1	623	144	2.57	236		17.6
0730	6.24	17.1	621	147	2.50	241		17.6
0735	6.22	17.1	622	97	2.19	247		17.6
0740	6.18	17.0	621	39	2.10	250	18	
0747	6.17	17.1	619	32	1.93	247		
0752	6.17	17.0	618	27.0	1.90	245	~22	2.0

Well Dewater Yes (No) **Total Volume Removed:** ~22.0 **Gallons**

Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____

Sample Date: 8/9/17	**Sample Time:** 0758	**DTW at Sample:** 17.64
Sample ID: mw-1	**Lab:** MCL	**Number of Containers:** 3
Analysis: ~~TPH- Gas, BTEX, MTBE~~ → 8260		

Notes: purge @ 23'

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	Sampler: SP	Client: ELLWOOD	
Well ID: MW-2	Date: 8/9/17	Site: RED Hanger	
Well Diameter: ~~2~~ 1	DTW: 17.40	Total Depth 26.7	
Purge Equipment Reel	Tubing (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ X_____ = _____ Gallons 80% = _____'

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
0830	6.26	16.8	493	360	3.55	284	~~0~~	
0835	6.25	16.8	493	187	3.63	285		
0840	6.19	16.7	496	135	3.27	291		
0845	6.19	16.7	500	132.0	3.29	296		
0850	6.19	16.8	495	~~115~~	3.34	292		25
0855	6.19	16.8	495	~~117~~	3.35	294	1g	21
0900	6.18	16.8	496	32	3.32	295		~~5~~

Well Dewater	Yes / ~~No~~	Total Volume Removed: ~2	Gallons
Sample Method:	Disp Bailer (New Tubing)	Sample port	Other: _____
Sample Date: 8/9/17	Sample Time: 0902	DTW at Sample: 17.48	
Sample ID: MW-2	Lab: MCC	Number of Containers: 3	
Analysis: ~~TPH- Gas, BTEX, MTBE~~	8260		

Notes:

_____

_____

_____

_____

Purging And Sampling Data Sheet

Job Number: TM Red Hanger	Sampler: GJF	Client: ELLWOOD
Well ID: MW-3	Date: 8/8/17	Site: Red Hanger
Well Diameter: 2	DTW: 17.67	Total Depth 28.0

Purge Equipment BLADDER — Tubing (OD) 1/4 — New (circled) / Dedicated

Purge Method: 3-5 Casing Vol / Micro/low Flow (circled) / Extraction Well / Other:

Multipliers: 1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot

Total Depth - DTW X Mulitplier = 1 casing vol. | 80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = 10.33' X____ = 1.65 Gallons 80% =________' µS/cm

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
12.51	6.71	18.3	528	1000	8.2	145.4	~~0~~	.25
1256	6.63	17.4	527	1000	6.4	140		.500 lm
1301	6.53	17.3	523	>1000	8.1	131		
1307	6.36	17.2	519	>1000	5.86	115		
1312	6.29	17.1	517	>1000	5.36	121		
1317	6.24	17.1	519	>1000	5.24	111	1g	
1321	6.24	17.0	515	>1000	5.01	121		
1325	6.30	16.8	510	553	5.25	125		
1330	6.32	17.0	510	550	5.29	123		
1335	6.35	17.0	510	549	5.37	~~[illegible]~~	12	133 orp
1340	6.28	17.0	509	548	5.15	136		

Well Dewater Yes / No (circled)	Total Volume Removed: ~2 Gallons	
Sample Method: Disp Bailer / New Tubing (circled) / Sample port / Other:____		
Sample Date: 8/8/17	Sample Time: 1342	DTW at Sample: 17.91
Sample ID: MW-3	Lab: MC C	Number of Containers:
Analysis: ~~TPH- Gas, BTEX, MTBE~~ 8260		

Notes:

Purging And Sampling Data Sheet

Job Number: Tim Ellwood	**Sampler:** SP	**Client:** Ellwood	
Well ID: MW-4	**Date:** 8/8/17	**Site:** RED Hoyer	
Well Diameter: 2.0	**DTW:** 16.15	**Total Depth** 28	
Purge Equipment Bladder	**Tubing** (OD) 1/4	(New) Dedicated	
Purge Method	3- 5 Casing Vol Micro/low Flow Extraction Well Other:		
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot		
Total Depth - DTW X Mulitplier = 1 casing vol.		80% Recovery = Total Depth -DTW X .20 + DTW	

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1401	6.85	18.2	441	>1000	6.81	255		
1410	6.48	18.1	430	>1000	6.75	252		
1415	6.85	18.2	427	1800	7.38	233		
1420	6.42	18.3	418	1400	6.85	251		ph-6.42
1425	6.42	18.3	406	733	6.82	256		
1430	6.37	18.3	396	426	6.88	259		
1435	6.28	18.3	383	159	6.41	258		
1440	6.28	18.3	384	150	6.37	[illegible]		260
1445	6.27	18.3	385	145	6.28	257		

Well Dewater Yes (No)	**Total Volume Removed:** 2	**Gallons**
Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____		
Sample Date: 8/8/17	**Sample Time:** 1446	**DTW at Sample:** 16.21
Sample ID: MW-4	**Lab:** MCL	**Number of Containers:** 3
Analysis: ~~TPH Gas, BTEX, MTBE~~ 8260		

Notes:

Job Number:	Sampler:	Client:
Well ID:	Date:	Site:
Well Diameter:	DTW:	Total Depth

Purging And Sampling Data Sheet

Job Number: TWRED Hangar	**Sampler:** SH	**Client:** ELLWOOD
Well ID: MW-5	**Date:** 8/8/17	**Site:** RED Hangar
Well Diameter:	**DTW:** 16.55	**Total Depth** 28.0
Purge Equipment Bladder	**Tubing** (OD) 1/4	**New** **Dedicated**
Purge Method	3- 5 Casing Vol Micro/low Flow Extraction Well Other:	
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot	

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1510	6.48	19.0	493	2000	7.96	252	~~0~~	
1515	6.24	18.2	524	1600	4.45	266		
1520	6.19	18.0	524	1500	4.12	271		
1525	6.26	18.0	524	1500	5.10	273		
1530	6.17	18.1	522	1527	4.19	278		
1535	6.16	18.1	520	1521	4.15	281		
1540	6.21	18.0	518	1520	4.21	283		

Well Dewater	**Yes / No**	**Total Volume Removed:** ~2	**Gallons**
Sample Method:	Disp Bailer New Tubing	**Sample port**	**Other:** _____
Sample Date: 8/8/17	**Sample Time:** 1541	**DTW at Sample:** 16.80	
Sample ID: MW-5	**Lab:** McC	**Number of Containers:** 3	
Analysis: ~~TPH-Gas, BTEX, MTBE~~ 8260			

Notes:

Purging And Sampling Data Sheet

Job Number: Tim Red Hanger	**Sampler:** SP	**Client:** Ellwood
Well ID: MW-6	**Date:** 8/8/17	**Site:** Red Hanger
Well Diameter: 2	**DTW:** 17.80	**Total Depth** 27.80
Purge Equipment Bladder	**Tubing** (OD) Y/T	(New) Dedicated
Purge Method	3- 5 Casing Vol (Micro/low Flow) Extraction Well Other:	
Multipliers	1"= 0.04, 2"=0.16, 3"=0.37, 4"=0.65, 5"=1.02, 6"=1.47 Gallons per liner foot	

Total Depth - DTW X Mulitplier = 1 casing vol.	80% Recovery = Total Depth -DTW X .20 + DTW

1 volume = _____ **X** _____ **=** _____ **Gallons** **80% =** _____ '

Time	ph	Temp	Cond	Turb	DO	ORP	Gallons	Notes
1600	6.75	18.3	556	1100	6.99	~~249~~	0	
1605	6.53	18.2	551	1051	6.94	292		
1610	6.77	18.1	553	888	7.41	294		
1615	6.25	17.6	555	888	4.28	300		
1620	6.24	17.6	556	830	4.23	299		
1625	6.24	17.6	554	856	4.12	299		
1630	6.24	17.6	552	845	4.07	299		

Well Dewater Yes (No)	**Total Volume Removed:** ~2	**Gallons**
Sample Method: Disp Bailer (New Tubing) Sample port **Other:** _____		
Sample Date: 8/8/17	**Sample Time:** 1634	**DTW at Sample:**
Sample ID: MW-6	**Lab:** M²C	**Number of Containers:** 3
Analysis: ~~TPH Gas, BTEX, MTBE~~ 8260		

Notes:

ATTACHMENT C

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1707A32

Report Created for: LRM Consulting, Inc.

1534 Plaza Lane, #145
Burlingame, CA 94010

Project Contact: Mehrdad Javaherian
Project P.O.:
Project Name: TM Red Hanger: 6239 College Ave.

Project Received: 07/26/2017

Analytical Report reviewed & approved for release on 08/04/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: TM Red Hanger: 6239 College Ave.
WorkOrder: 1707A32

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1 @ 5'	1707A32-001A	Soil	07/25/2017 12:00	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/03/2017 20:25
Bromochloromethane	ND	0.0050	1	08/03/2017 20:25
Bromodichloromethane	ND	0.0050	1	08/03/2017 20:25
Bromoform	ND	0.0050	1	08/03/2017 20:25
Bromomethane	ND	0.0050	1	08/03/2017 20:25
Carbon Tetrachloride	ND	0.0050	1	08/03/2017 20:25
Chlorobenzene	ND	0.0050	1	08/03/2017 20:25
Chloroethane	ND	0.0050	1	08/03/2017 20:25
Chloroform	ND	0.0050	1	08/03/2017 20:25
Chloromethane	ND	0.0050	1	08/03/2017 20:25
2-Chlorotoluene	ND	0.0050	1	08/03/2017 20:25
4-Chlorotoluene	ND	0.0050	1	08/03/2017 20:25
Dibromochloromethane	ND	0.0050	1	08/03/2017 20:25
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/03/2017 20:25
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/03/2017 20:25
Dibromomethane	ND	0.0050	1	08/03/2017 20:25
1,2-Dichlorobenzene	ND	0.0050	1	08/03/2017 20:25
1,3-Dichlorobenzene	ND	0.0050	1	08/03/2017 20:25
1,4-Dichlorobenzene	ND	0.0050	1	08/03/2017 20:25
Dichlorodifluoromethane	ND	0.0050	1	08/03/2017 20:25
1,1-Dichloroethane	ND	0.0050	1	08/03/2017 20:25
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/03/2017 20:25
1,1-Dichloroethene	ND	0.0050	1	08/03/2017 20:25
cis-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 20:25
trans-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 20:25
1,2-Dichloropropane	ND	0.0050	1	08/03/2017 20:25
1,3-Dichloropropane	ND	0.0050	1	08/03/2017 20:25
2,2-Dichloropropane	ND	0.0050	1	08/03/2017 20:25
1,1-Dichloropropene	ND	0.0050	1	08/03/2017 20:25
cis-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 20:25
trans-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 20:25
Freon 113	ND	0.0050	1	08/03/2017 20:25
Hexachlorobutadiene	ND	0.0050	1	08/03/2017 20:25
Hexachloroethane	ND	0.0050	1	08/03/2017 20:25
Methylene chloride	ND	0.0050	1	08/03/2017 20:25
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 20:25
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 20:25

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1 @ 5'	**1707A32-001A**	**Soil**	**07/25/2017 12:00**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/03/2017 20:25
1,2,3-Trichlorobenzene	ND	0.0050	1	08/03/2017 20:25
1,2,4-Trichlorobenzene	ND	0.0050	1	08/03/2017 20:25
1,1,1-Trichloroethane	ND	0.0050	1	08/03/2017 20:25
1,1,2-Trichloroethane	ND	0.0050	1	08/03/2017 20:25
Trichloroethene	ND	0.0050	1	08/03/2017 20:25
Trichlorofluoromethane	ND	0.0050	1	08/03/2017 20:25
1,2,3-Trichloropropane	ND	0.0050	1	08/03/2017 20:25
Vinyl Chloride	ND	0.0050	1	08/03/2017 20:25

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/03/2017 20:25
Toluene-d8	114	70-130	08/03/2017 20:25
4-BFB	123	70-130	08/03/2017 20:25
Benzene-d6	71	60-140	08/03/2017 20:25
Ethylbenzene-d10	89	60-140	08/03/2017 20:25
1,2-DCB-d4	75	60-140	08/03/2017 20:25

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1 @ 15'	1707A32-003A	Soil	07/25/2017 15:15	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/03/2017 21:07
Bromochloromethane	ND	0.0050	1	08/03/2017 21:07
Bromodichloromethane	ND	0.0050	1	08/03/2017 21:07
Bromoform	ND	0.0050	1	08/03/2017 21:07
Bromomethane	ND	0.0050	1	08/03/2017 21:07
Carbon Tetrachloride	ND	0.0050	1	08/03/2017 21:07
Chlorobenzene	ND	0.0050	1	08/03/2017 21:07
Chloroethane	ND	0.0050	1	08/03/2017 21:07
Chloroform	ND	0.0050	1	08/03/2017 21:07
Chloromethane	ND	0.0050	1	08/03/2017 21:07
2-Chlorotoluene	ND	0.0050	1	08/03/2017 21:07
4-Chlorotoluene	ND	0.0050	1	08/03/2017 21:07
Dibromochloromethane	ND	0.0050	1	08/03/2017 21:07
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/03/2017 21:07
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/03/2017 21:07
Dibromomethane	ND	0.0050	1	08/03/2017 21:07
1,2-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:07
1,3-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:07
1,4-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:07
Dichlorodifluoromethane	ND	0.0050	1	08/03/2017 21:07
1,1-Dichloroethane	ND	0.0050	1	08/03/2017 21:07
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/03/2017 21:07
1,1-Dichloroethene	ND	0.0050	1	08/03/2017 21:07
cis-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 21:07
trans-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 21:07
1,2-Dichloropropane	ND	0.0050	1	08/03/2017 21:07
1,3-Dichloropropane	ND	0.0050	1	08/03/2017 21:07
2,2-Dichloropropane	ND	0.0050	1	08/03/2017 21:07
1,1-Dichloropropene	ND	0.0050	1	08/03/2017 21:07
cis-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 21:07
trans-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 21:07
Freon 113	ND	0.0050	1	08/03/2017 21:07
Hexachlorobutadiene	ND	0.0050	1	08/03/2017 21:07
Hexachloroethane	ND	0.0050	1	08/03/2017 21:07
Methylene chloride	ND	0.0050	1	08/03/2017 21:07
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 21:07
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 21:07

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1 @ 15'	**1707A32-003A**	**Soil**	**07/25/2017 15:15**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/03/2017 21:07
1,2,3-Trichlorobenzene	ND	0.0050	1	08/03/2017 21:07
1,2,4-Trichlorobenzene	ND	0.0050	1	08/03/2017 21:07
1,1,1-Trichloroethane	ND	0.0050	1	08/03/2017 21:07
1,1,2-Trichloroethane	ND	0.0050	1	08/03/2017 21:07
Trichloroethene	ND	0.0050	1	08/03/2017 21:07
Trichlorofluoromethane	ND	0.0050	1	08/03/2017 21:07
1,2,3-Trichloropropane	ND	0.0050	1	08/03/2017 21:07
Vinyl Chloride	ND	0.0050	1	08/03/2017 21:07

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/03/2017 21:07
Toluene-d8	114	70-130	08/03/2017 21:07
4-BFB	125	70-130	08/03/2017 21:07
Benzene-d6	62	60-140	08/03/2017 21:07
Ethylbenzene-d10	85	60-140	08/03/2017 21:07
1,2-DCB-d4	75	60-140	08/03/2017 21:07

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 5'	1707A32-005A	Soil	07/26/2017 08:30	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/03/2017 21:48
Bromochloromethane	ND	0.0050	1	08/03/2017 21:48
Bromodichloromethane	ND	0.0050	1	08/03/2017 21:48
Bromoform	ND	0.0050	1	08/03/2017 21:48
Bromomethane	ND	0.0050	1	08/03/2017 21:48
Carbon Tetrachloride	ND	0.0050	1	08/03/2017 21:48
Chlorobenzene	ND	0.0050	1	08/03/2017 21:48
Chloroethane	ND	0.0050	1	08/03/2017 21:48
Chloroform	ND	0.0050	1	08/03/2017 21:48
Chloromethane	ND	0.0050	1	08/03/2017 21:48
2-Chlorotoluene	ND	0.0050	1	08/03/2017 21:48
4-Chlorotoluene	ND	0.0050	1	08/03/2017 21:48
Dibromochloromethane	ND	0.0050	1	08/03/2017 21:48
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/03/2017 21:48
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/03/2017 21:48
Dibromomethane	ND	0.0050	1	08/03/2017 21:48
1,2-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:48
1,3-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:48
1,4-Dichlorobenzene	ND	0.0050	1	08/03/2017 21:48
Dichlorodifluoromethane	ND	0.0050	1	08/03/2017 21:48
1,1-Dichloroethane	ND	0.0050	1	08/03/2017 21:48
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/03/2017 21:48
1,1-Dichloroethene	ND	0.0050	1	08/03/2017 21:48
cis-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 21:48
trans-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 21:48
1,2-Dichloropropane	ND	0.0050	1	08/03/2017 21:48
1,3-Dichloropropane	ND	0.0050	1	08/03/2017 21:48
2,2-Dichloropropane	ND	0.0050	1	08/03/2017 21:48
1,1-Dichloropropene	ND	0.0050	1	08/03/2017 21:48
cis-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 21:48
trans-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 21:48
Freon 113	ND	0.0050	1	08/03/2017 21:48
Hexachlorobutadiene	ND	0.0050	1	08/03/2017 21:48
Hexachloroethane	ND	0.0050	1	08/03/2017 21:48
Methylene chloride	ND	0.0050	1	08/03/2017 21:48
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 21:48
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 21:48

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 5'	1707A32-005A	Soil	07/26/2017 08:30	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/03/2017 21:48
1,2,3-Trichlorobenzene	ND	0.0050	1	08/03/2017 21:48
1,2,4-Trichlorobenzene	ND	0.0050	1	08/03/2017 21:48
1,1,1-Trichloroethane	ND	0.0050	1	08/03/2017 21:48
1,1,2-Trichloroethane	ND	0.0050	1	08/03/2017 21:48
Trichloroethene	ND	0.0050	1	08/03/2017 21:48
Trichlorofluoromethane	ND	0.0050	1	08/03/2017 21:48
1,2,3-Trichloropropane	ND	0.0050	1	08/03/2017 21:48
Vinyl Chloride	ND	0.0050	1	08/03/2017 21:48

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/03/2017 21:48
Toluene-d8	114	70-130	08/03/2017 21:48
4-BFB	120	70-130	08/03/2017 21:48
Benzene-d6	62	60-140	08/03/2017 21:48
Ethylbenzene-d10	76	60-140	08/03/2017 21:48
1,2-DCB-d4	64	60-140	08/03/2017 21:48

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 15'	1707A32-007A	Soil	07/26/2017 08:40	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/03/2017 22:30
Bromochloromethane	ND	0.0050	1	08/03/2017 22:30
Bromodichloromethane	ND	0.0050	1	08/03/2017 22:30
Bromoform	ND	0.0050	1	08/03/2017 22:30
Bromomethane	ND	0.0050	1	08/03/2017 22:30
Carbon Tetrachloride	ND	0.0050	1	08/03/2017 22:30
Chlorobenzene	ND	0.0050	1	08/03/2017 22:30
Chloroethane	ND	0.0050	1	08/03/2017 22:30
Chloroform	ND	0.0050	1	08/03/2017 22:30
Chloromethane	ND	0.0050	1	08/03/2017 22:30
2-Chlorotoluene	ND	0.0050	1	08/03/2017 22:30
4-Chlorotoluene	ND	0.0050	1	08/03/2017 22:30
Dibromochloromethane	ND	0.0050	1	08/03/2017 22:30
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/03/2017 22:30
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/03/2017 22:30
Dibromomethane	ND	0.0050	1	08/03/2017 22:30
1,2-Dichlorobenzene	ND	0.0050	1	08/03/2017 22:30
1,3-Dichlorobenzene	ND	0.0050	1	08/03/2017 22:30
1,4-Dichlorobenzene	ND	0.0050	1	08/03/2017 22:30
Dichlorodifluoromethane	ND	0.0050	1	08/03/2017 22:30
1,1-Dichloroethane	ND	0.0050	1	08/03/2017 22:30
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/03/2017 22:30
1,1-Dichloroethene	ND	0.0050	1	08/03/2017 22:30
cis-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 22:30
trans-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 22:30
1,2-Dichloropropane	ND	0.0050	1	08/03/2017 22:30
1,3-Dichloropropane	ND	0.0050	1	08/03/2017 22:30
2,2-Dichloropropane	ND	0.0050	1	08/03/2017 22:30
1,1-Dichloropropene	ND	0.0050	1	08/03/2017 22:30
cis-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 22:30
trans-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 22:30
Freon 113	ND	0.0050	1	08/03/2017 22:30
Hexachlorobutadiene	ND	0.0050	1	08/03/2017 22:30
Hexachloroethane	ND	0.0050	1	08/03/2017 22:30
Methylene chloride	ND	0.0050	1	08/03/2017 22:30
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 22:30
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 22:30

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 15'	**1707A32-007A**	**Soil**	**07/26/2017 08:40**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/03/2017 22:30
1,2,3-Trichlorobenzene	ND	0.0050	1	08/03/2017 22:30
1,2,4-Trichlorobenzene	ND	0.0050	1	08/03/2017 22:30
1,1,1-Trichloroethane	ND	0.0050	1	08/03/2017 22:30
1,1,2-Trichloroethane	ND	0.0050	1	08/03/2017 22:30
Trichloroethene	ND	0.0050	1	08/03/2017 22:30
Trichlorofluoromethane	ND	0.0050	1	08/03/2017 22:30
1,2,3-Trichloropropane	ND	0.0050	1	08/03/2017 22:30
Vinyl Chloride	ND	0.0050	1	08/03/2017 22:30

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/03/2017 22:30
Toluene-d8	115	70-130	08/03/2017 22:30
4-BFB	122	70-130	08/03/2017 22:30
Benzene-d6	75	60-140	08/03/2017 22:30
Ethylbenzene-d10	93	60-140	08/03/2017 22:30
1,2-DCB-d4	79	60-140	08/03/2017 22:30

