REVIEWED

By Nelson Velez at 1:53 pm, Oct 21, 2022

Review of the January 22, 2022 ABATEMENT COMPLETION REPORT: Content satisfactory

Operator has successfully completed the standards set forth in NMAC 19.15.30.9, Abatement Standards and Requirements. Director has approved this Abatement Completion Report (letter attached at the end of the report). Termination of abatement plan (AP-0138) is finalized.

ABATEMENT COMPLETION REPORT

KAUFMAN NO. 1 HILCORP ENERGY COMPANY SAN JUAN COUNTY, NEW MEXICO

OCD No.: AP-0138

January 22, 2022

Prepared for:

New Mexico Oil Conservation Division – District 3 1000 Rio Brazos Road Aztec, New Mexico 87410

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ABATEMENT COMPLETION REPORT

KAUFMAN NO. 1 HILCORP ENERGY COMPANY SAN JUAN COUNTY, NEW MEXICO OCD No.: AP-0138

January 22, 2022

On behalf of Hilcorp Energy Company (Hilcorp), Timberwolf Environmental, LLC (Timberwolf) presents this report which documents soil and groundwater abatement, groundwater monitoring activities, and request for site closure.

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Timberwolf Project No. HEC-180061

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1.0 Overview

1.1 Introduction

On behalf of Hilcorp Energy Company (Hilcorp), Timberwolf Environmental, LLC (Timberwolf) presents this report documenting soil and groundwater abatement, groundwater monitoring activities, and a request for regulatory site closure at Kaufman No. 1 (Site). The Site is located approximately 9.1 miles north of Farmington in San Juan County, New Mexico (Figures 1-3).

1.2 Site Description and Environmental Setting

The Site is situated on Federal land (managed by the Bureau of Land Management (BLM)) and is immediately east of the La Plata River (Figures 2 and 3). The Site is comprised of approximately 1 acre, all of which is located within the La Plata River flood plain and adjacent to riparian zones and wetlands.

The Site has been temporarily abandoned following a release in November 2018. All equipment has been taken out of service including storage tanks, separators, and a glycol dehydrator. Other surface equipment at the Site includes a wellhead and gas meter.

The Site is situated in a rural area and surrounding land use is predominantly recreational use and oil and gas production. According to the U.S. Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS), the Site soil series is identified as of Walrees loam, 0 to 2 percent slope. This soil series consist of a loam underlain by stratified gravelly sand; native salinity is very slightly saline to moderately saline (2.0 to 8.0 millimhos per centimeter (mmhos/cm)).

An unnamed intermittent stream located approximately 500 feet (ft) south of the Site empties into the La Plata River flood plan and has deposited sufficient sand to form a deltaic feature. This feature extends north to within 100 ft of the Site and is visible on aerial photographs (e.g., Figure 3) and is characterized by sparse vegetation, most pronounced in the understory.

The average elevation at the Site is approximately 5,537 feet above mean sea level. Site topography is relatively flat with a slight dip west, toward the La Plata River.

1.3 Site Geology and Hydrogeology

Site geology consists of 0.5 ft of silt, underlain by approximately 3.5 ft of firm clay. Beneath the clay lies a groundwater sand which is comprised of medium to very coarse sand; sand becomes coarser with depth and contains rock inclusions ranging in size from pebbles to cobbles.

During the groundwater assessment and installation of monitor wells, the shallow groundwater aquifer was at full capacity and groundwater was typically encountered at 4.5 ft below ground surface (bgs). However, weathered petroleum hydrocarbon, consistent with a historical release,

were observed within the saturated zone at 9.0 ft bgs. This indicates that the aquifer may fluctuate seasonally and/or is influenced by drought.

The La Plata River is situated along the western edge of the Site and appears to be in communication with groundwater. The excavation dug during the initial spill response extended into the groundwater sand and is in direct communication with Site groundwater.

The potentiometric surface elevation (PSE) map created during the groundwater assessment conducted in January 2019 revealed the natural direction of groundwater flow to be west-southwest, towards the La Plata River (Figure 4).