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 25'	1707A32-009A	Soil	07/26/2017 08:50	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/03/2017 23:12
Bromochloromethane	ND	0.0050	1	08/03/2017 23:12
Bromodichloromethane	ND	0.0050	1	08/03/2017 23:12
Bromoform	ND	0.0050	1	08/03/2017 23:12
Bromomethane	ND	0.0050	1	08/03/2017 23:12
Carbon Tetrachloride	ND	0.0050	1	08/03/2017 23:12
Chlorobenzene	ND	0.0050	1	08/03/2017 23:12
Chloroethane	ND	0.0050	1	08/03/2017 23:12
Chloroform	ND	0.0050	1	08/03/2017 23:12
Chloromethane	ND	0.0050	1	08/03/2017 23:12
2-Chlorotoluene	ND	0.0050	1	08/03/2017 23:12
4-Chlorotoluene	ND	0.0050	1	08/03/2017 23:12
Dibromochloromethane	ND	0.0050	1	08/03/2017 23:12
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/03/2017 23:12
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/03/2017 23:12
Dibromomethane	ND	0.0050	1	08/03/2017 23:12
1,2-Dichlorobenzene	ND	0.0050	1	08/03/2017 23:12
1,3-Dichlorobenzene	ND	0.0050	1	08/03/2017 23:12
1,4-Dichlorobenzene	ND	0.0050	1	08/03/2017 23:12
Dichlorodifluoromethane	ND	0.0050	1	08/03/2017 23:12
1,1-Dichloroethane	ND	0.0050	1	08/03/2017 23:12
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/03/2017 23:12
1,1-Dichloroethene	ND	0.0050	1	08/03/2017 23:12
cis-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 23:12
trans-1,2-Dichloroethene	ND	0.0050	1	08/03/2017 23:12
1,2-Dichloropropane	ND	0.0050	1	08/03/2017 23:12
1,3-Dichloropropane	ND	0.0050	1	08/03/2017 23:12
2,2-Dichloropropane	ND	0.0050	1	08/03/2017 23:12
1,1-Dichloropropene	ND	0.0050	1	08/03/2017 23:12
cis-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 23:12
trans-1,3-Dichloropropene	ND	0.0050	1	08/03/2017 23:12
Freon 113	ND	0.0050	1	08/03/2017 23:12
Hexachlorobutadiene	ND	0.0050	1	08/03/2017 23:12
Hexachloroethane	ND	0.0050	1	08/03/2017 23:12
Methylene chloride	ND	0.0050	1	08/03/2017 23:12
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 23:12
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/03/2017 23:12

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Received:	7/26/17 16:03	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6 @ 25'	**1707A32-009A**	**Soil**	**07/26/2017 08:50**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/03/2017 23:12
1,2,3-Trichlorobenzene	ND	0.0050	1	08/03/2017 23:12
1,2,4-Trichlorobenzene	ND	0.0050	1	08/03/2017 23:12
1,1,1-Trichloroethane	ND	0.0050	1	08/03/2017 23:12
1,1,2-Trichloroethane	ND	0.0050	1	08/03/2017 23:12
Trichloroethene	ND	0.0050	1	08/03/2017 23:12
Trichlorofluoromethane	ND	0.0050	1	08/03/2017 23:12
1,2,3-Trichloropropane	ND	0.0050	1	08/03/2017 23:12
Vinyl Chloride	ND	0.0050	1	08/03/2017 23:12

Surrogates	REC (%)	Limits	
Dibromofluoromethane	104	70-130	08/03/2017 23:12
Toluene-d8	115	70-130	08/03/2017 23:12
4-BFB	119	70-130	08/03/2017 23:12
Benzene-d6	73	60-140	08/03/2017 23:12
Ethylbenzene-d10	95	60-140	08/03/2017 23:12
1,2-DCB-d4	79	60-140	08/03/2017 23:12

Analyst(s): KF

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Prepared:	7/27/17	**BatchID:**	142711
Date Analyzed:	7/28/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger: 6239 College Ave.	**Sample ID:**	MB/LCS-142711 1707A38-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0553	0.0050	0.050	-	111	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0496	0.0040	0.050	-	99	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0504	0.0040	0.050	-	101	58-135
1,1-Dichloroethene	ND	0.0513	0.0050	0.050	-	103	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
Methylene chloride	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A32
Date Prepared:	7/27/17	**BatchID:**	142711
Date Analyzed:	7/28/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger: 6239 College Ave.	**Sample ID:**	MB/LCS-142711 1707A38-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Tetrachloroethene	ND	-	0.0050	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0602	0.0050	0.050	-	120	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	0.1276	0.132		0.12	102	106	70-130
Toluene-d8	0.1516	0.153		0.12	121	123	70-130
4-BFB	0.01515	0.0142		0.012	121	113	70-130
Benzene-d6	0.08009	0.0912		0.10	80	91	60-140
Ethylbenzene-d10	0.1048	0.111		0.10	105	111	60-140
1,2-DCB-d4	0.08084	0.0910		0.10	81	91	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chlorobenzene	0.0509	0.0530	0.050	ND	102	106	77-121	3.93	20
1,2-Dibromoethane (EDB)	0.0460	0.0479	0.050	ND	92	96	67-119	4.14	20
1,2-Dichloroethane (1,2-DCA)	0.0456	0.0491	0.050	ND	91	98	58-135	7.32	20
1,1-Dichloroethene	0.0427	0.0495	0.050	ND	85	99	42-145	14.8	20
Trichloroethene	0.0520	0.0568	0.050	ND	104	114	72-132	8.86	20
Surrogate Recovery									
Dibromofluoromethane	0.132	0.133	0.12		106	106	70-130	0	20
Toluene-d8	0.152	0.153	0.12		121	122	70-130	0.912	20
4-BFB	0.0146	0.0140	0.012		117	112	70-130	4.45	20
Benzene-d6	0.0855	0.0882	0.10		86	88	60-140	3.15	20
Ethylbenzene-d10	0.103	0.105	0.10		103	105	60-140	2.30	20
1,2-DCB-d4	0.0884	0.0911	0.10		88	91	60-140	2.97	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1707A32 **ClientCode: LRMC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Mehrdad Javaherian
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010
(415) 706-8935 FAX:

Email: mehrdad@lrm-consulting.com
cc/3rd Party:
PO:
ProjectNo: TM Red Hanger: 6239 College Ave.

Bill to:
Accounts Payable
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Requested TAT: **5 days;**

Date Received: **07/26/2017**
Date Logged: **07/27/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1707A32-001	MW-1 @ 5'	Soil	7/25/2017 12:00	☐	A											
1707A32-003	MW-1 @ 15'	Soil	7/25/2017 15:15	☐	A											
1707A32-005	MW-6 @ 5'	Soil	7/26/2017 08:30	☐	A											
1707A32-007	MW-6 @ 15'	Soil	7/26/2017 08:40	☐	A											
1707A32-009	MW-6 @ 25'	Soil	7/26/2017 08:50	☐	A											

Test Legend:

1	8010_S	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: LRM CONSULTING, INC.
Client Contact: Mehrdad Javaherian
Contact's Email: mehrdad@lrm-consulting.com

Project: TM Red Hange: 6239 College Ave.
Comments:

Work Order: 1707A32
QC Level: LEVEL 2
Date Logged: 7/27/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1707A32-001A	MW-1 @ 5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/25/2017 12:00	5 days		☐	
1707A32-002A	MW-1 @ 10'	Soil		1	Acetate Liner	☐	7/25/2017 12:55			☑	
1707A32-003A	MW-1 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/25/2017 15:15	5 days		☐	
1707A32-004A	MW-1 @ 20'	Soil		1	Acetate Liner	☐	7/25/2017 16:20			☑	
1707A32-005A	MW-6 @ 5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 8:30	5 days		☐	
1707A32-006A	MW-6 @ 10'	Soil		1	Acetate Liner	☐	7/26/2017 8:35			☑	
1707A32-007A	MW-6 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 8:40	5 days		☐	
1707A32-008A	MW-6 @ 20'	Soil		1	Acetate Liner	☐	7/26/2017 8:45			☑	
1707A32-009A	MW-6 @ 25'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 8:50	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1707A32

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		(STD) circled		Quote #	
J-Flag / MDL		ESL		Cleanup Approved				Bottle Order #	
Delivery Format:	PDF		GeoTracker EDF		EDD		Write On (DW)		EQuIS

Report To: Mehrdad Javaherian Bill To:
Company: LRM
Email: mehrad@lrm-consulting.com
Alt Email: Tele: 415-706-8935
Project Name: 6239 College Ave Project #: TM Red Hangar
Project Location: Oakland PO #
Sampler Signature: [signature]

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs) B 8010 List	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	~~6010~~	Hold	
MW-1 @ 5'	7-25	12:00	1	S										/							/		
MW-1 @ 10'		12:55	1	S																		/	
MW-1 @ 15'		3:15	1	S										/							/		
MW-1 @ 20'		4:20	1	S																		/	
~~[illegible]~~																							
MW-6 @ 5'	7-26	8:30	1	S										/							/		
MW-6 @ 10'		8:35	1	S																		/	
MW-6 @ 15'		8:40	1	S										/							/		
MW-6 @ 20'		8:45	1	S																		/	
MW-6 @ 25'		8:50	1	S										/							/		

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
[signature]	7-26	9:40	PTJ	7/25/17	951
PTJ	7/26/17	1603	[signature]	7/26/17	1603

Comments / Instructions

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 5.4 °C wet Initials [initials]

Page ___ of ___

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Sample Receipt Checklist

Client Name:	**LRM Consulting, Inc.**	Date and Time Received	**7/26/2017 16:03**
Project Name:	**TM Red Hange: 6239 College Ave.**	Date Logged:	**7/27/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1707A32** Matrix: Soil	Logged by:	Kena Ponce
Carrier:	Patrick Johnson (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp: 5.4°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1707A60

Report Created for: LRM Consulting, Inc.

1534 Plaza Lane, #145
Burlingame, CA 94010

Project Contact: Mehrdad Javaherian
Project P.O.:
Project Name: TM Red Hanger

Project Received: 07/27/2017

Analytical Report reviewed & approved for release on 08/04/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: TM Red Hanger
WorkOrder: 1707A60

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

a9	Reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5035
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/Kg

Halogenated Volatile Organics [Encore Sampling]

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1-25'	1707A60-001A	Soil	07/26/2017 12:05	GC16	142746

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.010	1	08/03/2017 23:54
Bromochloromethane	ND	0.010	1	08/03/2017 23:54
Bromodichloromethane	ND	0.010	1	08/03/2017 23:54
Bromoform	ND	0.010	1	08/03/2017 23:54
Bromomethane	ND	0.010	1	08/03/2017 23:54
Carbon Tetrachloride	ND	0.010	1	08/03/2017 23:54
Chlorobenzene	ND	0.010	1	08/03/2017 23:54
Chloroethane	ND	0.010	1	08/03/2017 23:54
Chloroform	ND	0.010	1	08/03/2017 23:54
Chloromethane	ND	0.010	1	08/03/2017 23:54
2-Chlorotoluene	ND	0.010	1	08/03/2017 23:54
4-Chlorotoluene	ND	0.010	1	08/03/2017 23:54
Dibromochloromethane	ND	0.010	1	08/03/2017 23:54
1,2-Dibromo-3-chloropropane	ND	0.0080	1	08/03/2017 23:54
1,2-Dibromoethane (EDB)	ND	0.0080	1	08/03/2017 23:54
Dibromomethane	ND	0.010	1	08/03/2017 23:54
1,2-Dichlorobenzene	ND	0.010	1	08/03/2017 23:54
1,3-Dichlorobenzene	ND	0.010	1	08/03/2017 23:54
1,4-Dichlorobenzene	ND	0.010	1	08/03/2017 23:54
Dichlorodifluoromethane	ND	0.010	1	08/03/2017 23:54
1,1-Dichloroethane	ND	0.010	1	08/03/2017 23:54
1,2-Dichloroethane (1,2-DCA)	ND	0.010	1	08/03/2017 23:54
1,1-Dichloroethene	ND	0.010	1	08/03/2017 23:54
cis-1,2-Dichloroethene	ND	0.010	1	08/03/2017 23:54
trans-1,2-Dichloroethene	ND	0.010	1	08/03/2017 23:54
1,2-Dichloropropane	ND	0.010	1	08/03/2017 23:54
1,3-Dichloropropane	ND	0.010	1	08/03/2017 23:54
2,2-Dichloropropane	ND	0.010	1	08/03/2017 23:54
1,1-Dichloropropene	ND	0.010	1	08/03/2017 23:54
cis-1,3-Dichloropropene	ND	0.010	1	08/03/2017 23:54
trans-1,3-Dichloropropene	ND	0.010	1	08/03/2017 23:54
Freon 113	ND	0.010	1	08/03/2017 23:54
Hexachlorobutadiene	ND	0.010	1	08/03/2017 23:54
Hexachloroethane	ND	0.010	1	08/03/2017 23:54
Methylene chloride	ND	0.010	1	08/03/2017 23:54
1,1,1,2-Tetrachloroethane	ND	0.010	1	08/03/2017 23:54
1,1,2,2-Tetrachloroethane	ND	0.010	1	08/03/2017 23:54

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5035
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/Kg

Halogenated Volatile Organics [Encore Sampling]

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1-25'	**1707A60-001A**	**Soil**	**07/26/2017 12:05**	**GC16**	**142746**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.010	1	08/03/2017 23:54
1,2,3-Trichlorobenzene	ND	0.010	1	08/03/2017 23:54
1,2,4-Trichlorobenzene	ND	0.010	1	08/03/2017 23:54
1,1,1-Trichloroethane	ND	0.010	1	08/03/2017 23:54
1,1,2-Trichloroethane	ND	0.010	1	08/03/2017 23:54
Trichloroethene	ND	0.010	1	08/03/2017 23:54
Trichlorofluoromethane	ND	0.010	1	08/03/2017 23:54
1,2,3-Trichloropropane	ND	0.010	1	08/03/2017 23:54
Vinyl Chloride	ND	0.010	1	08/03/2017 23:54

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/03/2017 23:54
Toluene-d8	115	70-130	08/03/2017 23:54
4-BFB	124	70-130	08/03/2017 23:54
Benzene-d6	73	60-140	08/03/2017 23:54
Ethylbenzene-d10	92	60-140	08/03/2017 23:54
1,2-DCB-d4	78	60-140	08/03/2017 23:54

Analyst(s): KF Analytical Comments: a9

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 3.5'	1707A60-002A	Soil	07/26/2017 13:05	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 00:36
Bromochloromethane	ND	0.0050	1	08/04/2017 00:36
Bromodichloromethane	ND	0.0050	1	08/04/2017 00:36
Bromoform	ND	0.0050	1	08/04/2017 00:36
Bromomethane	ND	0.0050	1	08/04/2017 00:36
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 00:36
Chlorobenzene	ND	0.0050	1	08/04/2017 00:36
Chloroethane	ND	0.0050	1	08/04/2017 00:36
Chloroform	ND	0.0050	1	08/04/2017 00:36
Chloromethane	ND	0.0050	1	08/04/2017 00:36
2-Chlorotoluene	ND	0.0050	1	08/04/2017 00:36
4-Chlorotoluene	ND	0.0050	1	08/04/2017 00:36
Dibromochloromethane	ND	0.0050	1	08/04/2017 00:36
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 00:36
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 00:36
Dibromomethane	ND	0.0050	1	08/04/2017 00:36
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 00:36
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 00:36
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 00:36
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 00:36
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 00:36
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 00:36
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 00:36
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 00:36
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 00:36
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 00:36
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 00:36
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 00:36
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 00:36
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 00:36
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 00:36
Freon 113	ND	0.0050	1	08/04/2017 00:36
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 00:36
Hexachloroethane	ND	0.0050	1	08/04/2017 00:36
Methylene chloride	ND	0.0050	1	08/04/2017 00:36
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 00:36
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 00:36

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 3.5'	**1707A60-002A**	**Soil**	**07/26/2017 13:05**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 00:36
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 00:36
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 00:36
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 00:36
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 00:36
Trichloroethene	ND	0.0050	1	08/04/2017 00:36
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 00:36
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 00:36
Vinyl Chloride	ND	0.0050	1	08/04/2017 00:36

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/04/2017 00:36
Toluene-d8	115	70-130	08/04/2017 00:36
4-BFB	126	70-130	08/04/2017 00:36
Benzene-d6	74	60-140	08/04/2017 00:36
Ethylbenzene-d10	91	60-140	08/04/2017 00:36
1,2-DCB-d4	76	60-140	08/04/2017 00:36

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Mw-5 @ 5'	**1707A60-003A**	**Soil**	**07/26/2017 13:05**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 01:18
Bromochloromethane	ND	0.0050	1	08/04/2017 01:18
Bromodichloromethane	ND	0.0050	1	08/04/2017 01:18
Bromoform	ND	0.0050	1	08/04/2017 01:18
Bromomethane	ND	0.0050	1	08/04/2017 01:18
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 01:18
Chlorobenzene	ND	0.0050	1	08/04/2017 01:18
Chloroethane	ND	0.0050	1	08/04/2017 01:18
Chloroform	ND	0.0050	1	08/04/2017 01:18
Chloromethane	ND	0.0050	1	08/04/2017 01:18
2-Chlorotoluene	ND	0.0050	1	08/04/2017 01:18
4-Chlorotoluene	ND	0.0050	1	08/04/2017 01:18
Dibromochloromethane	ND	0.0050	1	08/04/2017 01:18
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 01:18
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 01:18
Dibromomethane	ND	0.0050	1	08/04/2017 01:18
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:18
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:18
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:18
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 01:18
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 01:18
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 01:18
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 01:18
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 01:18
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 01:18
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 01:18
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 01:18
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 01:18
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 01:18
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 01:18
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 01:18
Freon 113	ND	0.0050	1	08/04/2017 01:18
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 01:18
Hexachloroethane	ND	0.0050	1	08/04/2017 01:18
Methylene chloride	ND	0.0050	1	08/04/2017 01:18
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 01:18
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 01:18

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Mw-5 @ 5'	**1707A60-003A**	**Soil**	**07/26/2017 13:05**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 01:18
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 01:18
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 01:18
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 01:18
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 01:18
Trichloroethene	ND	0.0050	1	08/04/2017 01:18
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 01:18
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 01:18
Vinyl Chloride	ND	0.0050	1	08/04/2017 01:18

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/04/2017 01:18
Toluene-d8	115	70-130	08/04/2017 01:18
4-BFB	129	70-130	08/04/2017 01:18
Benzene-d6	74	60-140	08/04/2017 01:18
Ethylbenzene-d10	95	60-140	08/04/2017 01:18
1,2-DCB-d4	78	60-140	08/04/2017 01:18

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 15'	1707A60-005A	Soil	07/26/2017 13:15	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 01:59
Bromochloromethane	ND	0.0050	1	08/04/2017 01:59
Bromodichloromethane	ND	0.0050	1	08/04/2017 01:59
Bromoform	ND	0.0050	1	08/04/2017 01:59
Bromomethane	ND	0.0050	1	08/04/2017 01:59
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 01:59
Chlorobenzene	ND	0.0050	1	08/04/2017 01:59
Chloroethane	ND	0.0050	1	08/04/2017 01:59
Chloroform	ND	0.0050	1	08/04/2017 01:59
Chloromethane	ND	0.0050	1	08/04/2017 01:59
2-Chlorotoluene	ND	0.0050	1	08/04/2017 01:59
4-Chlorotoluene	ND	0.0050	1	08/04/2017 01:59
Dibromochloromethane	ND	0.0050	1	08/04/2017 01:59
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 01:59
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 01:59
Dibromomethane	ND	0.0050	1	08/04/2017 01:59
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:59
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:59
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 01:59
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 01:59
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 01:59
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 01:59
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 01:59
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 01:59
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 01:59
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 01:59
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 01:59
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 01:59
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 01:59
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 01:59
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 01:59
Freon 113	ND	0.0050	1	08/04/2017 01:59
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 01:59
Hexachloroethane	ND	0.0050	1	08/04/2017 01:59
Methylene chloride	ND	0.0050	1	08/04/2017 01:59
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 01:59
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 01:59

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 15'	**1707A60-005A**	**Soil**	**07/26/2017 13:15**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	**0.023**	0.0050	1	08/04/2017 01:59
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 01:59
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 01:59
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 01:59
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 01:59
Trichloroethene	ND	0.0050	1	08/04/2017 01:59
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 01:59
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 01:59
Vinyl Chloride	ND	0.0050	1	08/04/2017 01:59

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	08/04/2017 01:59
Toluene-d8	115	70-130	08/04/2017 01:59
4-BFB	127	70-130	08/04/2017 01:59
Benzene-d6	71	60-140	08/04/2017 01:59
Ethylbenzene-d10	89	60-140	08/04/2017 01:59
1,2-DCB-d4	76	60-140	08/04/2017 01:59

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 25'	1707A60-007A	Soil	07/26/2017 13:35	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 02:41
Bromochloromethane	ND	0.0050	1	08/04/2017 02:41
Bromodichloromethane	ND	0.0050	1	08/04/2017 02:41
Bromoform	ND	0.0050	1	08/04/2017 02:41
Bromomethane	ND	0.0050	1	08/04/2017 02:41
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 02:41
Chlorobenzene	ND	0.0050	1	08/04/2017 02:41
Chloroethane	ND	0.0050	1	08/04/2017 02:41
Chloroform	ND	0.0050	1	08/04/2017 02:41
Chloromethane	ND	0.0050	1	08/04/2017 02:41
2-Chlorotoluene	ND	0.0050	1	08/04/2017 02:41
4-Chlorotoluene	ND	0.0050	1	08/04/2017 02:41
Dibromochloromethane	ND	0.0050	1	08/04/2017 02:41
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 02:41
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 02:41
Dibromomethane	ND	0.0050	1	08/04/2017 02:41
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 02:41
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 02:41
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 02:41
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 02:41
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 02:41
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 02:41
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 02:41
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 02:41
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 02:41
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 02:41
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 02:41
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 02:41
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 02:41
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 02:41
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 02:41
Freon 113	ND	0.0050	1	08/04/2017 02:41
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 02:41
Hexachloroethane	ND	0.0050	1	08/04/2017 02:41
Methylene chloride	ND	0.0050	1	08/04/2017 02:41
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 02:41
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 02:41

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5 @ 25'	**1707A60-007A**	**Soil**	**07/26/2017 13:35**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 02:41
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 02:41
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 02:41
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 02:41
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 02:41
Trichloroethene	ND	0.0050	1	08/04/2017 02:41
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 02:41
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 02:41
Vinyl Chloride	ND	0.0050	1	08/04/2017 02:41

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/04/2017 02:41
Toluene-d8	116	70-130	08/04/2017 02:41
4-BFB	128	70-130	08/04/2017 02:41
Benzene-d6	77	60-140	08/04/2017 02:41
Ethylbenzene-d10	92	60-140	08/04/2017 02:41
1,2-DCB-d4	77	60-140	08/04/2017 02:41

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 2 45.5'	1707A60-008A	Soil	07/27/2017 08:50	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 03:22
Bromochloromethane	ND	0.0050	1	08/04/2017 03:22
Bromodichloromethane	ND	0.0050	1	08/04/2017 03:22
Bromoform	ND	0.0050	1	08/04/2017 03:22
Bromomethane	ND	0.0050	1	08/04/2017 03:22
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 03:22
Chlorobenzene	ND	0.0050	1	08/04/2017 03:22
Chloroethane	ND	0.0050	1	08/04/2017 03:22
Chloroform	ND	0.0050	1	08/04/2017 03:22
Chloromethane	ND	0.0050	1	08/04/2017 03:22
2-Chlorotoluene	ND	0.0050	1	08/04/2017 03:22
4-Chlorotoluene	ND	0.0050	1	08/04/2017 03:22
Dibromochloromethane	ND	0.0050	1	08/04/2017 03:22
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 03:22
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 03:22
Dibromomethane	ND	0.0050	1	08/04/2017 03:22
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 03:22
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 03:22
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 03:22
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 03:22
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 03:22
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 03:22
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 03:22
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 03:22
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 03:22
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 03:22
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 03:22
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 03:22
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 03:22
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 03:22
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 03:22
Freon 113	ND	0.0050	1	08/04/2017 03:22
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 03:22
Hexachloroethane	ND	0.0050	1	08/04/2017 03:22
Methylene chloride	ND	0.0050	1	08/04/2017 03:22
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 03:22
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 03:22

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 2 45.5'	**1707A60-008A**	**Soil**	**07/27/2017 08:50**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 03:22
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 03:22
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 03:22
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 03:22
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 03:22
Trichloroethene	ND	0.0050	1	08/04/2017 03:22
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 03:22
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 03:22
Vinyl Chloride	ND	0.0050	1	08/04/2017 03:22

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/04/2017 03:22
Toluene-d8	116	70-130	08/04/2017 03:22
4-BFB	127	70-130	08/04/2017 03:22
Benzene-d6	76	60-140	08/04/2017 03:22
Ethylbenzene-d10	94	60-140	08/04/2017 03:22
1,2-DCB-d4	78	60-140	08/04/2017 03:22

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 @ 15'	1707A60-010A	Soil	07/27/2017 09:05	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 04:04
Bromochloromethane	ND	0.0050	1	08/04/2017 04:04
Bromodichloromethane	ND	0.0050	1	08/04/2017 04:04
Bromoform	ND	0.0050	1	08/04/2017 04:04
Bromomethane	ND	0.0050	1	08/04/2017 04:04
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 04:04
Chlorobenzene	ND	0.0050	1	08/04/2017 04:04
Chloroethane	ND	0.0050	1	08/04/2017 04:04
Chloroform	ND	0.0050	1	08/04/2017 04:04
Chloromethane	ND	0.0050	1	08/04/2017 04:04
2-Chlorotoluene	ND	0.0050	1	08/04/2017 04:04
4-Chlorotoluene	ND	0.0050	1	08/04/2017 04:04
Dibromochloromethane	ND	0.0050	1	08/04/2017 04:04
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 04:04
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 04:04
Dibromomethane	ND	0.0050	1	08/04/2017 04:04
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:04
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:04
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:04
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 04:04
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 04:04
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 04:04
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 04:04
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 04:04
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 04:04
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 04:04
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 04:04
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 04:04
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 04:04
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 04:04
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 04:04
Freon 113	ND	0.0050	1	08/04/2017 04:04
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 04:04
Hexachloroethane	ND	0.0050	1	08/04/2017 04:04
Methylene chloride	ND	0.0050	1	08/04/2017 04:04
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 04:04
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 04:04

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 @ 15'	**1707A60-010A**	**Soil**	**07/27/2017 09:05**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 04:04
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 04:04
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 04:04
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 04:04
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 04:04
Trichloroethene	ND	0.0050	1	08/04/2017 04:04
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 04:04
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 04:04
Vinyl Chloride	ND	0.0050	1	08/04/2017 04:04

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/04/2017 04:04
Toluene-d8	116	70-130	08/04/2017 04:04
4-BFB	124	70-130	08/04/2017 04:04
Benzene-d6	74	60-140	08/04/2017 04:04
Ethylbenzene-d10	90	60-140	08/04/2017 04:04
1,2-DCB-d4	76	60-140	08/04/2017 04:04

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 @ 25'	1707A60-012A	Soil	07/27/2017 09:20	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 04:45
Bromochloromethane	ND	0.0050	1	08/04/2017 04:45
Bromodichloromethane	ND	0.0050	1	08/04/2017 04:45
Bromoform	ND	0.0050	1	08/04/2017 04:45
Bromomethane	ND	0.0050	1	08/04/2017 04:45
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 04:45
Chlorobenzene	ND	0.0050	1	08/04/2017 04:45
Chloroethane	ND	0.0050	1	08/04/2017 04:45
Chloroform	ND	0.0050	1	08/04/2017 04:45
Chloromethane	ND	0.0050	1	08/04/2017 04:45
2-Chlorotoluene	ND	0.0050	1	08/04/2017 04:45
4-Chlorotoluene	ND	0.0050	1	08/04/2017 04:45
Dibromochloromethane	ND	0.0050	1	08/04/2017 04:45
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 04:45
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 04:45
Dibromomethane	ND	0.0050	1	08/04/2017 04:45
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:45
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:45
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 04:45
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 04:45
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 04:45
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 04:45
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 04:45
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 04:45
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 04:45
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 04:45
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 04:45
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 04:45
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 04:45
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 04:45
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 04:45
Freon 113	ND	0.0050	1	08/04/2017 04:45
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 04:45
Hexachloroethane	ND	0.0050	1	08/04/2017 04:45
Methylene chloride	ND	0.0050	1	08/04/2017 04:45
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 04:45
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 04:45

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 @ 25'	**1707A60-012A**	**Soil**	**07/27/2017 09:20**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 04:45
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 04:45
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 04:45
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 04:45
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 04:45
Trichloroethene	ND	0.0050	1	08/04/2017 04:45
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 04:45
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 04:45
Vinyl Chloride	ND	0.0050	1	08/04/2017 04:45

Surrogates	REC (%)	Limits	
Dibromofluoromethane	106	70-130	08/04/2017 04:45
Toluene-d8	117	70-130	08/04/2017 04:45
4-BFB	129	70-130	08/04/2017 04:45
Benzene-d6	79	60-140	08/04/2017 04:45
Ethylbenzene-d10	99	60-140	08/04/2017 04:45
1,2-DCB-d4	81	60-140	08/04/2017 04:45

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 5'	1707A60-013A	Soil	07/27/2017 09:05	GC16	142711

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 05:27
Bromochloromethane	ND	0.0050	1	08/04/2017 05:27
Bromodichloromethane	ND	0.0050	1	08/04/2017 05:27
Bromoform	ND	0.0050	1	08/04/2017 05:27
Bromomethane	ND	0.0050	1	08/04/2017 05:27
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 05:27
Chlorobenzene	ND	0.0050	1	08/04/2017 05:27
Chloroethane	ND	0.0050	1	08/04/2017 05:27
Chloroform	ND	0.0050	1	08/04/2017 05:27
Chloromethane	ND	0.0050	1	08/04/2017 05:27
2-Chlorotoluene	ND	0.0050	1	08/04/2017 05:27
4-Chlorotoluene	ND	0.0050	1	08/04/2017 05:27
Dibromochloromethane	ND	0.0050	1	08/04/2017 05:27
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 05:27
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 05:27
Dibromomethane	ND	0.0050	1	08/04/2017 05:27
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 05:27
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 05:27
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 05:27
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 05:27
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 05:27
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 05:27
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 05:27
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 05:27
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 05:27
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 05:27
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 05:27
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 05:27
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 05:27
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 05:27
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 05:27
Freon 113	ND	0.0050	1	08/04/2017 05:27
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 05:27
Hexachloroethane	ND	0.0050	1	08/04/2017 05:27
Methylene chloride	ND	0.0050	1	08/04/2017 05:27
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 05:27
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 05:27

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Received:	7/27/17 14:56	**Extraction Method:**	SW5030B
Date Prepared:	7/27/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 5'	**1707A60-013A**	**Soil**	**07/27/2017 09:05**	**GC16**	**142711**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 05:27
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 05:27
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 05:27
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 05:27
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 05:27
Trichloroethene	ND	0.0050	1	08/04/2017 05:27
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 05:27
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 05:27
Vinyl Chloride	ND	0.0050	1	08/04/2017 05:27

Surrogates	REC (%)	Limits	
Dibromofluoromethane	104	70-130	08/04/2017 05:27
Toluene-d8	117	70-130	08/04/2017 05:27
4-BFB	124	70-130	08/04/2017 05:27
Benzene-d6	78	60-140	08/04/2017 05:27
Ethylbenzene-d10	99	60-140	08/04/2017 05:27
1,2-DCB-d4	79	60-140	08/04/2017 05:27

Analyst(s): KF

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Prepared:	7/27/17	**BatchID:**	142746
Date Analyzed:	7/28/17 - 7/29/17	**Extraction Method:**	SW5035
Instrument:	GC10, GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	TM Red Hanger	**Sample ID:**	MB/LCS/LCSD-142746

QC Summary Report for SW8260B (Encore)

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Bromobenzene	ND	0.010	-	-	-
Bromochloromethane	ND	0.010	-	-	-
Bromodichloromethane	ND	0.010	-	-	-
Bromoform	ND	0.010	-	-	-
Bromomethane	ND	0.010	-	-	-
Carbon Tetrachloride	ND	0.010	-	-	-
Chlorobenzene	ND	0.010	-	-	-
Chloroethane	ND	0.010	-	-	-
Chloroform	ND	0.010	-	-	-
Chloromethane	ND	0.010	-	-	-
2-Chlorotoluene	ND	0.010	-	-	-
4-Chlorotoluene	ND	0.010	-	-	-
Dibromochloromethane	ND	0.010	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.0080	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0080	-	-	-
Dibromomethane	ND	0.010	-	-	-
1,2-Dichlorobenzene	ND	0.010	-	-	-
1,3-Dichlorobenzene	ND	0.010	-	-	-
1,4-Dichlorobenzene	ND	0.010	-	-	-
Dichlorodifluoromethane	ND	0.010	-	-	-
1,1-Dichloroethane	ND	0.010	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.010	-	-	-
1,1-Dichloroethene	ND	0.010	-	-	-
cis-1,2-Dichloroethene	ND	0.010	-	-	-
trans-1,2-Dichloroethene	ND	0.010	-	-	-
1,2-Dichloropropane	ND	0.010	-	-	-
1,3-Dichloropropane	ND	0.010	-	-	-
2,2-Dichloropropane	ND	0.010	-	-	-
1,1-Dichloropropene	ND	0.010	-	-	-
cis-1,3-Dichloropropene	ND	0.010	-	-	-
trans-1,3-Dichloropropene	ND	0.010	-	-	-
Freon 113	ND	0.010	-	-	-
Hexachlorobutadiene	ND	0.010	-	-	-
Hexachloroethane	ND	0.010	-	-	-
Methylene chloride	0.01004	0.010	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.010	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.010	-	-	-
Tetrachloroethene	ND	0.010	-	-	-
1,2,3-Trichlorobenzene	ND	0.010	-	-	-

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Prepared:	7/27/17	**BatchID:**	142746
Date Analyzed:	7/28/17 - 7/29/17	**Extraction Method:**	SW5035
Instrument:	GC10, GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	TM Red Hanger	**Sample ID:**	MB/LCS/LCSD-142746

QC Summary Report for SW8260B (Encore)

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
1,2,4-Trichlorobenzene	ND	0.010	-	-	-
1,1,1-Trichloroethane	ND	0.010	-	-	-
1,1,2-Trichloroethane	ND	0.010	-	-	-
Trichloroethene	ND	0.010	-	-	-
Trichlorofluoromethane	ND	0.010	-	-	-
1,2,3-Trichloropropane	ND	0.010	-	-	-
Vinyl Chloride	ND	0.010	-	-	-
Surrogate Recovery					
Dibromofluoromethane	0.2896		0.25	116	70-130
Toluene-d8	0.3077		0.25	123	70-130
4-BFB	0.02311		0.025	92	70-130
Benzene-d6	0.1973		0.20	99	60-140
Ethylbenzene-d10	0.2141		0.20	107	60-140
1,2-DCB-d4	0.2018		0.20	101	60-140

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chlorobenzene	0.104	0.101	0.10	104	101	77-121	3.45	20
1,2-Dibromoethane (EDB)	0.0919	0.0928	0.10	92	93	67-119	1.01	20
1,2-Dichloroethane (1,2-DCA)	0.0716	0.0694	0.10	72	69	58-135	3.02	20
1,1-Dichloroethene	0.116	0.109	0.10	116	109	42-145	5.78	20
Trichloroethene	0.109	0.105	0.10	109	105	72-132	3.54	20
Surrogate Recovery								
Dibromofluoromethane	0.299	0.300	0.25	119	120	70-130	0.382	20
Toluene-d8	0.310	0.308	0.25	124	123	70-130	0.637	20
4-BFB	0.0250	0.0244	0.025	100	98	70-130	2.17	20
Benzene-d6	0.208	0.197	0.20	104	98	60-140	5.51	20
Ethylbenzene-d10	0.229	0.217	0.20	115	109	60-140	5.48	20
1,2-DCB-d4	0.215	0.206	0.20	108	103	60-140	4.41	20

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Prepared:	7/27/17	**BatchID:**	142711
Date Analyzed:	7/28/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-142711 1707A38-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0553	0.0050	0.050	-	111	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0496	0.0040	0.050	-	99	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0504	0.0040	0.050	-	101	58-135
1,1-Dichloroethene	ND	0.0513	0.0050	0.050	-	103	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
Methylene chloride	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-

(Cont.)

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707A60
Date Prepared:	7/27/17	**BatchID:**	142711
Date Analyzed:	7/28/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-142711 1707A38-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Tetrachloroethene	ND	-	0.0050	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0602	0.0050	0.050	-	120	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	0.1276	0.132		0.12	102	106	70-130
Toluene-d8	0.1516	0.153		0.12	121	123	70-130
4-BFB	0.01515	0.0142		0.012	121	113	70-130
Benzene-d6	0.08009	0.0912		0.10	80	91	60-140
Ethylbenzene-d10	0.1048	0.111		0.10	105	111	60-140
1,2-DCB-d4	0.08084	0.0910		0.10	81	91	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chlorobenzene	0.0509	0.0530	0.050	ND	102	106	77-121	3.93	20
1,2-Dibromoethane (EDB)	0.0460	0.0479	0.050	ND	92	96	67-119	4.14	20
1,2-Dichloroethane (1,2-DCA)	0.0456	0.0491	0.050	ND	91	98	58-135	7.32	20
1,1-Dichloroethene	0.0427	0.0495	0.050	ND	85	99	42-145	14.8	20
Trichloroethene	0.0520	0.0568	0.050	ND	104	114	72-132	8.86	20
Surrogate Recovery									
Dibromofluoromethane	0.132	0.133	0.12		106	106	70-130	0	20
Toluene-d8	0.152	0.153	0.12		121	122	70-130	0.912	20
4-BFB	0.0146	0.0140	0.012		117	112	70-130	4.45	20
Benzene-d6	0.0855	0.0882	0.10		86	88	60-140	3.15	20
Ethylbenzene-d10	0.103	0.105	0.10		103	105	60-140	2.30	20
1,2-DCB-d4	0.0884	0.0911	0.10		88	91	60-140	2.97	20

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1707A60 **ClientCode: LRMC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Mehrdad Javaherian
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010
(415) 706-8935 FAX:

Email: mehrdad@lrm-consulting.com
cc/3rd Party:
PO:
ProjectNo: TM Red Hanger

Bill to:
Accounts Payable
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Requested TAT: 5 days;

Date Received: 07/27/2017
Date Logged: 07/27/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1707A60-001	MW-1-25'	Soil	7/26/2017 12:05	☐	A											
1707A60-002	MW-5 @ 3.5'	Soil	7/26/2017 13:05	☐		A										
1707A60-003	Mw-5 @ 5'	Soil	7/26/2017 13:05	☐		A										
1707A60-005	MW-5 @ 15'	Soil	7/26/2017 13:15	☐		A										
1707A60-007	MW-5 @ 25'	Soil	7/26/2017 13:35	☐		A										
1707A60-008	MW-4 2 45.5'	Soil	7/27/2017 08:50	☐		A										
1707A60-010	MW-4 @ 15'	Soil	7/27/2017 09:05	☐		A										
1707A60-012	MW-4 @ 25'	Soil	7/27/2017 09:20	☐		A										
1707A60-013	MW-2 @ 5'	Soil	7/27/2017 09:05	☐		A										

Test Legend:

1	8010_E	2	8010_S	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: LRM CONSULTING, INC. **Project:** TM Red Hanger **Work Order:** 1707A60
Client Contact: Mehrdad Javaherian **QC Level:** LEVEL 2
Contact's Email: mehrdad@lrm-consulting.com **Comments:** **Date Logged:** 7/27/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1707A60-001A	MW-1-25'	Soil	SW8260B (HVOCs List) (Encore)	2	Encore Sampler	☐	7/26/2017 12:05	5 days		☐	
1707A60-002A	MW-5 @ 3.5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 13:05	5 days		☐	
1707A60-003A	Mw-5 @ 5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 13:05	5 days		☐	
1707A60-004A	MW-5 @ 10'	Soil		1	Acetate Liner	☐	7/26/2017 13:10			☑	
1707A60-005A	MW-5 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 13:15	5 days		☐	
1707A60-006A	MW-5 @ 20'	Soil		1	Acetate Liner	☐	7/26/2017 13:20			☑	
1707A60-007A	MW-5 @ 25'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 13:35	5 days		☐	
1707A60-008A	MW-4 2 45.5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/26/2017 13:35	5 days		☐	
1707A60-009A	MW-4 @ 10'	Soil		1	Acetate Liner	☐	7/27/2017 8:50			☑	
1707A60-010A	MW-4 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/27/2017 9:05	5 days		☐	
1707A60-011A	MW-4 @ 20'	Soil		1	Acetate Liner	☐	7/27/2017 9:12			☑	
1707A60-012A	MW-4 @ 25'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/27/2017 9:20	5 days		☐	
1707A60-013A	MW-2 @ 5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/27/2017 9:05	5 days		☐	
1707A60-014A	MW-2 @ 10'	Soil		1	Acetate Liner	☐	7/27/2017 9:20			☑	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1707 A60

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF | EDD | Write On (DW) | EQuIS

Report To: Mehrdad Javaherian Bill To:
Company: LRM Consulting
Email: mehrdad@lrm-consulting.com
Alt Email: Tele: 415-706-8935
Project Name: Red Hanger Project #: TM Red Hanger
Project Location: 6239 College Avenue, Oakland PO #
Sampler Signature:

SAMPLE ID / Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative
MW-1 @ 25'	7-26	1205	2	S	
MW-5 @ 3.5'		1:05	1	S	
MW-5 @ 5'		1:05	1	S	
MW-5 @ 10'		1:10	1	S	
MW-5 @ 15'		1:15	1	S	
MW-5 @ 20'		1:20	1	S	
MW-5 @ 25'		1:35	1	S	
MW-4 @ 45-5'	7-27	8:50	1	S	
MW-4 @ 10'		9:00	1	S	
MW-4 @ 15'		9:05	1	S	

Analysis Requested

BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silca Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs) 8010 list	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	Hold
								/							
								/							
								/							
															/
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MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Comments / Instructions

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	7-27-17	9:50	PTS	72717	954
PTS	72717	1456			

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 8.6 °C Initials

Page ___ of ___

General COC

MAI Work Order # 1707A60

6

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD (circled) | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF | EDD | Write On (DW) | EQuIS

Report To: Mehrdad Javaherian Bill To:
Company: LRM Consulting
Email: mehrdad@lrm-consulting.com
Alt Email: Tele: 415-706-8935
Project Name: Red Hanger Project #: TM Red Hanger
Project Location: 6239 College Ave PO #
Sampler Signature:

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs) Basic list	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	Hold
MW-4 @ 20'	7-27	9:12	1	S																	/
MW-4 @ 25'	"	9:20	1	S										/							
MW-2 @ 5'	"	9:05	1	S										/							
MW-2 @ 10'	"	9:20	1	S																	/

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
PTD	7-27-17	9:50	PTD	72717	954
	72717	1456			

Comments / Instructions

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 8.6 °C Initials _____

Page ___ of ___

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Sample Receipt Checklist

Client Name:	**LRM Consulting, Inc.**	Date and Time Received	**7/27/2017 14:56**
Project Name:	**TM Red Hanger**	Date Logged:	**7/27/2017**
		Received by:	Kena Ponce
WorkOrder №:	**1707A60** Matrix: Soil	Logged by:	Kena Ponce
Carrier:	Patrick Johnson (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp: 8.6°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1707B64

Report Created for: LRM Consulting, Inc.

1534 Plaza Lane, #145
Burlingame, CA 94010

Project Contact: Mehrdad Javaherian
Project P.O.:
Project Name: TM Red Hanger: 6239 College Ave.