1.4 Site History

On 11/16/18, approximately 8 barrels (bbl) of oil and 10 bbl of produced water was released from the storage tank. Enduring Resources was the operator of record at the time of the release; Hilcorp assumed operations of the Site on or about December 1, 2018.

After Hilcorp assumed operations, the well was temporarily abandoned. All surface equipment within the tank battery was removed, and impacted soil within the battery was excavated and transported to off-site disposal. The excavation was primarily along the eastern and southern portion of the tank battery. Initial soil abatement included an excavation approximately 50 ft by 60 ft with a depth ranging from 1 ft to 5 ft bgs. A safety fence was constructed along the perimeter of the excavation.

To delineate impacted groundwater, six groundwater monitoring wells (i.e., MW1 – MW6) were installed in January 2019. Groundwater delineation is documented in Timberwolf's Stage 1 Abatement Plan (pp. 12-14), dated 06/17/19.

Subsequent soil abatement activities were conducted in November 2019. Abatement included excavating and disposal of impacted soil in and around the initial excavation (i.e., former tank battery). Soil exceeding soil-to-groundwater migration criteria and soil exceeding the ecological protective concentration limits (PCLs) was excavated and removed from the site. All excavation activities were completed on 11/08/19. The excavation was backfilled following confirmation sample and analysis. Soil abatement is documented in Timberwolf's *Stage 2 Abatement Plan* (pp. 19-21), dated 01/03/20.

In November 2019, Timberwolf began quarterly groundwater monitoring at the Site. The monitoring included evaluation of Site groundwater and a hydrological assessment of Site groundwater and its relationship to the La Plata River. Consecutive quarterly monitoring was conducted from November 2019 (i.e., 4Q19) through September 2021 (i.e., 3Q21).

On 08/11/20, Timberwolf conducted an additional groundwater investigation at the Site. The purpose of the investigation was to determine if a residual groundwater plume was present between MW1 and MW5. To evaluate the area of concern, a groundwater sample was collected by installing a temporary sampling point in lieu of proposed MW7. Analytical results revealed that all

constituents of concern (COCs) were below regulatory criteria. Findings of the additional groundwater investigation are documented in Timberwolf's *Status Report* – 3^{rd} *Quarter 2020*, dated 09/20/20.

Other assessment and characterization activities included a wetlands investigation/delineation and threatened and endangered species surveys. The work conducted at the Site is documented in the following reports:

- Site Characterization Report and Stage 1 Abatement Plan, dated 06/18/19
- Wetland Delineation (Revised), dated 10/03/19
- Stage 2 Abatement Plan, dated 01/03/20
- Status Report 1st Quarter 2020, dated 04/28/20
- Status Report 2nd Quarter 2020, dated 06/19/2020
- Status Report 3rd Quarter 2020, dated 09/20/2020
- Status Report 4th Quarter 2020, dated 11/25/2020
- Status Report 1st Quarter 2021, dated 01/20/21
- *Status Report 2nd Quarter 2021*, dated 07/01/21
- Status Report 3rd Quarter 2021, dated 10/29/21.

1.5 Soil Assessment

In July 2019, Timberwolf conducted soil assessments to delineate impacts and characterize the vadose zone. The assessment evaluated soil-to-groundwater migration pathways and ecological risks to threatened and endangered species (i.e., Southwestern willow flycatcher).

The assessment included collection and analysis of approximately 40 soil samples from depth ranging from the surface to 4.5 ft bgs. The samples were analyzed for TPH and/or BTEX. The vadose zone and ecological assessment revealed that additional soil abatement was required at the excavation base and sidewalls to protect groundwater and/or meet ecological PCL.

Vadose zone and ecological soil assessments are documented in Timberwolf's *Stage 2 Abatement Plan* (pp. 14-18), dated 01/03/20.

1.6 Soil Abatement

Initial soil abatement was conducted during 4Q18, immediately following the release and prior to conducting the Site characterization. Subsequent soil abatement activities were conducted after Site characterization and soil delineation, in November 2019. The subsequent abatement included excavating and disposal of impacted soil in and around the initial excavation (i.e., former tank battery). Soil exceeding soil-to-groundwater migration criteria and soil exceeding the ecological

protective concentration limits (PCLs) was excavated and removed from the site.

Impacted soil was excavated and transported to Industrial Ecosystems, Inc. (IEI) for commercial disposal. The final excavation dimensions were approximately 105 ft long by 65 ft wide with an average depth of 4.5 ft bgs. The subsequent soil abatement removed approximately 784 cubic yards of soil which exceeded soil-to-groundwater migration criteria and/or soil exceeding ecological PCLs.

Soil abatement activities were completed on 11/08/19. Twenty (20) confirmation samples were collected from the abatement area to ensure that soil exceeding remedial targets had been removed from the Site prior to backfilled. The soil abatement area is depicted in Figure 5. Soil abatement activities are documented in Timberwolf's *Stage 2 Abatement Plan* (pp. 19-21), dated 01/03/20.

1.7 Groundwater Assessment

The groundwater assessment was conducted in January 2019 and included installation of six 2-inch monitor wells across the Site. Monitor Well 1 (i.e., MW1) was installed immediately adjacent to the point of release. All other wells (i.e., MW2 through MW6) were installed near the perimeter of the Site for horizontal delineation of groundwater constituents. A monitor well location map is provided in Figure 6.

The groundwater assessment revealed the following:

- COCs in Site groundwater included: benzene, total dissolved solids (TDS), and sulfate
- MW1 was impacted by benzene; the benzene plume was horizontally delineated
- Groundwater flow across the Site was to the west-southwest, towards the La Plata River
- Additional assessment was required to determine if TDS and sulfate concentrations observed in MW1 were a result of the release or is a native feature of Site groundwater.

The benzene plume is shown in Figure 7. The groundwater assessment is documented in Timberwolf's *Site Characterization Report and Stage 1 Abatement Plan* (pp. 12-14), dated 06/17/19.

The initial groundwater assessment revealed elevated TDS and sulfate in a sample collected from MW1. In June 2019, additional groundwater assessments was conducted to determine if the elevated TDS and sulfate was native to the Site or a result of the release. Groundwater samples were collected from MW1 and MW3, which is hydrologically upgradient from MW1. Both samples were analyzed for chloride, sulfate, and TDS. Analytical results revealed that salinity in Site groundwater is consistent between samples collected from the center of the plume (i.e., MW1) and the sample collected hydrologically upgradient from the plume (i.e., MW3). The additional groundwater assessment is documented in Timberwolf's Stage 2 Abatement Plan (pp. 22-23), dated 01/03/20.

In August 2020, an additional groundwater investigation was conducted to determine if a residual groundwater plume was present between MW1 and MW5. The groundwater sample was collected by installation of a temporary sample point. The sample was analyzed for BTEX.

Analytical results revealed that all constituents of BTEX were below regulatory criteria. The additional groundwater investigation is documented in Timberwolf's *Status Report* – 3^{rd} *Quarter* 2020 (pp. 5), dated 09/30/20.

1.8 Groundwater Abatement

Groundwater abatement occurred between the initial soil abatement and the subsequent soil abatement (i.e., November 2018 through November 2019). The initial soil abatement consisted of excavating impacted soil which extended into the upper groundwater bearing unit encountered at approximately 4.5 ft bgs.

Groundwater filled the excavation and was subjected to the high evaporation potential the arid San Juan Basin climate provides (approximately 9 inches per month evaporation during the warm season and approximately 78 inches annually). Since benzene is mobile and hydrophilic, benzene was transported to the open excavation and subjected to volatilization and ultimately ultraviolet degradation through this evaporation process. The high evaporation rate is corroborated by the June 2019 PSE map which depicts the abrupt change in groundwater flow direction towards the excavation (Figure 8).

Groundwater abatement is additionally evidenced by the reduction in benzene concentration in MW1, decreasing from 0.074 milligrams per liter (mg/L) on 01/18/19 to less than 0.001 mg/L on 10/09/19.