Project Received: 07/28/2017

Analytical Report reviewed & approved for release on 08/04/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: TM Red Hanger: 6239 College Ave.
WorkOrder: 1707B64

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 15'	**1707B64-001A**	**Soil**	**07/27/2017 10:10**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 13:12
Bromochloromethane	ND	0.0050	1	08/04/2017 13:12
Bromodichloromethane	ND	0.0050	1	08/04/2017 13:12
Bromoform	ND	0.0050	1	08/04/2017 13:12
Bromomethane	ND	0.0050	1	08/04/2017 13:12
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 13:12
Chlorobenzene	ND	0.0050	1	08/04/2017 13:12
Chloroethane	ND	0.0050	1	08/04/2017 13:12
Chloroform	ND	0.0050	1	08/04/2017 13:12
Chloromethane	ND	0.0050	1	08/04/2017 13:12
2-Chlorotoluene	ND	0.0050	1	08/04/2017 13:12
4-Chlorotoluene	ND	0.0050	1	08/04/2017 13:12
Dibromochloromethane	ND	0.0050	1	08/04/2017 13:12
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 13:12
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 13:12
Dibromomethane	ND	0.0050	1	08/04/2017 13:12
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:12
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:12
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:12
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 13:12
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 13:12
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 13:12
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 13:12
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 13:12
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 13:12
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 13:12
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 13:12
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 13:12
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 13:12
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 13:12
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 13:12
Freon 113	ND	0.0050	1	08/04/2017 13:12
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 13:12
Hexachloroethane	ND	0.0050	1	08/04/2017 13:12
Methylene chloride	ND	0.0050	1	08/04/2017 13:12
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 13:12
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 13:12

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 15'	**1707B64-001A**	**Soil**	**07/27/2017 10:10**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 13:12
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 13:12
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 13:12
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 13:12
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 13:12
Trichloroethene	ND	0.0050	1	08/04/2017 13:12
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 13:12
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 13:12
Vinyl Chloride	ND	0.0050	1	08/04/2017 13:12

Surrogates	REC (%)	Limits	
Dibromofluoromethane	121	70-130	08/04/2017 13:12
Toluene-d8	121	70-130	08/04/2017 13:12
4-BFB	107	70-130	08/04/2017 13:12
Benzene-d6	76	60-140	08/04/2017 13:12
Ethylbenzene-d10	80	60-140	08/04/2017 13:12
1,2-DCB-d4	82	60-140	08/04/2017 13:12

Analyst(s): HK

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 25'	**1707B64-003A**	**Soil**	**07/27/2017 10:20**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 13:53
Bromochloromethane	ND	0.0050	1	08/04/2017 13:53
Bromodichloromethane	ND	0.0050	1	08/04/2017 13:53
Bromoform	ND	0.0050	1	08/04/2017 13:53
Bromomethane	ND	0.0050	1	08/04/2017 13:53
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 13:53
Chlorobenzene	ND	0.0050	1	08/04/2017 13:53
Chloroethane	ND	0.0050	1	08/04/2017 13:53
Chloroform	ND	0.0050	1	08/04/2017 13:53
Chloromethane	ND	0.0050	1	08/04/2017 13:53
2-Chlorotoluene	ND	0.0050	1	08/04/2017 13:53
4-Chlorotoluene	ND	0.0050	1	08/04/2017 13:53
Dibromochloromethane	ND	0.0050	1	08/04/2017 13:53
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 13:53
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 13:53
Dibromomethane	ND	0.0050	1	08/04/2017 13:53
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:53
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:53
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 13:53
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 13:53
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 13:53
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 13:53
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 13:53
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 13:53
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 13:53
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 13:53
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 13:53
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 13:53
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 13:53
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 13:53
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 13:53
Freon 113	ND	0.0050	1	08/04/2017 13:53
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 13:53
Hexachloroethane	ND	0.0050	1	08/04/2017 13:53
Methylene chloride	ND	0.0050	1	08/04/2017 13:53
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 13:53
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 13:53

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 @ 25'	**1707B64-003A**	**Soil**	**07/27/2017 10:20**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	**0.0090**	0.0050	1	08/04/2017 13:53
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 13:53
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 13:53
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 13:53
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 13:53
Trichloroethene	ND	0.0050	1	08/04/2017 13:53
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 13:53
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 13:53
Vinyl Chloride	ND	0.0050	1	08/04/2017 13:53

Surrogates	REC (%)	Limits	
Dibromofluoromethane	121	70-130	08/04/2017 13:53
Toluene-d8	120	70-130	08/04/2017 13:53
4-BFB	108	70-130	08/04/2017 13:53
Benzene-d6	77	60-140	08/04/2017 13:53
Ethylbenzene-d10	81	60-140	08/04/2017 13:53
1,2-DCB-d4	83	60-140	08/04/2017 13:53

Analyst(s): HK

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Analytical Report

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Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 5'	1707B64-004A	Soil	07/28/2017 07:15	GC28	142814

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 16:35
Bromochloromethane	ND	0.0050	1	08/04/2017 16:35
Bromodichloromethane	ND	0.0050	1	08/04/2017 16:35
Bromoform	ND	0.0050	1	08/04/2017 16:35
Bromomethane	ND	0.0050	1	08/04/2017 16:35
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 16:35
Chlorobenzene	ND	0.0050	1	08/04/2017 16:35
Chloroethane	ND	0.0050	1	08/04/2017 16:35
Chloroform	ND	0.0050	1	08/04/2017 16:35
Chloromethane	ND	0.0050	1	08/04/2017 16:35
2-Chlorotoluene	ND	0.0050	1	08/04/2017 16:35
4-Chlorotoluene	ND	0.0050	1	08/04/2017 16:35
Dibromochloromethane	ND	0.0050	1	08/04/2017 16:35
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 16:35
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 16:35
Dibromomethane	ND	0.0050	1	08/04/2017 16:35
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 16:35
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 16:35
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 16:35
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 16:35
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 16:35
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 16:35
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 16:35
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 16:35
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 16:35
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 16:35
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 16:35
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 16:35
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 16:35
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 16:35
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 16:35
Freon 113	ND	0.0050	1	08/04/2017 16:35
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 16:35
Hexachloroethane	ND	0.0050	1	08/04/2017 16:35
Methylene chloride	ND	0.0050	1	08/04/2017 16:35
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 16:35
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 16:35

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 5'	**1707B64-004A**	**Soil**	**07/28/2017 07:15**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 16:35
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 16:35
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 16:35
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 16:35
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 16:35
Trichloroethene	ND	0.0050	1	08/04/2017 16:35
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 16:35
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 16:35
Vinyl Chloride	ND	0.0050	1	08/04/2017 16:35

Surrogates	REC (%)	Limits	
Dibromofluoromethane	121	70-130	08/04/2017 16:35
Toluene-d8	121	70-130	08/04/2017 16:35
4-BFB	108	70-130	08/04/2017 16:35
Benzene-d6	81	60-140	08/04/2017 16:35
Ethylbenzene-d10	87	60-140	08/04/2017 16:35
1,2-DCB-d4	88	60-140	08/04/2017 16:35

Analyst(s): JEM

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 15'	1707B64-006A	Soil	07/28/2017 07:25	GC28	142814

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 15:14
Bromochloromethane	ND	0.0050	1	08/04/2017 15:14
Bromodichloromethane	ND	0.0050	1	08/04/2017 15:14
Bromoform	ND	0.0050	1	08/04/2017 15:14
Bromomethane	ND	0.0050	1	08/04/2017 15:14
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 15:14
Chlorobenzene	ND	0.0050	1	08/04/2017 15:14
Chloroethane	ND	0.0050	1	08/04/2017 15:14
Chloroform	ND	0.0050	1	08/04/2017 15:14
Chloromethane	ND	0.0050	1	08/04/2017 15:14
2-Chlorotoluene	ND	0.0050	1	08/04/2017 15:14
4-Chlorotoluene	ND	0.0050	1	08/04/2017 15:14
Dibromochloromethane	ND	0.0050	1	08/04/2017 15:14
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 15:14
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 15:14
Dibromomethane	ND	0.0050	1	08/04/2017 15:14
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:14
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:14
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:14
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 15:14
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 15:14
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 15:14
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 15:14
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 15:14
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 15:14
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 15:14
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 15:14
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 15:14
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 15:14
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 15:14
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 15:14
Freon 113	ND	0.0050	1	08/04/2017 15:14
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 15:14
Hexachloroethane	ND	0.0050	1	08/04/2017 15:14
Methylene chloride	ND	0.0050	1	08/04/2017 15:14
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 15:14
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 15:14

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 15'	1707B64-006A	Soil	07/28/2017 07:25	GC28	142814

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 15:14
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 15:14
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 15:14
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 15:14
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 15:14
Trichloroethene	ND	0.0050	1	08/04/2017 15:14
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 15:14
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 15:14
Vinyl Chloride	ND	0.0050	1	08/04/2017 15:14

Surrogates	REC (%)	Limits	
Dibromofluoromethane	121	70-130	08/04/2017 15:14
Toluene-d8	123	70-130	08/04/2017 15:14
4-BFB	110	70-130	08/04/2017 15:14
Benzene-d6	96	60-140	08/04/2017 15:14
Ethylbenzene-d10	102	60-140	08/04/2017 15:14
1,2-DCB-d4	101	60-140	08/04/2017 15:14

Analyst(s): JEM

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 25'	**1707B64-008A**	**Soil**	**07/28/2017 07:35**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.0050	1	08/04/2017 15:55
Bromochloromethane	ND	0.0050	1	08/04/2017 15:55
Bromodichloromethane	ND	0.0050	1	08/04/2017 15:55
Bromoform	ND	0.0050	1	08/04/2017 15:55
Bromomethane	ND	0.0050	1	08/04/2017 15:55
Carbon Tetrachloride	ND	0.0050	1	08/04/2017 15:55
Chlorobenzene	ND	0.0050	1	08/04/2017 15:55
Chloroethane	ND	0.0050	1	08/04/2017 15:55
Chloroform	ND	0.0050	1	08/04/2017 15:55
Chloromethane	ND	0.0050	1	08/04/2017 15:55
2-Chlorotoluene	ND	0.0050	1	08/04/2017 15:55
4-Chlorotoluene	ND	0.0050	1	08/04/2017 15:55
Dibromochloromethane	ND	0.0050	1	08/04/2017 15:55
1,2-Dibromo-3-chloropropane	ND	0.0040	1	08/04/2017 15:55
1,2-Dibromoethane (EDB)	ND	0.0040	1	08/04/2017 15:55
Dibromomethane	ND	0.0050	1	08/04/2017 15:55
1,2-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:55
1,3-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:55
1,4-Dichlorobenzene	ND	0.0050	1	08/04/2017 15:55
Dichlorodifluoromethane	ND	0.0050	1	08/04/2017 15:55
1,1-Dichloroethane	ND	0.0050	1	08/04/2017 15:55
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	08/04/2017 15:55
1,1-Dichloroethene	ND	0.0050	1	08/04/2017 15:55
cis-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 15:55
trans-1,2-Dichloroethene	ND	0.0050	1	08/04/2017 15:55
1,2-Dichloropropane	ND	0.0050	1	08/04/2017 15:55
1,3-Dichloropropane	ND	0.0050	1	08/04/2017 15:55
2,2-Dichloropropane	ND	0.0050	1	08/04/2017 15:55
1,1-Dichloropropene	ND	0.0050	1	08/04/2017 15:55
cis-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 15:55
trans-1,3-Dichloropropene	ND	0.0050	1	08/04/2017 15:55
Freon 113	ND	0.0050	1	08/04/2017 15:55
Hexachlorobutadiene	ND	0.0050	1	08/04/2017 15:55
Hexachloroethane	ND	0.0050	1	08/04/2017 15:55
Methylene chloride	ND	0.0050	1	08/04/2017 15:55
1,1,1,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 15:55
1,1,2,2-Tetrachloroethane	ND	0.0050	1	08/04/2017 15:55

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Received:	7/28/17 14:50	**Extraction Method:**	SW5030B
Date Prepared:	7/28/17	**Analytical Method:**	SW8260B
Project:	TM Red Hanger: 6239 College Ave.	**Unit:**	mg/kg

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 @ 25'	**1707B64-008A**	**Soil**	**07/28/2017 07:35**	**GC28**	**142814**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.0050	1	08/04/2017 15:55
1,2,3-Trichlorobenzene	ND	0.0050	1	08/04/2017 15:55
1,2,4-Trichlorobenzene	ND	0.0050	1	08/04/2017 15:55
1,1,1-Trichloroethane	ND	0.0050	1	08/04/2017 15:55
1,1,2-Trichloroethane	ND	0.0050	1	08/04/2017 15:55
Trichloroethene	ND	0.0050	1	08/04/2017 15:55
Trichlorofluoromethane	ND	0.0050	1	08/04/2017 15:55
1,2,3-Trichloropropane	ND	0.0050	1	08/04/2017 15:55
Vinyl Chloride	ND	0.0050	1	08/04/2017 15:55

Surrogates	REC (%)	Limits	
Dibromofluoromethane	121	70-130	08/04/2017 15:55
Toluene-d8	123	70-130	08/04/2017 15:55
4-BFB	107	70-130	08/04/2017 15:55
Benzene-d6	95	60-140	08/04/2017 15:55
Ethylbenzene-d10	101	60-140	08/04/2017 15:55
1,2-DCB-d4	100	60-140	08/04/2017 15:55

Analyst(s): JEM

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Prepared:	7/28/17	**BatchID:**	142814
Date Analyzed:	7/29/17 - 7/31/17	**Extraction Method:**	SW5030B
Instrument:	GC10, GC28, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger: 6239 College Ave.	**Sample ID:**	MB/LCS-142814 1707B39-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0498	0.0050	0.050	-	99	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0445	0.0040	0.050	-	89	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0477	0.0040	0.050	-	95	58-135
1,1-Dichloroethene	ND	0.0493	0.0050	0.050	-	99	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
Methylene chloride	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-

(Cont.)

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1707B64
Date Prepared:	7/28/17	**BatchID:**	142814
Date Analyzed:	7/29/17 - 7/31/17	**Extraction Method:**	SW5030B
Instrument:	GC10, GC28, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	TM Red Hanger: 6239 College Ave.	**Sample ID:**	MB/LCS-142814 1707B39-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Tetrachloroethene	ND	-	0.0050	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0498	0.0050	0.050	-	100	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	0.1368	0.141		0.12	109	113	70-130
Toluene-d8	0.1419	0.142		0.12	114	113	70-130
4-BFB	0.01167	0.0122		0.012	93	97	70-130
Benzene-d6	0.09244	0.106		0.10	92	106	60-140
Ethylbenzene-d10	0.106	0.119		0.10	106	119	60-140
1,2-DCB-d4	0.08439	0.0954		0.10	84	95	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chlorobenzene	0.0566	0.0528	0.050	ND	113	106	77-121	6.88	20
1,2-Dibromoethane (EDB)	0.0520	0.0490	0.050	ND	104	98	67-119	5.93	20
1,2-Dichloroethane (1,2-DCA)	0.0410	0.0378	0.050	ND	82	76	58-135	8.20	20
1,1-Dichloroethene	0.0497	0.0454	0.050	ND	99	91	42-145	9.01	20
Trichloroethene	0.0583	0.0535	0.050	ND	117	107	72-132	8.64	20
Surrogate Recovery									
Dibromofluoromethane	0.152	0.152	0.12		121	121	70-130	0	20
Toluene-d8	0.157	0.156	0.12		125	124	70-130	0.787	20
4-BFB	0.0131	0.0128	0.012		105	102	70-130	2.21	20
Benzene-d6	0.114	0.107	0.10		114	107	60-140	5.89	20
Ethylbenzene-d10	0.122	0.116	0.10		121	116	60-140	4.47	20
1,2-DCB-d4	0.113	0.109	0.10		113	109	60-140	3.55	20

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1707B64 **ClientCode: LRMC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Mehrdad Javaherian
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010
(415) 706-8935 FAX:

Email: mehrdad@lrm-consulting.com
cc/3rd Party:
PO:
ProjectNo: TM Red Hanger: 6239 College Ave.

Bill to:
Accounts Payable
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Requested TAT: **5 days;**

Date Received: **07/28/2017**
Date Logged: **07/28/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1707B64-001	MW-2 @ 15'	Soil	7/27/2017 10:10	☐	A											
1707B64-003	MW-2 @ 25'	Soil	7/27/2017 10:20	☐	A											
1707B64-004	MW-3 @ 5'	Soil	7/28/2017 07:15	☐	A											
1707B64-006	MW-3 @ 15'	Soil	7/28/2017 07:25	☐	A											
1707B64-008	MW-3 @ 25'	Soil	7/28/2017 07:35	☐	A											

Test Legend:

1	8010_S	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: LRM CONSULTING, INC.
Client Contact: Mehrdad Javaherian
Contact's Email: mehrdad@lrm-consulting.com

Project: TM Red Hanger: 6239 College Ave.
Comments:

Work Order: 1707B64
QC Level: LEVEL 2
Date Logged: 7/28/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1707B64-001A	MW-2 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/27/2017 10:10	5 days		☐	
1707B64-002A	MW-2 @ 20'	Soil		1	Acetate Liner	☐	7/27/2017 10:20			☑	
1707B64-003A	MW-2 @ 25'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/27/2017 10:20	5 days		☐	
1707B64-004A	MW-3 @ 5'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/28/2017 7:15	5 days		☐	
1707B64-005A	MW-3 @ 10'	Soil		1	Acetate Liner	☐	7/28/2017 7:20			☑	
1707B64-006A	MW-3 @ 15'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/28/2017 7:25	5 days		☐	
1707B64-007A	MW-3 @ 20'	Soil		1	Acetate Liner	☐	7/28/2017 7:30			☑	
1707B64-008A	MW-3 @ 25'	Soil	SW8260B (HVOCs List)	1	Acetate Liner	☐	7/28/2017 7:35	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1707B64

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | (STD) | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF | EDD | Write On (DW) | EQuIS

Report To: Mehrdad Javaherian Bill To:
Company: LRM
Email: mehrdad@lrm-consulting.com
Alt Email: Tele: 415-706-8935
Project Name: 6239 College Ave Project #: TM Red Hanger
Project Location: Oakland PO #
Sampler Signature:

SAMPLE ID / Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative
MW-2 @ 15'	7-27-17	10:10	1	S	
MW-2 @ 20'		10:20	1	S	
MW-2 @ 25'		11:00	1	S	
MW-3 @ 5'	7-28-17	~~8:15~~	1	S	
MW-3 @ 10'		7:20	1	S	
MW-3 @ 15'		7:25	1	S	
MW-3 @ 20'		7:30	1	S	
MW-3 @ 25'		7:35	1	S	

Analysis Requested

BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs) 8010 list	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	
								/							
														/	Hold
								/							
								/							
														/	
								/							
														/	
								/							

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Comments / Instructions

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	7-28	9:00	PTJ	72817	1230
PTJ	72817	1450			

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 6.0 °C Initials

Page ___ of ___

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Sample Receipt Checklist

Client Name:	**LRM Consulting, Inc.**	Date and Time Received	**7/28/2017 14:50**
Project Name:	**TM Red Hanger: 6239 College Ave.**	Date Logged:	**7/28/2017**
		Received by:	Kena Ponce
WorkOrder №:	**1707B64** Matrix: Soil	Logged by:	Kena Ponce
Carrier:	Patrick Johnson (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp: 6°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1708405 **Amended:** 08/15/2017

Report Created for: LRM Consulting, Inc.

1534 Plaza Lane, #145
Burlingame, CA 94010

Project Contact: Mehrdad Javaherian
Project P.O.:
Project Name: TM Red Hanger

Project Received: 08/09/2017

Analytical Report reviewed & approved for release on 08/15/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: TM Red Hanger
WorkOrder: 1708405

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Case Narrative

Client: LRM Consulting, Inc. **Work Order:** 1708405
Project: TM Red Hanger August 14, 2017

TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Active Soil Gas Advisory of July 2015.

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	ASTM D 1946-90
Date Prepared:	8/10/17	**Analytical Method:**	ASTM D 1946-90
Project:	TM Red Hanger	**Unit:**	%

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-7	1708405-001A	SoilGas	08/07/2017 14:38	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.77	25.47	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 10:49

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-15	1708405-002A	SoilGas	08/07/2017 15:48	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.35	26.68	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 11:02

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-17	1708405-003A	SoilGas	08/07/2017 16:58	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.06	26.12	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 11:15

(Cont.)

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Analytical Report

Client: LRM Consulting, Inc.
Date Received: 8/9/17 10:20
Date Prepared: 8/10/17
Project: TM Red Hanger

WorkOrder: 1708405
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-3-17	1708405-004A	SoilGas	08/08/2017 08:38	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.48	26.91	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 11:27

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-17	1708405-005A	SoilGas	08/08/2017 09:25	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.09	26.13	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 11:40

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-11-17	1708405-006A	SoilGas	08/08/2017 10:12	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.81	25.57	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 11:53

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Analytical Report

Client: LRM Consulting, Inc.
Date Received: 8/9/17 10:20
Date Prepared: 8/10/17
Project: TM Red Hanger

WorkOrder: 1708405
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-7	1708405-007A	SoilGas	08/08/2017 11:01	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.07	26.15	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 12:06

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-14	1708405-008A	SoilGas	08/08/2017 11:42	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.45	24.81	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 12:19

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-2-17	1708405-009A	SoilGas	08/08/2017 12:28	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.87	25.73	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	**0.15**	0.050	1	08/10/2017 12:32

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Analytical Report

Client: LRM Consulting, Inc.
Date Received: 8/9/17 10:20
Date Prepared: 8/10/17
Project: TM Red Hanger

WorkOrder: 1708405
Extraction Method: ASTM D 1946-90
Analytical Method: ASTM D 1946-90
Unit: %

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-17	1708405-010A	SoilGas	08/08/2017 13:17	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.98	23.90	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	**0.086**	0.050	1	08/10/2017 12:45

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVE-4	1708405-011A	SoilGas	08/08/2017 14:50	GC26	143540

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.26	24.43	HK

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	08/10/2017 12:58

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-7	1708405-001A	SoilGas	08/07/2017 14:38	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.77	25.47	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 08:05
Acrolein	ND	5.8	1	08/11/2017 08:05
Acrylonitrile	ND	1.1	1	08/11/2017 08:05
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 08:05
Benzene	**2.1**	1.6	1	08/11/2017 08:05
Benzyl chloride	ND	2.6	1	08/11/2017 08:05
Bromodichloromethane	ND	3.5	1	08/11/2017 08:05
Bromoform	ND	5.2	1	08/11/2017 08:05
Bromomethane	ND	2.0	1	08/11/2017 08:05
1,3-Butadiene	ND	1.1	1	08/11/2017 08:05
2-Butanone (MEK)	ND	75	1	08/11/2017 08:05
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 08:05
Carbon Disulfide	**68**	1.6	1	08/11/2017 08:05
Carbon Tetrachloride	ND	3.2	1	08/11/2017 08:05
Chlorobenzene	ND	2.4	1	08/11/2017 08:05
Chloroethane	ND	1.3	1	08/11/2017 08:05
Chloroform	**6.4**	2.4	1	08/11/2017 08:05
Chloromethane	ND	1.0	1	08/11/2017 08:05
Cyclohexane	ND	18	1	08/11/2017 08:05
Dibromochloromethane	ND	4.4	1	08/11/2017 08:05
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 08:05
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 08:05
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 08:05
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 08:05
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 08:05
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 08:05
1,1-Dichloroethane	ND	2.0	1	08/11/2017 08:05
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 08:05
1,1-Dichloroethene	ND	2.0	1	08/11/2017 08:05
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 08:05
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 08:05
1,2-Dichloropropane	ND	2.4	1	08/11/2017 08:05
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 08:05
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 08:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-7	1708405-001A	SoilGas	08/07/2017 14:38	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.77	25.47	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 08:05
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 08:05
1,4-Dioxane	ND	1.8	1	08/11/2017 08:05
Ethanol	ND	96	1	08/11/2017 08:05
Ethyl acetate	ND	1.8	1	08/11/2017 08:05
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 08:05
Ethylbenzene	**2.5**	2.2	1	08/11/2017 08:05
4-Ethyltoluene	ND	2.5	1	08/11/2017 08:05
Freon 113	ND	3.9	1	08/11/2017 08:05
Heptane	ND	21	1	08/11/2017 08:05
Hexachlorobutadiene	ND	5.4	1	08/11/2017 08:05
Hexane	ND	18	1	08/11/2017 08:05
2-Hexanone	ND	2.1	1	08/11/2017 08:05
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 08:05
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 08:05
Methylene chloride	ND	8.8	1	08/11/2017 08:05
Methyl methacrylate	ND	2.1	1	08/11/2017 08:05
Naphthalene	ND	5.3	1	08/11/2017 08:05
Propene	ND	88	1	08/11/2017 08:05
Styrene	ND	2.2	1	08/11/2017 08:05
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 08:05
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 08:05
Tetrachloroethene	ND	3.4	1	08/11/2017 08:05
Tetrahydrofuran	ND	3.0	1	08/11/2017 08:05
Toluene	**6.3**	1.9	1	08/11/2017 08:05
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 08:05
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 08:05
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 08:05
Trichloroethene	ND	2.8	1	08/11/2017 08:05
Trichlorofluoromethane	ND	2.8	1	08/11/2017 08:05
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 08:05
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 08:05
Vinyl Acetate	ND	18	1	08/11/2017 08:05
Vinyl Chloride	ND	1.3	1	08/11/2017 08:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-7	1708405-001A	SoilGas	08/07/2017 14:38	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.77	25.47	AK