2.0 COCs, Remedial Targets, and Closure Criteria

2.1 Introduction

The Site in under the jurisdiction of the New Mexico Oil Conservation Division (NMOCD) and is subject to the regulations provided under New Mexico Administrative Code (NMAC) 19.15.30, *Remediation*. The constituents of concern (COCs) for the Site, applicable remedial targets for soil and groundwater, and Site closure criteria are presented below.

2.2 COCs

Based on the Site characterization, which is documented in Timberwolf's *Site Characterization Report and Stage 1 Abatement Plan* (pp. 7-11), dated 06/17/19, the Site's COCs for soil included TPH and BTEX.

The groundwater assessment, documented in Timberwolf's *Site Characterization Report and Stage 1 Abatement Plan* (pp. 12-14), dated 06/17/19, revealed that the COC for Site groundwater is benzene.

2.3 Remedial Targets for Soil

Timberwolf developed site-specific criteria for vadose zone soil which are protective of groundwater as required under NMAC 19.15.30.9, *Abatement Standards and Requirements*. Additionally, ecological criteria which is protective of area threatened and endangered species is presented.

Groundwater Protection Criteria

In accordance with NMAC 19.15.30.9 (A), samples impacted by petroleum hydrocarbons from the base and sidewalls of the initial excavation were analyzed for synthetic precipitation leaching procedure (SPLP) to develop a site-specific soil-to-groundwater migration criteria which is protective of groundwater which may be used for human consumption. SPLP is an Environmental Protective Agency (EPA) laboratory method (i.e., Solid Waste SW-846; Test Method 1312) designed to determine the leachability and mobility of both organic and inorganic constituents in liquids, soil, and waste.

The SPLP benzene results were compared to the groundwater regulatory criteria presented in Table 4 of this report. If the SPLP results of a soil sample was lower than the groundwater regulatory criteria, then the constituent concentration from that sample is protective of groundwater. Analytical results of the SPLP benzene and corresponding BTEX results are presented in Table 1 below.

Table 1. Site-Specific Soil-to-Groundwater Migration PCL for Benzene

	Date	SPLP	Vola	Total BTEX			
Sample ID		Benzene (mg/L)	В	Т	E	х	(mg/kg)
EB3	07/11/19	0.12	6.2	17	35	410	468.2
ESW3 2.5-3.5'	07/11/19	0.0072	0.67	< 0.24	4.7	27	32.37
ESW4 2.5-3.5'	07/11/19	< 0.001	0.53	0.14	2.4	12	15.07
Groundwater Regulatory Criteria		0.005	1	1	-	-	-

BTEX - benzene; toluene; ethylbenzene; xylene

SPLP - synthetic precipitation leaching procedure

mg/kg - milligrams per kilograms

mg/L - milligrams per liter

The SPLP results reveal that soil concentrations from the vadose zone which have a benzene concentration of 0.53 mg/kg or less do not pose a risk of leaching and percolating into underlying groundwater. Therefore, the site-specific soil protective concentration limit (PCL) for benzene is 0.53 mg/kg.

To evaluate the threat to groundwater posed by total petroleum hydrocarbons (i.e., TPH), soil which had a TPH concentration that exceeded the NMOCD regulatory limit for the Site of 100 mg/kg were analyzed using the Texas Commission on Environmental Quality (TCEQ) Method 1006 ("Method 1006"). Method 1006 is a hydrocarbon fractionation analysis which speciates hydrocarbon chains into aliphatic and aromatic hydrocarbons with much shorter chain intervals than the EPA SW-846 Method 8015 which separates petroleum hydrocarbon chains into the following ranges: gasoline range organics (GRO) C6-C10; diesel range organics (DRO) C10-C28; motor oil range organics (ORO) C29-C35.

The results of Method 1006 analysis are compared to TCEQ soil-to-groundwater migration criteria to determine if soil TPH concentrations poses a risk to underlying groundwater. The TCEQ has established protective concentrations limits (PCL) for aliphatic and aromatic chains which protect underlying groundwater for human consumption. TCEQ soil criteria for the soil-to-groundwater migration pathway is presented in Table 2 below.

Table 2. Soil-to-Groundwater Migration PCL for TPH

Constituent	TPH PCL ¹ (mg/kg)								
	C ₆	C ₆₋₈	C ₇₋₈	C ₈₋₁₀	C ₁₀₋₁₂	C ₁₂₋₁₆	C ₁₆₋₂₁	C ₂₁₋₃₅	
Aliphatics	170	420		3,600	25,000	1,000,000	1,000,000		
Aromatics			20.0	65.0	100	200	470	3,700	

PCL - protective concentration limit

TPH - total petroleum hydrocarbons

¹ – PCL derived from the Texas Risk Reduction Program (TRRP)

 $mg/L-milligrams\ per\ liter$

-- - no established criteria

Ecological Protection Criteria

According to the BLM and the United States Fish and Wildlife Services (USFWS), the area surrounding the Site is critical habitat for the Southwestern willow flycatcher (*Empidonax traillii extimus*). The Southwestern willow flycatcher ("flycatcher") is listed as a USFWS endangered species.

A review of toxicological databases revealed the following protective concentration limits PCLs for the flycatcher.

Table 3. Soil PCLs for the Southwestern Willow Flycatcher

	Volatile Organic Compound (mg/kg) ¹					
Specie	В	Т	E	x		
PCL for the Southwestern willow flycatcher	26.36	25.98	97.1	7.7		

PCL - protective concentration limit

BTEX - benzene; toluene; ethylbenzene; xylene

mg/kg - milligrams per kilograms

Soil in the upper 2 ft with BTEX concentrations that exceed the PCLs presented in Table 3 pose an ecological risk to the Southwestern willow flycatcher and require mitigation or abatement.

2.4 Remedial Targets for Groundwater

Human health standards for usable groundwater (i.e., TDS less than 10,000 milligrams per kilograms (mg/L)) are established under NMAC 20.6.2§3103. Additionally, this statute provides standards for domestic water supply. These criteria provide standards for a variety of constituents, including: metals, anions, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), certain radioactive isotopes, salinity, and pH.

Based on process knowledge, a constituent list prepared for the Site includes:

- VOCs
- SVOCs
- arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver (i.e., Resource Conservation and Recovery Act (RCRA)-8 metals)
- anions (i.e., chloride and sulfate)
- TDS
- pH.

The regulatory criteria for human health or domestic water supply for these constituents are provided in Table 4.

^{1 -} Limit established by Los Alamos National Laboratory

Table 4. Groundwater Regulatory Criteria

Constituent	Regulatory Criteria (mg/L)							
Metals								
Arsenic	0.10 ¹							
Barium	1.00 ¹							
Cadmium	0.01 ¹							
Chromium	0.05 ¹							
Lead	0.05 ¹							
Mercury	0.0002 ¹							
Selenium	0.05 ¹							
Silver	0.05 ¹							
VOCs								
Benzene	0.01 ¹							
Toluene	0.75 ¹							
Ethylbenzene	0.75 ¹							
Xylenes	0.62 ¹							
PAHs (Total Naphthalene)	0.03 ¹							
SVOCs								
Phenols	0.005 ²							
General Water Chemistry								
Total Dissolved Solids	1,000²							
Chloride	250 ²							
Sulfate	600 ²							
pH (units – s.u.)	6 – 9 ²							

¹New Mexico human health standard

²New Mexico Standard for domestic water supply wells

mg/L - milligrams per liter

s.u. – standard units

VOCs - volatile organic compounds

SVOCs – semi-volatile organic compounds

The state of New Mexico has not established human health criteria for TPH in groundwater. Therefore, Timberwolf utilized the TCEQ Texas Risk Reduction Program (TRRP) groundwater ingestion pathway as a PCL for the Site. TPH PCLs for groundwater are presented in Table 5 below.