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 08:05
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	86	70-130		08/11/2017 08:05
Toluene-d8	100	70-130		08/11/2017 08:05
4-BFB	94	70-130		08/11/2017 08:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-15	1708405-002A	SoilGas	08/07/2017 15:48	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.35	26.68	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 08:45
Acrolein	ND	5.8	1	08/11/2017 08:45
Acrylonitrile	ND	1.1	1	08/11/2017 08:45
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 08:45
Benzene	**1.7**	1.6	1	08/11/2017 08:45
Benzyl chloride	ND	2.6	1	08/11/2017 08:45
Bromodichloromethane	ND	3.5	1	08/11/2017 08:45
Bromoform	ND	5.2	1	08/11/2017 08:45
Bromomethane	ND	2.0	1	08/11/2017 08:45
1,3-Butadiene	ND	1.1	1	08/11/2017 08:45
2-Butanone (MEK)	ND	75	1	08/11/2017 08:45
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 08:45
Carbon Disulfide	**29**	1.6	1	08/11/2017 08:45
Carbon Tetrachloride	ND	3.2	1	08/11/2017 08:45
Chlorobenzene	ND	2.4	1	08/11/2017 08:45
Chloroethane	ND	1.3	1	08/11/2017 08:45
Chloroform	**5.9**	2.4	1	08/11/2017 08:45
Chloromethane	ND	1.0	1	08/11/2017 08:45
Cyclohexane	ND	18	1	08/11/2017 08:45
Dibromochloromethane	ND	4.4	1	08/11/2017 08:45
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 08:45
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 08:45
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 08:45
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 08:45
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 08:45
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 08:45
1,1-Dichloroethane	ND	2.0	1	08/11/2017 08:45
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 08:45
1,1-Dichloroethene	ND	2.0	1	08/11/2017 08:45
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 08:45
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 08:45
1,2-Dichloropropane	ND	2.4	1	08/11/2017 08:45
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 08:45
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 08:45

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-15	1708405-002A	SoilGas	08/07/2017 15:48	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.35	26.68	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 08:45
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 08:45
1,4-Dioxane	ND	1.8	1	08/11/2017 08:45
Ethanol	ND	96	1	08/11/2017 08:45
Ethyl acetate	ND	1.8	1	08/11/2017 08:45
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 08:45
Ethylbenzene	ND	2.2	1	08/11/2017 08:45
4-Ethyltoluene	ND	2.5	1	08/11/2017 08:45
Freon 113	ND	3.9	1	08/11/2017 08:45
Heptane	ND	21	1	08/11/2017 08:45
Hexachlorobutadiene	ND	5.4	1	08/11/2017 08:45
Hexane	ND	18	1	08/11/2017 08:45
2-Hexanone	ND	2.1	1	08/11/2017 08:45
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 08:45
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 08:45
Methylene chloride	ND	8.8	1	08/11/2017 08:45
Methyl methacrylate	ND	2.1	1	08/11/2017 08:45
Naphthalene	ND	5.3	1	08/11/2017 08:45
Propene	ND	88	1	08/11/2017 08:45
Styrene	ND	2.2	1	08/11/2017 08:45
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 08:45
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 08:45
Tetrachloroethene	**3.9**	3.4	1	08/11/2017 08:45
Tetrahydrofuran	ND	3.0	1	08/11/2017 08:45
Toluene	**4.6**	1.9	1	08/11/2017 08:45
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 08:45
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 08:45
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 08:45
Trichloroethene	ND	2.8	1	08/11/2017 08:45
Trichlorofluoromethane	ND	2.8	1	08/11/2017 08:45
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 08:45
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 08:45
Vinyl Acetate	ND	18	1	08/11/2017 08:45
Vinyl Chloride	ND	1.3	1	08/11/2017 08:45

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-12-15	1708405-002A	SoilGas	08/07/2017 15:48	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.35	26.68	AK

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 08:45
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	87	70-130		08/11/2017 08:45
Toluene-d8	100	70-130		08/11/2017 08:45
4-BFB	93	70-130		08/11/2017 08:45

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-17	1708405-003A	SoilGas	08/07/2017 16:58	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.06	26.12	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	**200**	60	1	08/11/2017 09:25
Acrolein	ND	5.8	1	08/11/2017 09:25
Acrylonitrile	ND	1.1	1	08/11/2017 09:25
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 09:25
Benzene	**2.4**	1.6	1	08/11/2017 09:25
Benzyl chloride	ND	2.6	1	08/11/2017 09:25
Bromodichloromethane	ND	3.5	1	08/11/2017 09:25
Bromoform	ND	5.2	1	08/11/2017 09:25
Bromomethane	ND	2.0	1	08/11/2017 09:25
1,3-Butadiene	ND	1.1	1	08/11/2017 09:25
2-Butanone (MEK)	**100**	75	1	08/11/2017 09:25
t-Butyl alcohol (TBA)	**130**	31	1	08/11/2017 09:25
Carbon Disulfide	**2.9**	1.6	1	08/11/2017 09:25
Carbon Tetrachloride	ND	3.2	1	08/11/2017 09:25
Chlorobenzene	ND	2.4	1	08/11/2017 09:25
Chloroethane	ND	1.3	1	08/11/2017 09:25
Chloroform	**66**	2.4	1	08/11/2017 09:25
Chloromethane	ND	1.0	1	08/11/2017 09:25
Cyclohexane	ND	18	1	08/11/2017 09:25
Dibromochloromethane	ND	4.4	1	08/11/2017 09:25
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 09:25
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 09:25
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 09:25
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 09:25
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 09:25
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 09:25
1,1-Dichloroethane	ND	2.0	1	08/11/2017 09:25
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 09:25
1,1-Dichloroethene	ND	2.0	1	08/11/2017 09:25
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 09:25
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 09:25
1,2-Dichloropropane	ND	2.4	1	08/11/2017 09:25
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 09:25
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 09:25

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-17	1708405-003A	SoilGas	08/07/2017 16:58	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.06	26.12	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 09:25
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 09:25
1,4-Dioxane	ND	1.8	1	08/11/2017 09:25
Ethanol	ND	96	1	08/11/2017 09:25
Ethyl acetate	**5.9**	1.8	1	08/11/2017 09:25
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 09:25
Ethylbenzene	ND	2.2	1	08/11/2017 09:25
4-Ethyltoluene	ND	2.5	1	08/11/2017 09:25
Freon 113	ND	3.9	1	08/11/2017 09:25
Heptane	ND	21	1	08/11/2017 09:25
Hexachlorobutadiene	ND	5.4	1	08/11/2017 09:25
Hexane	ND	18	1	08/11/2017 09:25
2-Hexanone	**12**	2.1	1	08/11/2017 09:25
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 09:25
Methyl-t-butyl ether (MTBE)	**2.1**	1.8	1	08/11/2017 09:25
Methylene chloride	ND	8.8	1	08/11/2017 09:25
Methyl methacrylate	ND	2.1	1	08/11/2017 09:25
Naphthalene	ND	5.3	1	08/11/2017 09:25
Propene	ND	88	1	08/11/2017 09:25
Styrene	ND	2.2	1	08/11/2017 09:25
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 09:25
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 09:25
Tetrachloroethene	**2600**	34	10	08/11/2017 01:31
Tetrahydrofuran	**3.5**	3.0	1	08/11/2017 09:25
Toluene	**3.1**	1.9	1	08/11/2017 09:25
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 09:25
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 09:25
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 09:25
Trichloroethene	**3.0**	2.8	1	08/11/2017 09:25
Trichlorofluoromethane	ND	2.8	1	08/11/2017 09:25
1,2,4-Trimethylbenzene	**3.1**	2.5	1	08/11/2017 09:25
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 09:25
Vinyl Acetate	ND	18	1	08/11/2017 09:25
Vinyl Chloride	ND	1.3	1	08/11/2017 09:25

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-17	**1708405-003A**	**SoilGas**	**08/07/2017 16:58**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.06	**26.12**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 09:25
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	81	70-130		08/11/2017 09:25
Toluene-d8	101	70-130		08/11/2017 09:25
4-BFB	99	70-130		08/11/2017 09:25

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-3-17	1708405-004A	SoilGas	08/08/2017 08:38	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.48	26.91	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	**75**	60	1	08/11/2017 10:05
Acrolein	ND	5.8	1	08/11/2017 10:05
Acrylonitrile	ND	1.1	1	08/11/2017 10:05
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 10:05
Benzene	**1.8**	1.6	1	08/11/2017 10:05
Benzyl chloride	ND	2.6	1	08/11/2017 10:05
Bromodichloromethane	ND	3.5	1	08/11/2017 10:05
Bromoform	ND	5.2	1	08/11/2017 10:05
Bromomethane	ND	2.0	1	08/11/2017 10:05
1,3-Butadiene	ND	1.1	1	08/11/2017 10:05
2-Butanone (MEK)	ND	75	1	08/11/2017 10:05
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 10:05
Carbon Disulfide	**2.3**	1.6	1	08/11/2017 10:05
Carbon Tetrachloride	ND	3.2	1	08/11/2017 10:05
Chlorobenzene	ND	2.4	1	08/11/2017 10:05
Chloroethane	ND	1.3	1	08/11/2017 10:05
Chloroform	**17**	2.4	1	08/11/2017 10:05
Chloromethane	ND	1.0	1	08/11/2017 10:05
Cyclohexane	ND	18	1	08/11/2017 10:05
Dibromochloromethane	ND	4.4	1	08/11/2017 10:05
1,2-Dibromo-3-chloropropane	**0.45**	0.12	1	08/11/2017 10:05
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 10:05
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 10:05
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 10:05
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 10:05
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 10:05
1,1-Dichloroethane	ND	2.0	1	08/11/2017 10:05
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 10:05
1,1-Dichloroethene	ND	2.0	1	08/11/2017 10:05
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 10:05
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 10:05
1,2-Dichloropropane	ND	2.4	1	08/11/2017 10:05
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 10:05
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 10:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-3-17	1708405-004A	SoilGas	08/08/2017 08:38	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.48	26.91	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 10:05
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 10:05
1,4-Dioxane	ND	1.8	1	08/11/2017 10:05
Ethanol	ND	96	1	08/11/2017 10:05
Ethyl acetate	ND	1.8	1	08/11/2017 10:05
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 10:05
Ethylbenzene	ND	2.2	1	08/11/2017 10:05
4-Ethyltoluene	ND	2.5	1	08/11/2017 10:05
Freon 113	ND	3.9	1	08/11/2017 10:05
Heptane	ND	21	1	08/11/2017 10:05
Hexachlorobutadiene	ND	5.4	1	08/11/2017 10:05
Hexane	ND	18	1	08/11/2017 10:05
2-Hexanone	**9.7**	2.1	1	08/11/2017 10:05
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 10:05
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 10:05
Methylene chloride	ND	8.8	1	08/11/2017 10:05
Methyl methacrylate	ND	2.1	1	08/11/2017 10:05
Naphthalene	ND	5.3	1	08/11/2017 10:05
Propene	ND	88	1	08/11/2017 10:05
Styrene	ND	2.2	1	08/11/2017 10:05
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 10:05
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 10:05
Tetrachloroethene	**5900**	34	10	08/11/2017 02:10
Tetrahydrofuran	ND	3.0	1	08/11/2017 10:05
Toluene	**2.3**	1.9	1	08/11/2017 10:05
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 10:05
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 10:05
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 10:05
Trichloroethene	ND	2.8	1	08/11/2017 10:05
Trichlorofluoromethane	ND	2.8	1	08/11/2017 10:05
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 10:05
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 10:05
Vinyl Acetate	ND	18	1	08/11/2017 10:05
Vinyl Chloride	ND	1.3	1	08/11/2017 10:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-3-17	**1708405-004A**	**SoilGas**	**08/08/2017 08:38**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.48	**26.91**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 10:05
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	78	70-130		08/11/2017 10:05
Toluene-d8	103	70-130		08/11/2017 10:05
4-BFB	101	70-130		08/11/2017 10:05

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-17	1708405-005A	SoilGas	08/08/2017 09:25	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.09	26.13	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 10:46
Acrolein	ND	5.8	1	08/11/2017 10:46
Acrylonitrile	ND	1.1	1	08/11/2017 10:46
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 10:46
Benzene	ND	1.6	1	08/11/2017 10:46
Benzyl chloride	ND	2.6	1	08/11/2017 10:46
Bromodichloromethane	ND	3.5	1	08/11/2017 10:46
Bromoform	ND	5.2	1	08/11/2017 10:46
Bromomethane	ND	2.0	1	08/11/2017 10:46
1,3-Butadiene	ND	1.1	1	08/11/2017 10:46
2-Butanone (MEK)	ND	75	1	08/11/2017 10:46
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 10:46
Carbon Disulfide	ND	1.6	1	08/11/2017 10:46
Carbon Tetrachloride	ND	3.2	1	08/11/2017 10:46
Chlorobenzene	ND	2.4	1	08/11/2017 10:46
Chloroethane	ND	1.3	1	08/11/2017 10:46
Chloroform	ND	2.4	1	08/11/2017 10:46
Chloromethane	ND	1.0	1	08/11/2017 10:46
Cyclohexane	**200**	18	1	08/11/2017 10:46
Dibromochloromethane	ND	4.4	1	08/11/2017 10:46
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 10:46
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 10:46
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 10:46
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 10:46
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 10:46
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 10:46
1,1-Dichloroethane	ND	2.0	1	08/11/2017 10:46
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 10:46
1,1-Dichloroethene	ND	2.0	1	08/11/2017 10:46
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 10:46
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 10:46
1,2-Dichloropropane	ND	2.4	1	08/11/2017 10:46
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 10:46
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 10:46

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-17	1708405-005A	SoilGas	08/08/2017 09:25	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.09	26.13	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 10:46
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 10:46
1,4-Dioxane	ND	1.8	1	08/11/2017 10:46
Ethanol	ND	96	1	08/11/2017 10:46
Ethyl acetate	ND	1.8	1	08/11/2017 10:46
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 10:46
Ethylbenzene	ND	2.2	1	08/11/2017 10:46
4-Ethyltoluene	ND	2.5	1	08/11/2017 10:46
Freon 113	ND	3.9	1	08/11/2017 10:46
Heptane	ND	21	1	08/11/2017 10:46
Hexachlorobutadiene	ND	5.4	1	08/11/2017 10:46
Hexane	**49**	18	1	08/11/2017 10:46
2-Hexanone	ND	2.1	1	08/11/2017 10:46
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 10:46
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 10:46
Methylene chloride	ND	8.8	1	08/11/2017 10:46
Methyl methacrylate	ND	2.1	1	08/11/2017 10:46
Naphthalene	ND	5.3	1	08/11/2017 10:46
Propene	ND	88	1	08/11/2017 10:46
Styrene	ND	2.2	1	08/11/2017 10:46
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 10:46
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 10:46
Tetrachloroethene	**480**	3.4	1	08/11/2017 10:46
Tetrahydrofuran	ND	3.0	1	08/11/2017 10:46
Toluene	ND	1.9	1	08/11/2017 10:46
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 10:46
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 10:46
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 10:46
Trichloroethene	ND	2.8	1	08/11/2017 10:46
Trichlorofluoromethane	ND	2.8	1	08/11/2017 10:46
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 10:46
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 10:46
Vinyl Acetate	ND	18	1	08/11/2017 10:46
Vinyl Chloride	ND	1.3	1	08/11/2017 10:46

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-17	**1708405-005A**	**SoilGas**	**08/08/2017 09:25**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.09	**26.13**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 10:46
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	81	70-130		08/11/2017 10:46
Toluene-d8	100	70-130		08/11/2017 10:46
4-BFB	95	70-130		08/11/2017 10:46

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-11-17	1708405-006A	SoilGas	08/08/2017 10:12	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.81	25.57	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 11:26
Acrolein	ND	5.8	1	08/11/2017 11:26
Acrylonitrile	ND	1.1	1	08/11/2017 11:26
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 11:26
Benzene	**1.7**	1.6	1	08/11/2017 11:26
Benzyl chloride	ND	2.6	1	08/11/2017 11:26
Bromodichloromethane	ND	3.5	1	08/11/2017 11:26
Bromoform	ND	5.2	1	08/11/2017 11:26
Bromomethane	ND	2.0	1	08/11/2017 11:26
1,3-Butadiene	ND	1.1	1	08/11/2017 11:26
2-Butanone (MEK)	ND	75	1	08/11/2017 11:26
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 11:26
Carbon Disulfide	ND	1.6	1	08/11/2017 11:26
Carbon Tetrachloride	ND	3.2	1	08/11/2017 11:26
Chlorobenzene	ND	2.4	1	08/11/2017 11:26
Chloroethane	ND	1.3	1	08/11/2017 11:26
Chloroform	**62**	2.4	1	08/11/2017 11:26
Chloromethane	ND	1.0	1	08/11/2017 11:26
Cyclohexane	**44**	18	1	08/11/2017 11:26
Dibromochloromethane	ND	4.4	1	08/11/2017 11:26
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 11:26
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 11:26
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 11:26
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 11:26
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 11:26
Dichlorodifluoromethane	**2.7**	2.5	1	08/11/2017 11:26
1,1-Dichloroethane	ND	2.0	1	08/11/2017 11:26
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 11:26
1,1-Dichloroethene	ND	2.0	1	08/11/2017 11:26
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 11:26
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 11:26
1,2-Dichloropropane	ND	2.4	1	08/11/2017 11:26
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 11:26
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 11:26

(Cont.)

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Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-11-17	1708405-006A	SoilGas	08/08/2017 10:12	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.81	25.57	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 11:26
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 11:26
1,4-Dioxane	ND	1.8	1	08/11/2017 11:26
Ethanol	ND	96	1	08/11/2017 11:26
Ethyl acetate	ND	1.8	1	08/11/2017 11:26
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 11:26
Ethylbenzene	ND	2.2	1	08/11/2017 11:26
4-Ethyltoluene	ND	2.5	1	08/11/2017 11:26
Freon 113	ND	3.9	1	08/11/2017 11:26
Heptane	ND	21	1	08/11/2017 11:26
Hexachlorobutadiene	ND	5.4	1	08/11/2017 11:26
Hexane	ND	18	1	08/11/2017 11:26
2-Hexanone	ND	2.1	1	08/11/2017 11:26
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 11:26
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 11:26
Methylene chloride	ND	8.8	1	08/11/2017 11:26
Methyl methacrylate	ND	2.1	1	08/11/2017 11:26
Naphthalene	ND	5.3	1	08/11/2017 11:26
Propene	ND	88	1	08/11/2017 11:26
Styrene	ND	2.2	1	08/11/2017 11:26
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 11:26
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 11:26
Tetrachloroethene	**10,000**	34	10	08/11/2017 03:28
Tetrahydrofuran	ND	3.0	1	08/11/2017 11:26
Toluene	**2.0**	1.9	1	08/11/2017 11:26
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 11:26
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 11:26
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 11:26
Trichloroethene	**37**	2.8	1	08/11/2017 11:26
Trichlorofluoromethane	ND	2.8	1	08/11/2017 11:26
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 11:26
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 11:26
Vinyl Acetate	ND	18	1	08/11/2017 11:26
Vinyl Chloride	ND	1.3	1	08/11/2017 11:26

(Cont.)

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Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-11-17	**1708405-006A**	**SoilGas**	**08/08/2017 10:12**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.81	**25.57**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 11:26
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	85	70-130		08/11/2017 11:26
Toluene-d8	104	70-130		08/11/2017 11:26
4-BFB	93	70-130		08/11/2017 11:26

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Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-7	1708405-007A	SoilGas	08/08/2017 11:01	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.07	26.15	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 12:07
Acrolein	ND	5.8	1	08/11/2017 12:07
Acrylonitrile	ND	1.1	1	08/11/2017 12:07
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 12:07
Benzene	**1.9**	1.6	1	08/11/2017 12:07
Benzyl chloride	ND	2.6	1	08/11/2017 12:07
Bromodichloromethane	ND	3.5	1	08/11/2017 12:07
Bromoform	ND	5.2	1	08/11/2017 12:07
Bromomethane	ND	2.0	1	08/11/2017 12:07
1,3-Butadiene	ND	1.1	1	08/11/2017 12:07
2-Butanone (MEK)	ND	75	1	08/11/2017 12:07
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 12:07
Carbon Disulfide	**22**	1.6	1	08/11/2017 12:07
Carbon Tetrachloride	ND	3.2	1	08/11/2017 12:07
Chlorobenzene	ND	2.4	1	08/11/2017 12:07
Chloroethane	ND	1.3	1	08/11/2017 12:07
Chloroform	ND	2.4	1	08/11/2017 12:07
Chloromethane	ND	1.0	1	08/11/2017 12:07
Cyclohexane	ND	18	1	08/11/2017 12:07
Dibromochloromethane	ND	4.4	1	08/11/2017 12:07
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 12:07
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 12:07
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 12:07
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 12:07
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 12:07
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 12:07
1,1-Dichloroethane	ND	2.0	1	08/11/2017 12:07
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 12:07
1,1-Dichloroethene	ND	2.0	1	08/11/2017 12:07
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 12:07
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 12:07
1,2-Dichloropropane	ND	2.4	1	08/11/2017 12:07
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 12:07
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 12:07

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Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-7	1708405-007A	SoilGas	08/08/2017 11:01	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.07	26.15	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 12:07
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 12:07
1,4-Dioxane	ND	1.8	1	08/11/2017 12:07
Ethanol	ND	96	1	08/11/2017 12:07
Ethyl acetate	**3.0**	1.8	1	08/11/2017 12:07
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 12:07
Ethylbenzene	ND	2.2	1	08/11/2017 12:07
4-Ethyltoluene	ND	2.5	1	08/11/2017 12:07
Freon 113	ND	3.9	1	08/11/2017 12:07
Heptane	ND	21	1	08/11/2017 12:07
Hexachlorobutadiene	ND	5.4	1	08/11/2017 12:07
Hexane	ND	18	1	08/11/2017 12:07
2-Hexanone	**10**	2.1	1	08/11/2017 12:07
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 12:07
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 12:07
Methylene chloride	ND	8.8	1	08/11/2017 12:07
Methyl methacrylate	ND	2.1	1	08/11/2017 12:07
Naphthalene	ND	5.3	1	08/11/2017 12:07
Propene	ND	88	1	08/11/2017 12:07
Styrene	ND	2.2	1	08/11/2017 12:07
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 12:07
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 12:07
Tetrachloroethene	**930**	3.4	1	08/11/2017 12:07
Tetrahydrofuran	**3.3**	3.0	1	08/11/2017 12:07
Toluene	**4.5**	1.9	1	08/11/2017 12:07
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 12:07
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 12:07
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 12:07
Trichloroethene	ND	2.8	1	08/11/2017 12:07
Trichlorofluoromethane	ND	2.8	1	08/11/2017 12:07
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 12:07
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 12:07
Vinyl Acetate	ND	18	1	08/11/2017 12:07
Vinyl Chloride	ND	1.3	1	08/11/2017 12:07

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Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-7	**1708405-007A**	**SoilGas**	**08/08/2017 11:01**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.07	**26.15**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 12:07
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	78	70-130		08/11/2017 12:07
Toluene-d8	100	70-130		08/11/2017 12:07
4-BFB	93	70-130		08/11/2017 12:07