Table 5. PCL for Human Ingestion of Groundwater

Constituent	PCL for Human Ingestion ¹ (mg/L) ¹
TPH (C6-C12)	0.98
TPH (C12-C28)	0.73
TPH (C28-C35)	0.73

PCL – protective concentration limit

mg/L – milligrams per liter

TPH – total petroleum hydrocarbons

¹ – PCL derived from the Texas Risk Reduction Program (TRRP)

2.5 Site Closure Criteria

As specified in NMAC 19.15.30.9 *Abatement Standards and Requirements*, the following site closure conditions are applicable for the Site and must be completed prior to submitting a abatement completion report:

- Abate the vadose zone so that water contaminants in the vadose zone will not, with reasonable probability, contaminate groundwater or surface water
- Abate groundwater with TDS of less than 10,000 mg/L to the standards provided in Table 4 of this report
- Conduct eight consecutive quarterly groundwater monitoring events in which COCs at all sampling stations (i.e., MW 1 MW6) are below remedial targets for groundwater (i.e., BTEX concentrations in Table 4).

Site Monitoring 3.0

Introduction 3.1

Quarterly groundwater monitoring began October 2019. Eight consecutive quarters of groundwater monitoring have been completed at the Site. Prior to each event, the OCD District 3 Office was provided with 2-day advance notice of all field activities. Gauging and sampling methodology, as well as results, are documented below.

3.2 **Groundwater Gauging Methodology**

Prior to sample collection, well caps were removed to allow water within each well to equilibrate. Each well was gauged to determine depth to water and presence or absence of phaseseparated hydrocarbons (PSH) using an oil-water interface probe capable of measuring to the nearest one-hundredth foot. The interface probe and measurement tape were properly decontaminated between each well using deionized water and Alconox[®]. Additionally, the La Plata River water elevation was measured relative to two steel stakes. On 11/19/19, NCE Survey, Inc. of Farmington, NM surveyed the elevations of tops of each monitor well casing and the two steel stakes. Depths to groundwater were calculated for each well during each gauging event; additionally, the depth to the river water was calculated.

Results of Gauging Data and Hydrological Assessment of the La Plata River

PSH was not observed at any monitor station during any of the eight monitoring events. PSE maps were prepared from gauging data collected. The PSE maps reveal groundwater flow is to the west-southwest, towards the La Plata River. PSE maps for each quarterly monitoring event provided in Appendix A.

Groundwater flow rates were calculated from quarterly gauging data. The flow rates are presented in the following Table 6 below.

Flow Rate **Monitoring Event** (ft/yr) 4Q19 25.0 1Q20 32.6 2Q20 38.7 3Q20 38.7

Table 6. Annualized Groundwater Flow Rate

ft/yr - feet per year

The PSE maps also depict La Plata River elevation relative to the two steel stakes. In each quarterly PSE map, groundwater flow was toward the La Plata River. This suggests that seasonal changes in hydrology (e.g., snow melt, flooding, drought, etc.) do not appear to influence the trajectory of groundwater, only the flow rate as shown in Table 6 above.

3.4 Groundwater Sample Methodology

Except for one monitoring event (i.e., 3Q21), all six sampling stations (i.e., MW1 – MW6) were sampled using the EPA low-flow technique. A submersible pump was placed within the screened interval of each well. Water was extracted from each well and pumped through a flow-through cell equipped with a YSI probe. Field water quality parameters were analyzed and recorded, which included: dissolved oxygen, conductivity, pH, temperature, and oxidation reduction potential (ORP). After water quality parameters stabilized, the YSI flow-through cell was bypassed, and samples were collected directly into laboratory-provided sample containers.

During the 3Q21 groundwater monitoring event, a YSI malfunction precluded using the EPA low-flow sampling technique. Therefore, during this event, the six sampling stations were sampled by purging three well volumes prior to sampling; this sample method is also an EPA approved technique for groundwater sampling. The depths to water measurement for each well were subtracted from the well total depth to determine to length of the water column and well volumes for each well. A minimum of three times each well volume was extracted from each well prior to sample collection. Dedicated tubing and a submersible pump were placed within each well's screened interval and used to produce water from each well.

Groundwater samples were collected immediately following well purging in laboratory provided sample containers with appropriate preservative. Sample jars were labeled, stored on ice, and transported under proper chain-of-custody protocol to Hall Environmental Analytical Laboratories, Inc. (HEAL) in Albuquerque, New Mexico and Pace Analytical (Pace) of Mt. Juliet, Tennessee for chemical analysis.

3.5 Analytical Results of Quarterly Groundwater Monitoring

Groundwater samples submitted to HEAL were analyzed for the following constituents: benzene, toluene, ethylbenzene, and xylenes (BTEX); samples submitted to Pace were analyzed for TPH by Method TX 1005. Analytical methods are documented on the attached laboratory reports in Appendix B. Cumulative analytical results for the eight consecutive quarters of groundwater monitoring are presented in Table 7 below.

Table 7. Cumulative Groundwater Analytical Results

Sample	Date	Volat	ile Organic C	ompounds ((mg/L)	TPH (mg/L)			
ID		В	T	E	х	GRO (C6-C12)	DRO (C12-C28)	ORO C28-C35)	
	10/09/19	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
	01/16/20	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	04/09/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.60	< 0.60	< 0.60	
MW-1	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
10100-1	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.606	< 0.606	< 0.606	
	01/11/21	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.60	< 0.60	< 0.60	
	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	10/09/19	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
	01/16/20	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	04/09/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.60	< 0.60	< 0.60	
MW-2	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
IVIVV-Z	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
	01/11/21	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.606	< 0.606	< 0.606	
	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	10/09/19	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
	01/16/20	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	04/09/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.60	< 0.60	< 0.60	
MW-3	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
10100-3	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.606	< 0.606	< 0.606	
	01/11/21	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.606	< 0.606	< 0.606	
	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	10/09/19	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
	01/16/20	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	04/09/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.60	< 0.60	< 0.60	
NAVA A	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
MW-4	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.600	< 0.600	< 0.600	
	01/11/21	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.606	< 0.606	< 0.606	
	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002	< 0.60	< 0.60	< 0.60	
Regulato	ry Criteria	0.01	0.75	0.75	0.62	0.98	0.73	0.73	

BTEX - benzene, toluene, ethylbenzene, and xylenes

TPH – total petroleum hydrocarbons

mg/L - milligrams per liter

- exceeds regulatory criteria

GRO – gasoline range organics

DRO - diesel range organics

ORO - oil range organics

Volatile Organic Compounds (mg/L) TPH (mg/L) Sample **Date** GRO DRO ORO ID В Т Χ Ε (C6-C12)(C12-C28) C28-C35) 0.0041 < 0.001 < 0.001 10/09/19 < 0.001 0.0041 < 0.001 < 0.001 01/16/20 0.0012 < 0.001 < 0.001 < 0.002 < 0.60 < 0.60 < 0.60 04/09/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.60 < 0.60 < 0.60 07/02/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.600 < 0.600 < 0.600 MW-5 11/05/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.606 < 0.606 < 0.606 01/11/21 < 0.0015 < 0.001 < 0.001 < 0.001 < 0.606 < 0.606 < 0.606 05/26/21 < 0.001 < 0.001 < 0.001 < 0.002 < 0.60 < 0.60 < 0.60 < 0.60 09/09/21 < 0.001 < 0.001 < 0.001 < 0.60 < 0.002 < 0.60 10/09/19 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 01/16/20 < 0.001 < 0.001 < 0.001 < 0.002 < 0.60 < 0.60 < 0.60 04/09/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.60 < 0.60 < 0.60 07/02/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.630 < 0.630 < 0.630 MW-6 11/05/20 < 0.001 < 0.001 < 0.001 < 0.0015 < 0.606 < 0.606 < 0.606 01/11/21 < 0.0015 < 0.642 < 0.001 < 0.001 < 0.001 < 0.642 < 0.642 05/26/21 < 0.001 < 0.001 < 0.001 0.0038 0.644^{J} < 0.60 < 0.60 09/09/21 < 0.001 < 0.001 < 0.001 < 0.002 < 0.60 < 0.60 < 0.60 **Regulatory Criteria** 0.75 0.75 0.62 0.98 0.73 0.73 0.01

Table 7. Cumulative Groundwater Analytical Results (continued)

BTEX - benzene, toluene, ethylbenzene, and xylenes

TPH - total petroleum hydrocarbons

mg/L - milligrams per liter

– exceeds regulatory criteria

GRO - gasoline range organics

DRO - diesel range organics

ORO - oil range organics

The analytical results generated form quarterly monitoring reveal that:

- Concentrations of constituents of BTEX in all samples were below regulatory criteria for eight consecutive quarters
- Concentrations of TPH (GRO, DRO, and ORO) were below human ingestion PCLs.