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Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-14	1708405-008A	SoilGas	08/08/2017 11:42	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.45	24.81	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 12:47
Acrolein	ND	5.8	1	08/11/2017 12:47
Acrylonitrile	ND	1.1	1	08/11/2017 12:47
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 12:47
Benzene	ND	1.6	1	08/11/2017 12:47
Benzyl chloride	ND	2.6	1	08/11/2017 12:47
Bromodichloromethane	ND	3.5	1	08/11/2017 12:47
Bromoform	ND	5.2	1	08/11/2017 12:47
Bromomethane	ND	2.0	1	08/11/2017 12:47
1,3-Butadiene	ND	1.1	1	08/11/2017 12:47
2-Butanone (MEK)	ND	75	1	08/11/2017 12:47
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 12:47
Carbon Disulfide	**4.6**	1.6	1	08/11/2017 12:47
Carbon Tetrachloride	ND	3.2	1	08/11/2017 12:47
Chlorobenzene	ND	2.4	1	08/11/2017 12:47
Chloroethane	ND	1.3	1	08/11/2017 12:47
Chloroform	ND	2.4	1	08/11/2017 12:47
Chloromethane	ND	1.0	1	08/11/2017 12:47
Cyclohexane	ND	18	1	08/11/2017 12:47
Dibromochloromethane	ND	4.4	1	08/11/2017 12:47
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 12:47
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 12:47
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 12:47
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 12:47
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 12:47
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 12:47
1,1-Dichloroethane	ND	2.0	1	08/11/2017 12:47
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 12:47
1,1-Dichloroethene	ND	2.0	1	08/11/2017 12:47
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 12:47
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 12:47
1,2-Dichloropropane	ND	2.4	1	08/11/2017 12:47
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 12:47
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 12:47

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Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

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SG-13-14	1708405-008A	SoilGas	08/08/2017 11:42	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.45	24.81	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 12:47
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 12:47
1,4-Dioxane	ND	1.8	1	08/11/2017 12:47
Ethanol	ND	96	1	08/11/2017 12:47
Ethyl acetate	ND	1.8	1	08/11/2017 12:47
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 12:47
Ethylbenzene	ND	2.2	1	08/11/2017 12:47
4-Ethyltoluene	ND	2.5	1	08/11/2017 12:47
Freon 113	ND	3.9	1	08/11/2017 12:47
Heptane	ND	21	1	08/11/2017 12:47
Hexachlorobutadiene	ND	5.4	1	08/11/2017 12:47
Hexane	ND	18	1	08/11/2017 12:47
2-Hexanone	**6.3**	2.1	1	08/11/2017 12:47
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 12:47
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 12:47
Methylene chloride	ND	8.8	1	08/11/2017 12:47
Methyl methacrylate	ND	2.1	1	08/11/2017 12:47
Naphthalene	**9.8**	5.3	1	08/11/2017 12:47
Propene	ND	88	1	08/11/2017 12:47
Styrene	ND	2.2	1	08/11/2017 12:47
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 12:47
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 12:47
Tetrachloroethene	**560**	3.4	1	08/11/2017 12:47
Tetrahydrofuran	ND	3.0	1	08/11/2017 12:47
Toluene	ND	1.9	1	08/11/2017 12:47
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 12:47
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 12:47
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 12:47
Trichloroethene	ND	2.8	1	08/11/2017 12:47
Trichlorofluoromethane	ND	2.8	1	08/11/2017 12:47
1,2,4-Trimethylbenzene	**7.0**	2.5	1	08/11/2017 12:47
1,3,5-Trimethylbenzene	**3.3**	2.5	1	08/11/2017 12:47
Vinyl Acetate	ND	18	1	08/11/2017 12:47
Vinyl Chloride	ND	1.3	1	08/11/2017 12:47

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Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-13-14	**1708405-008A**	**SoilGas**	**08/08/2017 11:42**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.45	**24.81**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	**8.9**	6.6	1	08/11/2017 12:47
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	81	70-130		08/11/2017 12:47
Toluene-d8	100	70-130		08/11/2017 12:47
4-BFB	95	70-130		08/11/2017 12:47

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-2-17	1708405-009A	SoilGas	08/08/2017 12:28	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.87	25.73	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 13:27
Acrolein	ND	5.8	1	08/11/2017 13:27
Acrylonitrile	ND	1.1	1	08/11/2017 13:27
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 13:27
Benzene	**2.0**	1.6	1	08/11/2017 13:27
Benzyl chloride	ND	2.6	1	08/11/2017 13:27
Bromodichloromethane	ND	3.5	1	08/11/2017 13:27
Bromoform	ND	5.2	1	08/11/2017 13:27
Bromomethane	ND	2.0	1	08/11/2017 13:27
1,3-Butadiene	ND	1.1	1	08/11/2017 13:27
2-Butanone (MEK)	ND	75	1	08/11/2017 13:27
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 13:27
Carbon Disulfide	**2.6**	1.6	1	08/11/2017 13:27
Carbon Tetrachloride	ND	3.2	1	08/11/2017 13:27
Chlorobenzene	ND	2.4	1	08/11/2017 13:27
Chloroethane	ND	1.3	1	08/11/2017 13:27
Chloroform	**18**	2.4	1	08/11/2017 13:27
Chloromethane	ND	1.0	1	08/11/2017 13:27
Cyclohexane	ND	18	1	08/11/2017 13:27
Dibromochloromethane	ND	4.4	1	08/11/2017 13:27
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 13:27
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 13:27
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 13:27
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 13:27
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 13:27
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 13:27
1,1-Dichloroethane	ND	2.0	1	08/11/2017 13:27
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 13:27
1,1-Dichloroethene	ND	2.0	1	08/11/2017 13:27
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 13:27
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 13:27
1,2-Dichloropropane	ND	2.4	1	08/11/2017 13:27
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 13:27
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 13:27

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-2-17	1708405-009A	SoilGas	08/08/2017 12:28	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.87	25.73	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 13:27
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 13:27
1,4-Dioxane	ND	1.8	1	08/11/2017 13:27
Ethanol	ND	96	1	08/11/2017 13:27
Ethyl acetate	ND	1.8	1	08/11/2017 13:27
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 13:27
Ethylbenzene	ND	2.2	1	08/11/2017 13:27
4-Ethyltoluene	ND	2.5	1	08/11/2017 13:27
Freon 113	ND	3.9	1	08/11/2017 13:27
Heptane	ND	21	1	08/11/2017 13:27
Hexachlorobutadiene	ND	5.4	1	08/11/2017 13:27
Hexane	ND	18	1	08/11/2017 13:27
2-Hexanone	**9.4**	2.1	1	08/11/2017 13:27
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 13:27
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 13:27
Methylene chloride	ND	8.8	1	08/11/2017 13:27
Methyl methacrylate	ND	2.1	1	08/11/2017 13:27
Naphthalene	ND	5.3	1	08/11/2017 13:27
Propene	ND	88	1	08/11/2017 13:27
Styrene	ND	2.2	1	08/11/2017 13:27
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 13:27
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 13:27
Tetrachloroethene	**6600**	34	10	08/11/2017 05:27
Tetrahydrofuran	ND	3.0	1	08/11/2017 13:27
Toluene	ND	1.9	1	08/11/2017 13:27
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 13:27
1,1,1-Trichloroethane	**5.1**	2.8	1	08/11/2017 13:27
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 13:27
Trichloroethene	**4.6**	2.8	1	08/11/2017 13:27
Trichlorofluoromethane	ND	2.8	1	08/11/2017 13:27
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 13:27
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 13:27
Vinyl Acetate	ND	18	1	08/11/2017 13:27
Vinyl Chloride	ND	1.3	1	08/11/2017 13:27

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-2-17	**1708405-009A**	**SoilGas**	**08/08/2017 12:28**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.87	**25.73**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 13:27
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	75	70-130		08/11/2017 13:27
Toluene-d8	104	70-130		08/11/2017 13:27
4-BFB	93	70-130		08/11/2017 13:27

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Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-17	1708405-010A	SoilGas	08/08/2017 13:17	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.98	23.90	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 14:08
Acrolein	ND	5.8	1	08/11/2017 14:08
Acrylonitrile	ND	1.1	1	08/11/2017 14:08
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 14:08
Benzene	ND	1.6	1	08/11/2017 14:08
Benzyl chloride	ND	2.6	1	08/11/2017 14:08
Bromodichloromethane	ND	3.5	1	08/11/2017 14:08
Bromoform	ND	5.2	1	08/11/2017 14:08
Bromomethane	ND	2.0	1	08/11/2017 14:08
1,3-Butadiene	ND	1.1	1	08/11/2017 14:08
2-Butanone (MEK)	ND	75	1	08/11/2017 14:08
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 14:08
Carbon Disulfide	ND	1.6	1	08/11/2017 14:08
Carbon Tetrachloride	ND	3.2	1	08/11/2017 14:08
Chlorobenzene	ND	2.4	1	08/11/2017 14:08
Chloroethane	ND	1.3	1	08/11/2017 14:08
Chloroform	**35**	2.4	1	08/11/2017 14:08
Chloromethane	ND	1.0	1	08/11/2017 14:08
Cyclohexane	ND	18	1	08/11/2017 14:08
Dibromochloromethane	ND	4.4	1	08/11/2017 14:08
1,2-Dibromo-3-chloropropane	ND	0.12	1	08/11/2017 14:08
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 14:08
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 14:08
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 14:08
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 14:08
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 14:08
1,1-Dichloroethane	ND	2.0	1	08/11/2017 14:08
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 14:08
1,1-Dichloroethene	ND	2.0	1	08/11/2017 14:08
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 14:08
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 14:08
1,2-Dichloropropane	ND	2.4	1	08/11/2017 14:08
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 14:08
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 14:08

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Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-17	1708405-010A	SoilGas	08/08/2017 13:17	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.98	23.90	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 14:08
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 14:08
1,4-Dioxane	ND	1.8	1	08/11/2017 14:08
Ethanol	ND	96	1	08/11/2017 14:08
Ethyl acetate	ND	1.8	1	08/11/2017 14:08
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 14:08
Ethylbenzene	ND	2.2	1	08/11/2017 14:08
4-Ethyltoluene	ND	2.5	1	08/11/2017 14:08
Freon 113	ND	3.9	1	08/11/2017 14:08
Heptane	ND	21	1	08/11/2017 14:08
Hexachlorobutadiene	ND	5.4	1	08/11/2017 14:08
Hexane	ND	18	1	08/11/2017 14:08
2-Hexanone	ND	2.1	1	08/11/2017 14:08
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 14:08
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 14:08
Methylene chloride	ND	8.8	1	08/11/2017 14:08
Methyl methacrylate	ND	2.1	1	08/11/2017 14:08
Naphthalene	ND	5.3	1	08/11/2017 14:08
Propene	ND	88	1	08/11/2017 14:08
Styrene	ND	2.2	1	08/11/2017 14:08
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 14:08
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 14:08
Tetrachloroethene	**420**	3.4	1	08/11/2017 14:08
Tetrahydrofuran	ND	3.0	1	08/11/2017 14:08
Toluene	ND	1.9	1	08/11/2017 14:08
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 14:08
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 14:08
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 14:08
Trichloroethene	ND	2.8	1	08/11/2017 14:08
Trichlorofluoromethane	ND	2.8	1	08/11/2017 14:08
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 14:08
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 14:08
Vinyl Acetate	ND	18	1	08/11/2017 14:08
Vinyl Chloride	ND	1.3	1	08/11/2017 14:08

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-17	**1708405-010A**	**SoilGas**	**08/08/2017 13:17**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.98	**23.90**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 14:08
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	81	70-130		08/11/2017 14:08
Toluene-d8	101	70-130		08/11/2017 14:08
4-BFB	100	70-130		08/11/2017 14:08

(Cont.)

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVE-4	1708405-011A	SoilGas	08/08/2017 14:50	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.26	24.43	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	60	1	08/11/2017 07:25
Acrolein	ND	5.8	1	08/11/2017 07:25
Acrylonitrile	ND	1.1	1	08/11/2017 07:25
tert-Amyl methyl ether (TAME)	ND	2.1	1	08/11/2017 07:25
Benzene	ND	1.6	1	08/11/2017 07:25
Benzyl chloride	ND	2.6	1	08/11/2017 07:25
Bromodichloromethane	ND	3.5	1	08/11/2017 07:25
Bromoform	ND	5.2	1	08/11/2017 07:25
Bromomethane	ND	2.0	1	08/11/2017 07:25
1,3-Butadiene	ND	1.1	1	08/11/2017 07:25
2-Butanone (MEK)	ND	75	1	08/11/2017 07:25
t-Butyl alcohol (TBA)	ND	31	1	08/11/2017 07:25
Carbon Disulfide	ND	1.6	1	08/11/2017 07:25
Carbon Tetrachloride	ND	3.2	1	08/11/2017 07:25
Chlorobenzene	ND	2.4	1	08/11/2017 07:25
Chloroethane	ND	1.3	1	08/11/2017 07:25
Chloroform	**5.0**	2.4	1	08/11/2017 07:25
Chloromethane	ND	1.0	1	08/11/2017 07:25
Cyclohexane	ND	18	1	08/11/2017 07:25
Dibromochloromethane	ND	4.4	1	08/11/2017 07:25
1,2-Dibromo-3-chloropropane	**0.41**	0.12	1	08/11/2017 07:25
1,2-Dibromoethane (EDB)	ND	3.9	1	08/11/2017 07:25
1,2-Dichlorobenzene	ND	3.0	1	08/11/2017 07:25
1,3-Dichlorobenzene	ND	3.0	1	08/11/2017 07:25
1,4-Dichlorobenzene	ND	3.0	1	08/11/2017 07:25
Dichlorodifluoromethane	ND	2.5	1	08/11/2017 07:25
1,1-Dichloroethane	ND	2.0	1	08/11/2017 07:25
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	08/11/2017 07:25
1,1-Dichloroethene	ND	2.0	1	08/11/2017 07:25
cis-1,2-Dichloroethene	ND	2.0	1	08/11/2017 07:25
trans-1,2-Dichloroethene	ND	2.0	1	08/11/2017 07:25
1,2-Dichloropropane	ND	2.4	1	08/11/2017 07:25
cis-1,3-Dichloropropene	ND	2.3	1	08/11/2017 07:25
trans-1,3-Dichloropropene	ND	2.3	1	08/11/2017 07:25

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVE-4	1708405-011A	SoilGas	08/08/2017 14:50	GC24	143650

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.26	24.43	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	08/11/2017 07:25
Diisopropyl ether (DIPE)	ND	2.1	1	08/11/2017 07:25
1,4-Dioxane	ND	1.8	1	08/11/2017 07:25
Ethanol	ND	96	1	08/11/2017 07:25
Ethyl acetate	ND	1.8	1	08/11/2017 07:25
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	08/11/2017 07:25
Ethylbenzene	ND	2.2	1	08/11/2017 07:25
4-Ethyltoluene	ND	2.5	1	08/11/2017 07:25
Freon 113	ND	3.9	1	08/11/2017 07:25
Heptane	ND	21	1	08/11/2017 07:25
Hexachlorobutadiene	ND	5.4	1	08/11/2017 07:25
Hexane	ND	18	1	08/11/2017 07:25
2-Hexanone	**7.8**	2.1	1	08/11/2017 07:25
4-Methyl-2-pentanone (MIBK)	ND	2.1	1	08/11/2017 07:25
Methyl-t-butyl ether (MTBE)	ND	1.8	1	08/11/2017 07:25
Methylene chloride	ND	8.8	1	08/11/2017 07:25
Methyl methacrylate	ND	2.1	1	08/11/2017 07:25
Naphthalene	ND	5.3	1	08/11/2017 07:25
Propene	ND	88	1	08/11/2017 07:25
Styrene	ND	2.2	1	08/11/2017 07:25
1,1,1,2-Tetrachloroethane	ND	3.5	1	08/11/2017 07:25
1,1,2,2-Tetrachloroethane	ND	3.5	1	08/11/2017 07:25
Tetrachloroethene	**1200**	3.4	1	08/11/2017 07:25
Tetrahydrofuran	ND	3.0	1	08/11/2017 07:25
Toluene	ND	1.9	1	08/11/2017 07:25
1,2,4-Trichlorobenzene	ND	3.8	1	08/11/2017 07:25
1,1,1-Trichloroethane	ND	2.8	1	08/11/2017 07:25
1,1,2-Trichloroethane	ND	2.8	1	08/11/2017 07:25
Trichloroethene	ND	2.8	1	08/11/2017 07:25
Trichlorofluoromethane	ND	2.8	1	08/11/2017 07:25
1,2,4-Trimethylbenzene	ND	2.5	1	08/11/2017 07:25
1,3,5-Trimethylbenzene	ND	2.5	1	08/11/2017 07:25
Vinyl Acetate	ND	18	1	08/11/2017 07:25
Vinyl Chloride	ND	1.3	1	08/11/2017 07:25

(Cont.)

Angela Rydelius, Lab Manager

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Received:	8/9/17 10:20	**Extraction Method:**	TO15
Date Prepared:	8/11/17	**Analytical Method:**	TO15
Project:	TM Red Hanger	**Unit:**	µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVE-4	**1708405-011A**	**SoilGas**	**08/08/2017 14:50**	**GC24**	**143650**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
12.26	**24.43**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Xylenes, Total	ND	6.6	1	08/11/2017 07:25
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	81	70-130		08/11/2017 07:25
Toluene-d8	101	70-130		08/11/2017 07:25
4-BFB	99	70-130		08/11/2017 07:25

Angela Rydelius, Lab Manager

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Prepared:	8/10/17	**BatchID:**	143540
Date Analyzed:	8/10/17	**Extraction Method:**	ASTM D 1946-90
Instrument:	GC26	**Analytical Method:**	ASTM D 1946-90
Matrix:	Soilgas	**Unit:**	%
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-143540

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Helium	ND	0.0978	0.025	0.10	-	98	60-140

QA/QC Officer

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Prepared:	8/10/17	**BatchID:**	143650
Date Analyzed:	8/10/17	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	SoilGas	**Unit:**	µg/m³
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-143650

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	ND	30	60	-	78	60-140
Acrolein	ND	40.2	2.9	58.25	-	69	60-140
Acrylonitrile	ND	51.9	0.55	55	-	94	60-140
tert-Amyl methyl ether (TAME)	ND	91.8	1.0	105	-	87	60-140
Benzene	ND	65.2	0.80	80	-	82	60-140
Benzyl chloride	ND	153	1.3	132.5	-	115	60-140
Bromodichloromethane	ND	154	1.8	175	-	88	60-140
Bromoform	ND	249	2.6	262.5	-	95	60-140
Bromomethane	ND	130	1.0	97.5	-	134	60-140
1,3-Butadiene	ND	32.8	0.55	55	-	60	60-140
2-Butanone (MEK)	ND	ND	38	75	-	94	60-140
t-Butyl alcohol (TBA)	ND	79.9	16	77.5	-	103	60-140
Carbon Disulfide	ND	76.4	0.80	80	-	96	60-140
Carbon Tetrachloride	ND	131	1.6	160	-	82	60-140
Chlorobenzene	ND	115	1.2	117.5	-	98	60-140
Chloroethane	ND	70.5	0.65	67.5	-	104	60-140
Chloroform	ND	97.5	1.2	122.5	-	80	60-140
Chloromethane	ND	34.0	0.50	52.5	-	65	60-140
Cyclohexane	ND	71.5	9.0	87.5	-	82	60-140
Dibromochloromethane	ND	209	2.2	217.5	-	96	60-140
1,2-Dibromo-3-chloropropane	ND	297	0.060	245	-	121	60-140
1,2-Dibromoethane (EDB)	ND	188	2.0	195	-	97	60-140
1,2-Dichlorobenzene	ND	164	1.5	152.5	-	108	60-140
1,3-Dichlorobenzene	ND	152	1.5	152.5	-	100	60-140
1,4-Dichlorobenzene	ND	151	1.5	152.5	-	99	60-140
Dichlorodifluoromethane	ND	95.6	1.2	125	-	76	60-140
1,1-Dichloroethane	ND	119	1.0	102.5	-	116	60-140
1,2-Dichloroethane (1,2-DCA)	ND	67.6	1.0	102.5	-	66	60-140
1,1-Dichloroethene	ND	74.0	1.0	100	-	74	60-140
cis-1,2-Dichloroethene	ND	88.9	1.0	100	-	89	60-140
trans-1,2-Dichloroethene	ND	89.1	1.0	100	-	89	60-140
1,2-Dichloropropane	ND	95.4	1.2	117.5	-	81	60-140
cis-1,3-Dichloropropene	ND	125	1.2	115	-	109	60-140
trans-1,3-Dichloropropene	ND	123	1.2	115	-	107	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	138	1.8	177.5	-	78	60-140
Diisopropyl ether (DIPE)	ND	83.0	1.0	105	-	79	60-140
1,4-Dioxane	ND	91.1	0.90	92.5	-	98	60-140

(Cont.)

QA/QC Officer

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Prepared:	8/10/17	**BatchID:**	143650
Date Analyzed:	8/10/17	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	SoilGas	**Unit:**	µg/m³
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-143650

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethanol	ND	ND	48	47.5	-	87	60-140
Ethyl acetate	ND	74.8	0.90	92.5	-	81	60-140
Ethyl tert-butyl ether (ETBE)	ND	86.0	1.0	105	-	82	60-140
Ethylbenzene	ND	108	1.1	110	-	98	60-140
4-Ethyltoluene	ND	126	1.2	125	-	101	60-140
Freon 113	ND	165	2.0	195	-	85	60-140
Heptane	ND	79.8	10	105	-	76	60-140
Hexachlorobutadiene	ND	261	2.7	270	-	97	60-140
Hexane	ND	70.6	9.0	90	-	78	60-140
2-Hexanone	ND	133	1.0	105	-	127	60-140
Isopropyl Alcohol	ND	55.8	25	62.5	-	89	60-140
4-Methyl-2-pentanone (MIBK)	ND	92.8	1.0	105	-	88	60-140
Methyl-t-butyl ether (MTBE)	ND	81.3	0.90	92.5	-	88	60-140
Methylene chloride	ND	81.8	4.4	87.5	-	93	60-140
Methyl methacrylate	ND	91.6	1.0	104	-	88	60-140
Naphthalene	ND	358	2.6	265	-	135	60-140
Propene	ND	ND	44	42.5	-	76	60-140
Styrene	ND	109	1.1	107.5	-	101	60-140
1,1,1,2-Tetrachloroethane	ND	164	1.8	175	-	94	60-140
1,1,2,2-Tetrachloroethane	ND	177	1.8	175	-	101	60-140
Tetrachloroethene	ND	152	1.7	172	-	88	60-140
Tetrahydrofuran	ND	60.6	1.5	75	-	81	60-140
Toluene	ND	92.3	0.95	95	-	97	60-140
1,2,4-Trichlorobenzene	ND	212	1.9	187.5	-	113	60-140
1,1,1-Trichloroethane	ND	124	1.4	137.5	-	90	60-140
1,1,2-Trichloroethane	ND	127	1.4	137.5	-	92	60-140
Trichloroethene	ND	114	1.4	137.5	-	83	60-140
Trichlorofluoromethane	ND	116	1.4	142.5	-	82	60-140
1,2,4-Trimethylbenzene	ND	126	1.2	125	-	101	60-140
1,3,5-Trimethylbenzene	ND	121	1.2	125	-	97	60-140
Vinyl Acetate	ND	152	9.0	90	-	169, F2	60-140
Vinyl Chloride	ND	37.2	0.65	65	-	57, F2	60-140
Xylenes, Total	ND	283	3.3	330	-	86	60-140

(Cont.)

QA/QC Officer

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708405
Date Prepared:	8/10/17	**BatchID:**	143650
Date Analyzed:	8/10/17	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	SoilGas	**Unit:**	µg/m³
Project:	TM Red Hanger	**Sample ID:**	MB/LCS-143650

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
1,2-DCA-d4	384.5	387		500	77	77	70-130
Toluene-d8	499.3	504		500	100	101	70-130
4-BFB	501.8	505		500	100	101	70-130

QA/QC Officer

McCampbell Analytical, Inc.
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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1708405 **ClientCode: LRMC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Mehrdad Javaherian
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010
(415) 706-8935 FAX:

Email: mehrdad@lrm-consulting.com
cc/3rd Party:
PO:
ProjectNo: TM Red Hanger

Bill to:
Accounts Payable
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Requested TAT: **5 days;**

Date Received: **08/09/2017**
Date Logged: **08/09/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1708405-001	SG-12-7	SoilGas	8/7/2017 14:38	☐	A		A	A	A							
1708405-002	SG-12-15	SoilGas	8/7/2017 15:48	☐	A		A	A	A							
1708405-003	SG-7-17	SoilGas	8/7/2017 16:58	☐	A		A	A	A							
1708405-004	SG-3-17	SoilGas	8/8/2017 08:38	☐	A		A	A	A							
1708405-005	SG-4-17	SoilGas	8/8/2017 09:25	☐	A		A	A	A							
1708405-006	SG-11-17	SoilGas	8/8/2017 10:12	☐	A		A	A	A							
1708405-007	SG-13-7	SoilGas	8/8/2017 11:01	☐	A		A	A	A							
1708405-008	SG-13-14	SoilGas	8/8/2017 11:42	☐	A		A	A	A							
1708405-009	SG-2-17	SoilGas	8/8/2017 12:28	☐	A		A	A	A							
1708405-010	SG-6-17	SoilGas	8/8/2017 13:17	☐	A		A	A	A							
1708405-011	SVE-4	SoilGas	8/8/2017 14:50	☐	A		A	A	A							
1708405-012	Unused summa	SoilGas	<Not Provided>	☐		A				A						

Test Legend:

1	HELIUM_LC_SOILGAS(%)	2	PRUNUSEDSUMMA	3	TO15_HIGHLEVEL_SOIL(UG/M3)	4	TO15_Scan-SIM_SOIL(UG/M3) [N]
5	TO15-8260_SOIL(UG/M3) [N]	6	UNUSED_SUMMA	7		8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A contain testgroup TO15He_SG(UG/M3).

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: LRM CONSULTING, INC. **Project:** TM Red Hanger **Work Order:** 1708405
Client Contact: Mehrdad Javaherian **QC Level:** LEVEL 2
Contact's Email: mehrdad@lrm-consulting.com **Comments:** **Date Logged:** 8/9/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1708405-001A	SG-12-7	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/7/2017 14:38	5 days		☐	
1708405-002A	SG-12-15	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/7/2017 15:48	5 days		☐	
1708405-003A	SG-7-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/7/2017 16:58	5 days		☐	
1708405-004A	SG-3-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 8:38	5 days		☐	
1708405-005A	SG-4-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 9:25	5 days		☐	
1708405-006A	SG-11-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 10:12	5 days		☐	
1708405-007A	SG-13-7	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 11:01	5 days		☐	
1708405-008A	SG-13-14	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 11:42	5 days		☐	
1708405-009A	SG-2-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 12:28	5 days		☐	
1708405-010A	SG-6-17	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 13:17	5 days		☐	
1708405-011A	SVE-4	SoilGas	TO15 w/ Helium	1	1L Summa	☐	8/8/2017 14:50	5 days		☐	
1708405-012A	Unused summa	SoilGas	Unused Summa	1	1L Summa	☐	<Not Provided>	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Summa COC

MAI Work Order # 1708405

McCAMPBELL ANALYTICAL, INC.

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | X STD | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF | EDD | Write On (DW) | EQuIS

Report To: Mehrdad Bill To: LRM
Company: LRM
Email:
Alt Email: Tele: 415 706-8935
Project Name: Red Hanger Project#: The Red Hanger
Project Location: 6239 College Ave PO #
Sampler Signature:

Analysis Requested

Helium Shroud SN#

Leak Check Default is IPA

Notes: Please specify units if different than default: VOCs is reported in µg/m³, fixed is reported in %.

SAMPLE ID Location / Field Point	Sampling Start Date	Sampling Start Time	End Time	Canister SN#	Sample Kit / Manifold #	VOCs TO-15 (µg/m³) - See Notes	8010 by TO-15 (µg/m³)	TPH(g) (µg/m³)	LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas (CO_2, Methane, Ethane, Ethylene, Acetylene, Propane, CO) %	Fixed Gas: (O_2, N_2) %	APH: Aliphatic and/or Aromatic (circle one) µg/m³	Helium Leak Check %	Leak Check (IPA, Norflorane, 1,1-difluroethane) µg/m³	Matrix: Soilgas	Matrix: Indoor Air	Canister Pressure / Vacuum: Initial	Canister Pressure / Vacuum: Final
SG-12-7	8/7/17	1432	1438	2533	981	X							X		X		-29	-4.5
SG-12-15		1540	1548	2576	988												-30	-4.5
SG-7-17		1650	1658	2598	985												-30	-4.5
SG-3-17	8/8/17	831	0838	582	989												-30	-4.5
SG-4-17 *		09 9	092	2548	984												-30	-4.5
SG-11-17 *		1006	1012	2589	1225												-29	-4.5
SG-13-07		1056	1101	2591	980												-30	-4.5
SG-13-14		1137	1142	2538	1227												-30	-4.5
SG-13-17		1228	1228	1923	983												-30	-4.5
SG-6-17		1311	1317	708	1231												-30	-4.5
SVE-4		1444	1450	2588	674												-30	-4.5

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	Comments / Instructions
	8/9/17	1020		8/9/17	1020	* ID's Revised Per Client 8/15/17

Page ___ of ___

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Sample Receipt Checklist

Client Name:	**LRM Consulting, Inc.**	Date and Time Received	**8/9/2017 10:20**
Project Name:	**TM Red Hanger**	Date Logged:	**8/9/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1708405** Matrix: SoilGas	Logged by:	Jena Alfaro
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp:				NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☐	No	☑	

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1708404

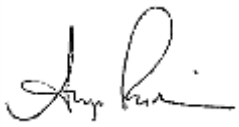
Report Created for: LRM Consulting, Inc.

1534 Plaza Lane, #145
Burlingame, CA 94010

Project Contact: Mehrdad Javaherian
Project P.O.:
Project Name: Red Hanger, TM Red Hanger

Project Received: 08/09/2017

Analytical Report reviewed & approved for release on 08/14/2017 by:



Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: Red Hanger, TM Red Hanger
WorkOrder: 1708404

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Glossary of Terms & Qualifier Definitions

Client: LRM Consulting, Inc.
Project: Red Hanger, TM Red Hanger
WorkOrder: 1708404

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
c2	Surrogate recovery outside of the control limits due to matrix interference.

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1708404-001A**	**Water**	**08/08/2017 13:42**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/12/2017 03:11
Bromochloromethane	ND	0.50	1	08/12/2017 03:11
Bromodichloromethane	ND	0.50	1	08/12/2017 03:11
Bromoform	ND	0.50	1	08/12/2017 03:11
Bromomethane	ND	0.50	1	08/12/2017 03:11
Carbon Tetrachloride	ND	0.50	1	08/12/2017 03:11
Chlorobenzene	ND	0.50	1	08/12/2017 03:11
Chloroethane	ND	0.50	1	08/12/2017 03:11
Chloroform	**0.64**	0.50	1	08/12/2017 03:11
Chloromethane	ND	0.50	1	08/12/2017 03:11
2-Chlorotoluene	ND	0.50	1	08/12/2017 03:11
4-Chlorotoluene	ND	0.50	1	08/12/2017 03:11
Dibromochloromethane	ND	0.50	1	08/12/2017 03:11
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/12/2017 03:11
1,2-Dibromoethane (EDB)	ND	0.50	1	08/12/2017 03:11
Dibromomethane	ND	0.50	1	08/12/2017 03:11
1,2-Dichlorobenzene	ND	0.50	1	08/12/2017 03:11
1,3-Dichlorobenzene	ND	0.50	1	08/12/2017 03:11
1,4-Dichlorobenzene	ND	0.50	1	08/12/2017 03:11
Dichlorodifluoromethane	ND	0.50	1	08/12/2017 03:11
1,1-Dichloroethane	ND	0.50	1	08/12/2017 03:11
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/12/2017 03:11
1,1-Dichloroethene	ND	0.50	1	08/12/2017 03:11
cis-1,2-Dichloroethene	ND	0.50	1	08/12/2017 03:11
trans-1,2-Dichloroethene	ND	0.50	1	08/12/2017 03:11
1,2-Dichloropropane	ND	0.50	1	08/12/2017 03:11
1,3-Dichloropropane	ND	0.50	1	08/12/2017 03:11
2,2-Dichloropropane	ND	0.50	1	08/12/2017 03:11
1,1-Dichloropropene	ND	0.50	1	08/12/2017 03:11
cis-1,3-Dichloropropene	ND	0.50	1	08/12/2017 03:11
trans-1,3-Dichloropropene	ND	0.50	1	08/12/2017 03:11
Freon 113	ND	0.50	1	08/12/2017 03:11
Hexachlorobutadiene	ND	0.50	1	08/12/2017 03:11
Hexachloroethane	ND	0.50	1	08/12/2017 03:11
Methylene chloride	ND	0.50	1	08/12/2017 03:11
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/12/2017 03:11
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/12/2017 03:11

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1708404-001A**	**Water**	**08/08/2017 13:42**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.50	1	08/12/2017 03:11
1,2,3-Trichlorobenzene	ND	0.50	1	08/12/2017 03:11
1,2,4-Trichlorobenzene	ND	0.50	1	08/12/2017 03:11
1,1,1-Trichloroethane	ND	0.50	1	08/12/2017 03:11
1,1,2-Trichloroethane	ND	0.50	1	08/12/2017 03:11
Trichloroethene	ND	0.50	1	08/12/2017 03:11
Trichlorofluoromethane	ND	0.50	1	08/12/2017 03:11
1,2,3-Trichloropropane	ND	0.50	1	08/12/2017 03:11
Vinyl Chloride	ND	0.50	1	08/12/2017 03:11

Surrogates	REC (%)	Limits	
Dibromofluoromethane	128	70-130	08/12/2017 03:11
Toluene-d8	111	70-130	08/12/2017 03:11
4-BFB	91	70-130	08/12/2017 03:11

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1708404-002A	Water	08/08/2017 14:46	GC28	143573

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/11/2017 22:26
Bromochloromethane	ND	0.50	1	08/11/2017 22:26
Bromodichloromethane	**0.64**	0.50	1	08/11/2017 22:26
Bromoform	ND	0.50	1	08/11/2017 22:26
Bromomethane	ND	0.50	1	08/11/2017 22:26
Carbon Tetrachloride	ND	0.50	1	08/11/2017 22:26
Chlorobenzene	ND	0.50	1	08/11/2017 22:26
Chloroethane	ND	0.50	1	08/11/2017 22:26
Chloroform	**14**	0.50	1	08/11/2017 22:26
Chloromethane	ND	0.50	1	08/11/2017 22:26
2-Chlorotoluene	ND	0.50	1	08/11/2017 22:26
4-Chlorotoluene	ND	0.50	1	08/11/2017 22:26
Dibromochloromethane	**0.54**	0.50	1	08/11/2017 22:26
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/11/2017 22:26
1,2-Dibromoethane (EDB)	ND	0.50	1	08/11/2017 22:26
Dibromomethane	ND	0.50	1	08/11/2017 22:26
1,2-Dichlorobenzene	ND	0.50	1	08/11/2017 22:26
1,3-Dichlorobenzene	ND	0.50	1	08/11/2017 22:26
1,4-Dichlorobenzene	ND	0.50	1	08/11/2017 22:26
Dichlorodifluoromethane	ND	0.50	1	08/11/2017 22:26
1,1-Dichloroethane	ND	0.50	1	08/11/2017 22:26
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/11/2017 22:26
1,1-Dichloroethene	ND	0.50	1	08/11/2017 22:26
cis-1,2-Dichloroethene	ND	0.50	1	08/11/2017 22:26
trans-1,2-Dichloroethene	ND	0.50	1	08/11/2017 22:26
1,2-Dichloropropane	ND	0.50	1	08/11/2017 22:26
1,3-Dichloropropane	ND	0.50	1	08/11/2017 22:26
2,2-Dichloropropane	ND	0.50	1	08/11/2017 22:26
1,1-Dichloropropene	ND	0.50	1	08/11/2017 22:26
cis-1,3-Dichloropropene	ND	0.50	1	08/11/2017 22:26
trans-1,3-Dichloropropene	ND	0.50	1	08/11/2017 22:26
Freon 113	ND	0.50	1	08/11/2017 22:26
Hexachlorobutadiene	ND	0.50	1	08/11/2017 22:26
Hexachloroethane	ND	0.50	1	08/11/2017 22:26
Methylene chloride	ND	0.50	1	08/11/2017 22:26
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/11/2017 22:26
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/11/2017 22:26

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1708404-002A**	**Water**	**08/08/2017 14:46**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.50	1	08/11/2017 22:26
1,2,3-Trichlorobenzene	ND	0.50	1	08/11/2017 22:26
1,2,4-Trichlorobenzene	ND	0.50	1	08/11/2017 22:26
1,1,1-Trichloroethane	ND	0.50	1	08/11/2017 22:26
1,1,2-Trichloroethane	ND	0.50	1	08/11/2017 22:26
Trichloroethene	ND	0.50	1	08/11/2017 22:26
Trichlorofluoromethane	ND	0.50	1	08/11/2017 22:26
1,2,3-Trichloropropane	ND	0.50	1	08/11/2017 22:26
Vinyl Chloride	ND	0.50	1	08/11/2017 22:26

Surrogates	REC (%)	Limits	
Dibromofluoromethane	126	70-130	08/11/2017 22:26
Toluene-d8	111	70-130	08/11/2017 22:26
4-BFB	93	70-130	08/11/2017 22:26

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1708404-003A**	**Water**	**08/08/2017 15:41**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/11/2017 16:51
Bromochloromethane	ND	0.50	1	08/11/2017 16:51
Bromodichloromethane	ND	0.50	1	08/11/2017 16:51
Bromoform	ND	0.50	1	08/11/2017 16:51
Bromomethane	ND	0.50	1	08/11/2017 16:51
Carbon Tetrachloride	ND	0.50	1	08/11/2017 16:51
Chlorobenzene	ND	0.50	1	08/11/2017 16:51
Chloroethane	ND	0.50	1	08/11/2017 16:51
Chloroform	**1.9**	0.50	1	08/11/2017 16:51
Chloromethane	ND	0.50	1	08/11/2017 16:51
2-Chlorotoluene	ND	0.50	1	08/11/2017 16:51
4-Chlorotoluene	ND	0.50	1	08/11/2017 16:51
Dibromochloromethane	ND	0.50	1	08/11/2017 16:51
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/11/2017 16:51
1,2-Dibromoethane (EDB)	ND	0.50	1	08/11/2017 16:51
Dibromomethane	ND	0.50	1	08/11/2017 16:51
1,2-Dichlorobenzene	ND	0.50	1	08/11/2017 16:51
1,3-Dichlorobenzene	ND	0.50	1	08/11/2017 16:51
1,4-Dichlorobenzene	ND	0.50	1	08/11/2017 16:51
Dichlorodifluoromethane	ND	0.50	1	08/11/2017 16:51
1,1-Dichloroethane	ND	0.50	1	08/11/2017 16:51
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/11/2017 16:51
1,1-Dichloroethene	ND	0.50	1	08/11/2017 16:51
cis-1,2-Dichloroethene	ND	0.50	1	08/11/2017 16:51
trans-1,2-Dichloroethene	ND	0.50	1	08/11/2017 16:51
1,2-Dichloropropane	ND	0.50	1	08/11/2017 16:51
1,3-Dichloropropane	ND	0.50	1	08/11/2017 16:51
2,2-Dichloropropane	ND	0.50	1	08/11/2017 16:51
1,1-Dichloropropene	ND	0.50	1	08/11/2017 16:51
cis-1,3-Dichloropropene	ND	0.50	1	08/11/2017 16:51
trans-1,3-Dichloropropene	ND	0.50	1	08/11/2017 16:51
Freon 113	ND	0.50	1	08/11/2017 16:51
Hexachlorobutadiene	ND	0.50	1	08/11/2017 16:51
Hexachloroethane	ND	0.50	1	08/11/2017 16:51
Methylene chloride	ND	0.50	1	08/11/2017 16:51
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/11/2017 16:51
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/11/2017 16:51

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1708404-003A**	**Water**	**08/08/2017 15:41**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.50	1	08/11/2017 16:51
1,2,3-Trichlorobenzene	ND	0.50	1	08/11/2017 16:51
1,2,4-Trichlorobenzene	ND	0.50	1	08/11/2017 16:51
1,1,1-Trichloroethane	ND	0.50	1	08/11/2017 16:51
1,1,2-Trichloroethane	ND	0.50	1	08/11/2017 16:51
Trichloroethene	ND	0.50	1	08/11/2017 16:51
Trichlorofluoromethane	ND	0.50	1	08/11/2017 16:51
1,2,3-Trichloropropane	ND	0.50	1	08/11/2017 16:51
Vinyl Chloride	ND	0.50	1	08/11/2017 16:51

Surrogates	REC (%)	Limits	
Dibromofluoromethane	128	70-130	08/11/2017 16:51
Toluene-d8	112	70-130	08/11/2017 16:51
4-BFB	94	70-130	08/11/2017 16:51

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1708404-004A**	**Water**	**08/08/2017 16:35**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/12/2017 01:50
Bromochloromethane	ND	0.50	1	08/12/2017 01:50
Bromodichloromethane	ND	0.50	1	08/12/2017 01:50
Bromoform	ND	0.50	1	08/12/2017 01:50
Bromomethane	ND	0.50	1	08/12/2017 01:50
Carbon Tetrachloride	ND	0.50	1	08/12/2017 01:50
Chlorobenzene	ND	0.50	1	08/12/2017 01:50
Chloroethane	ND	0.50	1	08/12/2017 01:50
Chloroform	**0.68**	0.50	1	08/12/2017 01:50
Chloromethane	ND	0.50	1	08/12/2017 01:50
2-Chlorotoluene	ND	0.50	1	08/12/2017 01:50
4-Chlorotoluene	ND	0.50	1	08/12/2017 01:50
Dibromochloromethane	ND	0.50	1	08/12/2017 01:50
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/12/2017 01:50
1,2-Dibromoethane (EDB)	ND	0.50	1	08/12/2017 01:50
Dibromomethane	ND	0.50	1	08/12/2017 01:50
1,2-Dichlorobenzene	ND	0.50	1	08/12/2017 01:50
1,3-Dichlorobenzene	ND	0.50	1	08/12/2017 01:50
1,4-Dichlorobenzene	ND	0.50	1	08/12/2017 01:50
Dichlorodifluoromethane	ND	0.50	1	08/12/2017 01:50
1,1-Dichloroethane	ND	0.50	1	08/12/2017 01:50
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/12/2017 01:50
1,1-Dichloroethene	ND	0.50	1	08/12/2017 01:50
cis-1,2-Dichloroethene	ND	0.50	1	08/12/2017 01:50
trans-1,2-Dichloroethene	ND	0.50	1	08/12/2017 01:50
1,2-Dichloropropane	ND	0.50	1	08/12/2017 01:50
1,3-Dichloropropane	ND	0.50	1	08/12/2017 01:50
2,2-Dichloropropane	ND	0.50	1	08/12/2017 01:50
1,1-Dichloropropene	ND	0.50	1	08/12/2017 01:50
cis-1,3-Dichloropropene	ND	0.50	1	08/12/2017 01:50
trans-1,3-Dichloropropene	ND	0.50	1	08/12/2017 01:50
Freon 113	ND	0.50	1	08/12/2017 01:50
Hexachlorobutadiene	ND	0.50	1	08/12/2017 01:50
Hexachloroethane	ND	0.50	1	08/12/2017 01:50
Methylene chloride	ND	0.50	1	08/12/2017 01:50
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/12/2017 01:50
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/12/2017 01:50

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1708404-004A**	**Water**	**08/08/2017 16:35**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	**1.9**	0.50	1	08/12/2017 01:50
1,2,3-Trichlorobenzene	ND	0.50	1	08/12/2017 01:50
1,2,4-Trichlorobenzene	ND	0.50	1	08/12/2017 01:50
1,1,1-Trichloroethane	ND	0.50	1	08/12/2017 01:50
1,1,2-Trichloroethane	ND	0.50	1	08/12/2017 01:50
Trichloroethene	ND	0.50	1	08/12/2017 01:50
Trichlorofluoromethane	ND	0.50	1	08/12/2017 01:50
1,2,3-Trichloropropane	ND	0.50	1	08/12/2017 01:50
Vinyl Chloride	ND	0.50	1	08/12/2017 01:50

Surrogates	REC (%)	Limits	
Dibromofluoromethane	130	70-130	08/12/2017 01:50
Toluene-d8	111	70-130	08/12/2017 01:50
4-BFB	95	70-130	08/12/2017 01:50

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1708404-005A	Water	08/09/2017 07:58	GC28	143573

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/12/2017 02:30
Bromochloromethane	ND	0.50	1	08/12/2017 02:30
Bromodichloromethane	ND	0.50	1	08/12/2017 02:30
Bromoform	ND	0.50	1	08/12/2017 02:30
Bromomethane	ND	0.50	1	08/12/2017 02:30
Carbon Tetrachloride	ND	0.50	1	08/12/2017 02:30
Chlorobenzene	ND	0.50	1	08/12/2017 02:30
Chloroethane	ND	0.50	1	08/12/2017 02:30
Chloroform	ND	0.50	1	08/12/2017 02:30
Chloromethane	ND	0.50	1	08/12/2017 02:30
2-Chlorotoluene	ND	0.50	1	08/12/2017 02:30
4-Chlorotoluene	ND	0.50	1	08/12/2017 02:30
Dibromochloromethane	ND	0.50	1	08/12/2017 02:30
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/12/2017 02:30
1,2-Dibromoethane (EDB)	ND	0.50	1	08/12/2017 02:30
Dibromomethane	ND	0.50	1	08/12/2017 02:30
1,2-Dichlorobenzene	ND	0.50	1	08/12/2017 02:30
1,3-Dichlorobenzene	ND	0.50	1	08/12/2017 02:30
1,4-Dichlorobenzene	ND	0.50	1	08/12/2017 02:30
Dichlorodifluoromethane	ND	0.50	1	08/12/2017 02:30
1,1-Dichloroethane	ND	0.50	1	08/12/2017 02:30
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/12/2017 02:30
1,1-Dichloroethene	ND	0.50	1	08/12/2017 02:30
cis-1,2-Dichloroethene	ND	0.50	1	08/12/2017 02:30
trans-1,2-Dichloroethene	ND	0.50	1	08/12/2017 02:30
1,2-Dichloropropane	ND	0.50	1	08/12/2017 02:30
1,3-Dichloropropane	ND	0.50	1	08/12/2017 02:30
2,2-Dichloropropane	ND	0.50	1	08/12/2017 02:30
1,1-Dichloropropene	ND	0.50	1	08/12/2017 02:30
cis-1,3-Dichloropropene	ND	0.50	1	08/12/2017 02:30
trans-1,3-Dichloropropene	ND	0.50	1	08/12/2017 02:30
Freon 113	ND	0.50	1	08/12/2017 02:30
Hexachlorobutadiene	ND	0.50	1	08/12/2017 02:30
Hexachloroethane	ND	0.50	1	08/12/2017 02:30
Methylene chloride	ND	0.50	1	08/12/2017 02:30
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/12/2017 02:30
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/12/2017 02:30

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1708404-005A**	**Water**	**08/09/2017 07:58**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	**1.2**	0.50	1	08/12/2017 02:30
1,2,3-Trichlorobenzene	ND	0.50	1	08/12/2017 02:30
1,2,4-Trichlorobenzene	ND	0.50	1	08/12/2017 02:30
1,1,1-Trichloroethane	ND	0.50	1	08/12/2017 02:30
1,1,2-Trichloroethane	ND	0.50	1	08/12/2017 02:30
Trichloroethene	ND	0.50	1	08/12/2017 02:30
Trichlorofluoromethane	ND	0.50	1	08/12/2017 02:30
1,2,3-Trichloropropane	ND	0.50	1	08/12/2017 02:30
Vinyl Chloride	ND	0.50	1	08/12/2017 02:30

Surrogates	REC (%)	Limits	
Dibromofluoromethane	128	70-130	08/12/2017 02:30
Toluene-d8	111	70-130	08/12/2017 02:30
4-BFB	94	70-130	08/12/2017 02:30

Analyst(s): KF

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1708404-006A**	**Water**	**08/09/2017 09:02**	**GC28**	**143573**

Analytes	Result	RL	DF	Date Analyzed
Bromobenzene	ND	0.50	1	08/12/2017 05:12
Bromochloromethane	ND	0.50	1	08/12/2017 05:12
Bromodichloromethane	ND	0.50	1	08/12/2017 05:12
Bromoform	ND	0.50	1	08/12/2017 05:12
Bromomethane	ND	0.50	1	08/12/2017 05:12
Carbon Tetrachloride	ND	0.50	1	08/12/2017 05:12
Chlorobenzene	ND	0.50	1	08/12/2017 05:12
Chloroethane	ND	0.50	1	08/12/2017 05:12
Chloroform	**0.64**	0.50	1	08/12/2017 05:12
Chloromethane	ND	0.50	1	08/12/2017 05:12
2-Chlorotoluene	ND	0.50	1	08/12/2017 05:12
4-Chlorotoluene	ND	0.50	1	08/12/2017 05:12
Dibromochloromethane	ND	0.50	1	08/12/2017 05:12
1,2-Dibromo-3-chloropropane	ND	0.20	1	08/12/2017 05:12
1,2-Dibromoethane (EDB)	ND	0.50	1	08/12/2017 05:12
Dibromomethane	ND	0.50	1	08/12/2017 05:12
1,2-Dichlorobenzene	ND	0.50	1	08/12/2017 05:12
1,3-Dichlorobenzene	ND	0.50	1	08/12/2017 05:12
1,4-Dichlorobenzene	ND	0.50	1	08/12/2017 05:12
Dichlorodifluoromethane	ND	0.50	1	08/12/2017 05:12
1,1-Dichloroethane	ND	0.50	1	08/12/2017 05:12
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	08/12/2017 05:12
1,1-Dichloroethene	ND	0.50	1	08/12/2017 05:12
cis-1,2-Dichloroethene	ND	0.50	1	08/12/2017 05:12
trans-1,2-Dichloroethene	ND	0.50	1	08/12/2017 05:12
1,2-Dichloropropane	ND	0.50	1	08/12/2017 05:12
1,3-Dichloropropane	ND	0.50	1	08/12/2017 05:12
2,2-Dichloropropane	ND	0.50	1	08/12/2017 05:12
1,1-Dichloropropene	ND	0.50	1	08/12/2017 05:12
cis-1,3-Dichloropropene	ND	0.50	1	08/12/2017 05:12
trans-1,3-Dichloropropene	ND	0.50	1	08/12/2017 05:12
Freon 113	ND	0.50	1	08/12/2017 05:12
Hexachlorobutadiene	ND	0.50	1	08/12/2017 05:12
Hexachloroethane	ND	0.50	1	08/12/2017 05:12
Methylene chloride	ND	0.50	1	08/12/2017 05:12
1,1,1,2-Tetrachloroethane	ND	0.50	1	08/12/2017 05:12
1,1,2,2-Tetrachloroethane	ND	0.50	1	08/12/2017 05:12

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Analytical Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Received:	8/9/17 10:20	**Extraction Method:**	SW5030B
Date Prepared:	8/11/17-8/12/17	**Analytical Method:**	SW8260B
Project:	Red Hanger, TM Red Hanger	**Unit:**	µg/L

Halogenated Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1708404-006A	Water	08/09/2017 09:02	GC28	143573

Analytes	Result	RL	DF	Date Analyzed
Tetrachloroethene	ND	0.50	1	08/12/2017 05:12
1,2,3-Trichlorobenzene	ND	0.50	1	08/12/2017 05:12
1,2,4-Trichlorobenzene	ND	0.50	1	08/12/2017 05:12
1,1,1-Trichloroethane	ND	0.50	1	08/12/2017 05:12
1,1,2-Trichloroethane	ND	0.50	1	08/12/2017 05:12
Trichloroethene	ND	0.50	1	08/12/2017 05:12
Trichlorofluoromethane	ND	0.50	1	08/12/2017 05:12
1,2,3-Trichloropropane	ND	0.50	1	08/12/2017 05:12
Vinyl Chloride	ND	0.50	1	08/12/2017 05:12

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	131	S	70-130	08/12/2017 05:12
Toluene-d8	113		70-130	08/12/2017 05:12
4-BFB	96		70-130	08/12/2017 05:12

Analyst(s): KF Analytical Comments: c2

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Prepared:	8/11/17	**BatchID:**	143573
Date Analyzed:	8/11/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Red Hanger, TM Red Hanger	**Sample ID:**	MB/LCS-143573 1708404-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Bromobenzene	ND	0.50	-	-	-
Bromochloromethane	ND	0.50	-	-	-
Bromodichloromethane	ND	0.50	-	-	-
Bromoform	ND	0.50	-	-	-
Bromomethane	ND	0.50	-	-	-
Carbon Tetrachloride	ND	0.50	-	-	-
Chlorobenzene	ND	0.50	-	-	-
Chloroethane	ND	0.50	-	-	-
Chloroform	ND	0.50	-	-	-
Chloromethane	ND	0.50	-	-	-
2-Chlorotoluene	ND	0.50	-	-	-
4-Chlorotoluene	ND	0.50	-	-	-
Dibromochloromethane	ND	0.50	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.20	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
Dibromomethane	ND	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.50	-	-	-
Dichlorodifluoromethane	ND	0.50	-	-	-
1,1-Dichloroethane	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
1,1-Dichloroethene	ND	0.50	-	-	-
cis-1,2-Dichloroethene	ND	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.50	-	-	-
1,2-Dichloropropane	ND	0.50	-	-	-
1,3-Dichloropropane	ND	0.50	-	-	-
2,2-Dichloropropane	ND	0.50	-	-	-
1,1-Dichloropropene	ND	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.50	-	-	-
trans-1,3-Dichloropropene	ND	0.50	-	-	-
Freon 113	ND	0.50	-	-	-
Hexachlorobutadiene	ND	0.50	-	-	-
Hexachloroethane	ND	0.50	-	-	-
Methylene chloride	ND	0.50	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.50	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.50	-	-	-
Tetrachloroethene	ND	0.50	-	-	-
1,2,3-Trichlorobenzene	ND	0.50	-	-	-

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Prepared:	8/11/17	**BatchID:**	143573
Date Analyzed:	8/11/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Red Hanger, TM Red Hanger	**Sample ID:**	MB/LCS-143573 1708404-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
1,2,4-Trichlorobenzene	ND	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.50	-	-	-
Trichloroethene	ND	0.50	-	-	-
Trichlorofluoromethane	ND	0.50	-	-	-
1,2,3-Trichloropropane	ND	0.50	-	-	-
Vinyl Chloride	ND	0.50	-	-	-
Surrogate Recovery					
Dibromofluoromethane	31.56		25	126	70-130
Toluene-d8	28.45		25	114	70-130
4-BFB	2.367		2.5	95	70-130

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Prepared:	8/11/17	**BatchID:**	143573
Date Analyzed:	8/11/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Red Hanger, TM Red Hanger	**Sample ID:**	MB/LCS-143573 1708404-003AMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Bromobenzene	11.6	-	10	116	-	50-155	-	-
Bromochloromethane	11.6	-	10	116	-	48-160	-	-
Bromodichloromethane	9.53	-	10	95	-	60-156	-	-
Bromoform	10.5	-	10	105	-	43-149	-	-
Bromomethane	6.72	-	10	67	-	61-159	-	-
Carbon Tetrachloride	10.8	-	10	108	-	61-158	-	-
Chlorobenzene	10.8	-	10	108	-	43-157	-	-
Chloroethane	10.4	-	10	104	-	50-127	-	-
Chloroform	9.98	-	10	100	-	56-154	-	-
Chloromethane	10.3	-	10	103	-	41-132	-	-
2-Chlorotoluene	11.5	-	10	115	-	50-155	-	-
4-Chlorotoluene	11.3	-	10	113	-	53-153	-	-
Dibromochloromethane	10.7	-	10	107	-	49-156	-	-
1,2-Dibromo-3-chloropropane	5.16	-	4	129	-	46-149	-	-
1,2-Dibromoethane (EDB)	11.0	-	10	110	-	44-155	-	-
Dibromomethane	10.7	-	10	107	-	50-157	-	-
1,2-Dichlorobenzene	12.0	-	10	120	-	48-156	-	-
1,3-Dichlorobenzene	12.0	-	10	120	-	49-159	-	-
1,4-Dichlorobenzene	11.5	-	10	115	-	51-151	-	-
Dichlorodifluoromethane	12.2	-	10	122, F2	-	61-117	-	-
1,1-Dichloroethane	10.5	-	10	105	-	53-153	-	-
1,2-Dichloroethane (1,2-DCA)	8.45	-	10	84	-	66-125	-	-
1,1-Dichloroethene	11.5	-	10	115	-	47-149	-	-
cis-1,2-Dichloroethene	9.65	-	10	97	-	54-155	-	-
trans-1,2-Dichloroethene	12.2	-	10	122	-	46-151	-	-
1,2-Dichloropropane	10.7	-	10	107	-	54-153	-	-
1,3-Dichloropropane	9.11	-	10	91	-	49-150	-	-
2,2-Dichloropropane	10.5	-	10	105	-	74-147	-	-
1,1-Dichloropropene	10.1	-	10	101	-	54-150	-	-
cis-1,3-Dichloropropene	9.20	-	10	92	-	55-159	-	-
trans-1,3-Dichloropropene	8.94	-	10	89	-	74-131	-	-
Freon 113	12.3	-	10	123	-	47-138	-	-
Hexachlorobutadiene	13.3	-	10	133	-	66-160	-	-
Hexachloroethane	11.2	-	10	113	-	75-130	-	-
Methylene chloride	10.6	-	10	106	-	66-127	-	-
1,1,1,2-Tetrachloroethane	11.6	-	10	116	-	58-159	-	-
1,1,2,2-Tetrachloroethane	10.8	-	10	108	-	51-150	-	-
Tetrachloroethene	10.3	-	10	103	-	55-145	-	-
1,2,3-Trichlorobenzene	13.1	-	10	131	-	70-136	-	-

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Prepared:	8/11/17	**BatchID:**	143573
Date Analyzed:	8/11/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Red Hanger, TM Red Hanger	**Sample ID:**	MB/LCS-143573 1708404-003AMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	13.4	-	10	134	-	74-137	-	-
1,1,1-Trichloroethane	10.0	-	10	100	-	57-156	-	-
1,1,2-Trichloroethane	10.6	-	10	106	-	51-150	-	-
Trichloroethene	11.0	-	10	110	-	43-157	-	-
Trichlorofluoromethane	13.2	-	10	132	-	50-147	-	-
1,2,3-Trichloropropane	10.2	-	10	102	-	41-152	-	-
Vinyl Chloride	11.6	-	10	116	-	42-137	-	-
Surrogate Recovery								
Dibromofluoromethane	31.6	-	25	126	-	70-130	-	-
Toluene-d8	28.3	-	25	113	-	70-130	-	-
4-BFB	2.50	-	2.5	100	-	70-130	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Bromobenzene	11.2	11.6	10	ND	113	116	70-127	2.86	20
Bromochloromethane	11.8	12.1	10	ND	118	121	72-142	2.06	20
Bromodichloromethane	9.28	9.54	10	ND	89	91	75-141	2.79	20
Bromoform	10.7	11.1	10	ND	107	111	72-126	3.04	20
Bromomethane	7.30	7.74	10	ND	73	77	50-160	5.96	20
Carbon Tetrachloride	10.3	10.7	10	ND	103	107	72-143	3.81	20
Chlorobenzene	10.5	10.9	10	ND	105	109	77-120	3.68	20
Chloroethane	10.6	10.2	10	ND	106	102	54-131	4.15	20
Chloroform	11.2	11.4	10	1.898	93	95	75-139	2.29	20
Chloromethane	10.2	10.1	10	ND	101	101	40-130	0	20
2-Chlorotoluene	10.9	11.2	10	ND	109	112	70-122	2.88	20
4-Chlorotoluene	10.7	11.1	10	ND	107	111	71-123	2.89	20
Dibromochloromethane	10.5	10.8	10	ND	105	108	78-132	3.26	20
1,2-Dibromo-3-chloropropane	5.40	5.61	4	ND	135	140	59-143	3.69	20
1,2-Dibromoethane (EDB)	11.2	11.7	10	ND	112	117	76-135	4.28	20
Dibromomethane	11.3	11.4	10	ND	113	114	78-135	1.48	20
1,2-Dichlorobenzene	12.0	12.2	10	ND	120	122	68-133	1.79	20
1,3-Dichlorobenzene	11.5	11.7	10	ND	115	117	78-122	1.76	20
1,4-Dichlorobenzene	11.4	11.6	10	ND	113	116	80-117	1.83	20
Dichlorodifluoromethane	11.7	11.7	10	ND	117	117	38-125	0	20
1,1-Dichloroethane	10.2	10.5	10	ND	102	105	65-152	2.97	20
1,2-Dichloroethane (1,2-DCA)	8.67	8.86	10	ND	87	89	73-139	2.26	20
1,1-Dichloroethene	11.4	11.6	10	ND	114	116	59-140	1.64	20

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Quality Control Report

Client:	LRM Consulting, Inc.	**WorkOrder:**	1708404
Date Prepared:	8/11/17	**BatchID:**	143573
Date Analyzed:	8/11/17	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Red Hanger, TM Red Hanger	**Sample ID:**	MB/LCS-143573 1708404-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	9.51	9.78	10	ND	95	98	50-154	2.80	20
trans-1,2-Dichloroethene	12.0	12.5	10	ND	120	125	69-136	3.96	20
1,2-Dichloropropane	10.6	11.0	10	ND	106	110	78-132	2.97	20
1,3-Dichloropropane	9.25	9.52	10	ND	93	95	77-131	2.84	20
2,2-Dichloropropane	9.65	9.75	10	ND	97	97	61-160	0	20
1,1-Dichloropropene	9.65	10.0	10	ND	96	100	70-137	4.02	20
cis-1,3-Dichloropropene	8.98	9.41	10	ND	90	94	78-135	4.62	20
trans-1,3-Dichloropropene	8.83	9.12	10	ND	88	91	78-131	3.19	20
Freon 113	12.1	12.3	10	ND	121	123	60-136	1.69	20
Hexachlorobutadiene	12.7	13.0	10	ND	127	130	56-132	3.01	20
Hexachloroethane	10.2	10.7	10	ND	103	107	61-129	4.47	20
Methylene chloride	10.8	10.9	10	ND	107	108	74-128	0.701	20
1,1,1,2-Tetrachloroethane	11.3	11.7	10	ND	113	117	74-127	3.68	20
1,1,2,2-Tetrachloroethane	11.1	11.1	10	ND	111	111	63-142	0	20
Tetrachloroethene	9.94	10.3	10	ND	98	101	71-125	3.59	20
1,2,3-Trichlorobenzene	13.7	13.7	10	ND	137,F1	137,F1	59-135	0	20
1,2,4-Trichlorobenzene	13.6	13.7	10	ND	136,F1	137,F1	60-132	0.379	20
1,1,1-Trichloroethane	9.61	9.96	10	ND	96	100	75-138	3.56	20
1,1,2-Trichloroethane	10.7	11.1	10	ND	106	110	78-129	3.85	20
Trichloroethene	11.0	11.3	10	ND	110	113	64-132	3.34	20
Trichlorofluoromethane	12.6	12.4	10	ND	126	124	53-159	1.74	20
1,2,3-Trichloropropane	10.7	10.8	10	ND	107	108	68-130	1.13	20
Vinyl Chloride	10.8	10.1	10	ND	107	100	43-142	7.15	20
Surrogate Recovery									
Dibromofluoromethane	32.0	31.9	25		128	128	73-131	0	20
Toluene-d8	27.5	27.8	25		110	111	72-117	1.24	20
4-BFB	2.44	2.46	2.5		98	98	74-116	0	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1708404 **ClientCode: LRMC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Mehrdad Javaherian
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010
(415) 706-8935 FAX:

Email: mehrdad@lrm-consulting.com
cc/3rd Party:
PO:
ProjectNo: Red Hanger, TM Red Hanger

Bill to:
Accounts Payable
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Requested TAT: 5 days;

Date Received: **08/09/2017**
Date Logged: **08/09/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1708404-001	MW-3	Water	8/8/2017 13:42	☐	A											
1708404-002	MW-4	Water	8/8/2017 14:46	☐	A											
1708404-003	MW-5	Water	8/8/2017 15:41	☐	A											
1708404-004	MW-6	Water	8/8/2017 16:35	☐	A											
1708404-005	MW-1	Water	8/9/2017 07:58	☐	A											
1708404-006	MW-2	Water	8/9/2017 09:02	☐	A											

Test Legend:

1	8010_W	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: LRM CONSULTING, INC. **Project:** Red Hanger, TM Red Hanger **Work Order:** 1708404
Client Contact: Mehrdad Javaherian **QC Level:** LEVEL 2
Contact's Email: mehrdad@lrm-consulting.com **Comments:** **Date Logged:** 8/9/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1708404-001A	MW-3	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/8/2017 13:42	5 days	Present	☐	
1708404-002A	MW-4	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/8/2017 14:46	5 days	Present	☐	
1708404-003A	MW-5	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/8/2017 15:41	5 days	Present	☐	
1708404-004A	MW-6	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/8/2017 16:35	5 days	Present	☐	
1708404-005A	MW-1	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/9/2017 7:58	5 days	Present	☐	
1708404-006A	MW-2	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	☐	8/9/2017 9:02	5 days	Trace	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1708404

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD [X] | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: PDF | GeoTracker EDF | EDD | Write On (DW) | EQuIS

Report To: Melrose Bill To: [illegible]
Company: [illegible]
Email:
Alt Email: Tele: 415.706.8535
Project Name: RED Hanger Project #: Tim Red Hanger
Project Location: 6239 Colby Ave PO #
Sampler Signature:

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative
mw-3	8/8/17	1342	3	GW	HCl
mw-4		1446			
mw-5 *		1541			
mw-6		1635			
mw-1	8/9/17	0758			
mw-2		0902			

Analysis Requested

BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	8260 - 8010 List only
															X

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
[illegible]	8/9/17	1020	[illegible]	8/9/17	1020

Comments / Instructions
* Sample Rec'd Unlabled. Confirmed By Process of Elimination.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 12.3 °C Initials

Page ___ of ___

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**LRM Consulting, Inc.**	Date and Time Received	**8/9/2017 10:20**
Project Name:	**Red Hanger, TM Red Hanger**	Date Logged:	**8/9/2017**
		Received by:	Maria Venegas
WorkOrder №:	**1708404** Matrix: Water	Logged by:	Jena Alfaro
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Sample/Temp Blank temperature	Temp: 12.3°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

ATTACHMENT D

NO. 736250

NON-HAZARDOUS WASTE DATA FORM

BESI # 285087

GENERATOR

Generator's Name and Mailing Address

COLLEGE CLAREMONT LLC C/O PROPERTY MANAGER,
PATRICK ELLWOOD
ELLWOOD COMMERCIAL REAL ESTATE
1345 GRAND AVENUE
PIEDMONT, CA 94610

Generator's Site Address (if different than mailing address)

RED HANGER KLEANERS
6239 COLLEGE AVE.
OAKLAND, CA 94618

Generator's Phone: 510-238-9111

Container type removed from site:

☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 008

Container type transported to receiving facility:

☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 8 Volume 4800 Pounds

WASTE DESCRIPTION NON-HAZARDOUS SOIL

GENERATING PROCESS SITE INVESTIGATION (DRILL CUTTINGS)

COMPONENTS OF WASTE	PPM	%
1. SOIL		100%
2.		
3.		
4.		

Waste Profile 070128043-13425 PROPERTIES: pH ____ ☐ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER ____

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING.

Generator Printed/Typed Name: Scott Rolstad | Signature | Month 8 | Day 31 | Year 17

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Frank Torres | Signature | Month 8 | Day 31 | Year 17

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name | Phone#

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address

U.S. ECOLOGY, NEVADA OPERATIONS
HIGHWAY 95, 11 MILES S. OF BEATTY
BEATTY, NV 89003

Phone#: 775-553-2203

Printed/Typed Name | Signature | Month | Day | Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

NO. 736251

NON-HAZARDOUS WASTE DATA FORM

BESI # 285087

GENERATOR

Generator's Name and Mailing Address

COLLEGE CLAREMONT LLC C/O PROPERTY MANAGER,
PATRICK ELLWOOD
ELLWOOD COMMERCIAL REAL ESTATE
1345 GRAND AVENUE
PIEDMONT, CA 94610

Generator's Site Address (if different than mailing address)

RED HANGER KLEANERS
6239 COLLEGE AVE.
OAKLAND, CA 94618

Generator's Phone: 510-238-9111

Container type removed from site:

☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 009

Container type transported to receiving facility:

☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 001 Volume 420 gal

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. TPH		<1%

COMPONENTS OF WASTE	PPM	%
3.		
4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING.

Generator Printed/Typed Name: Scott Polston | Signature | Month 8 Day 31 Year 17

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Frank Torres | Signature | Month 8 Day 31 Year 17

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. | Phone#: 714-990-6855

Transporter 2 Printed/Typed Name | Signature | Month Day Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address

DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name | Signature | Month Day Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.