3.6 Quality Assurance Program

To provide quality assurance in laboratory data, Timberwolf collected a field duplicate sample and utilized a Trip Blank during each monitor event. A field duplicated ("Dup") was collected from a monitor well to evaluate laboratory reproducibility. The field duplicate was collected immediately after the monitor well sample to ensure homogeneity between the sample and the field duplicate. The Trip Blank was maintained with the sampling kit to evaluate the potential for in-field contaminations or contaminants encountered traveling to and from the laboratory.

Both the field duplicate and trip blank were analyzed for BTEX. Analytical results are documented in the attached laboratory report provided in Appendix B and summarized in Table 8 below.

Table 8. Quality Assurance Results

Monitoring	0	D-1-	V	olatile Organic (Compounds (mo	g/L)
Event	Sample ID	Date	В	Т	E	х
	Trip Blank	10/08/19	< 0.001	< 0.001	< 0.001	< 0.002
4040	MW6	10/08/19	< 0.001	< 0.001	< 0.001	< 0.002
4Q19	Dup	10/08/19	< 0.001	< 0.001	< 0.001	< 0.002
	RF	סי	0%	0%	0%	0%
	Trip Blank	01/16/20	< 0.001	< 0.001	< 0.001	< 0.002
4000	MW5	01/16/20	0.0012	< 0.001	< 0.001	< 0.002
1Q20	Dup	01/16/20	0.0016	< 0.001	< 0.001	< 0.002
	RF	PD	28.5%	0%	0%	0%
	Trip Blank	NA	NA	NA	NA	NA
0000	MW5	04/09/20	< 0.001	< 0.001	< 0.001	< 0.002
2Q20	Dup	04/09/20	< 0.001	< 0.001	< 0.001	< 0.002
	RF	PD	0%	0%	0%	0%
	Trip Blank	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015
0000	MW5	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015
3Q20	Dup	07/02/20	< 0.001	< 0.001	< 0.001	< 0.0015
	RF	PD	0%	0%	0%	0%
	Trip Blank	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
4000	MW5	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
4Q20	Dup	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
	RPD		0%	0%	0%	0%
	Trip Blank	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
4004	MW5	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
1Q21	Dup	11/05/20	< 0.001	< 0.001	< 0.001	< 0.0015
	RF	PD	0%	0%	0%	0%
	Trip Blank	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002
2024	MW5	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002
2Q21	Dup	05/26/21	< 0.001	< 0.001	< 0.001	< 0.002
	RI	OP .	0%	0%	0%	0%
	Trip Blank	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002
2024	MW5	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002
3Q21	Dup	09/09/21	< 0.001	< 0.001	< 0.001	< 0.002
	RI)P	0%	0%	0%	0%

 $mg/L-milligrams\ per\ liter$

BTEX – benzene, toluene, ethylbenzene, and xylenes

NA – not analyzed

RPD – relative percent difference between the sample (i.e., MW5 or MW6) and the duplicate ("Dup")

The acceptable limit for relative percent difference (RPD) between duplicate samples for organic compounds, such as the constituents of BTEX, is 30 percent relative percent difference (i.e., 30% RDP) or less. The RDP for duplicate sample in monitoring events ranged from 0% to 28.5% RDP; the highest RDP was observed during 1Q20. This analysis validates laboratory reproducibility.

Laboratory analysis of Trip Blanks revealed that concentrations of constituents of BTEX were below laboratory detection limits. This analysis indicates that no in-field contamination occurred. [Note: A trip blank was not analyzed for the 2Q20 monitoring event, however, only one sample exceeded laboratory detection limits.]

4.0 Closure Request and Final Actions

4.1 Introduction

The following sections present a summary of abatement activities, results of the quarterly groundwater monitoring, and a request for termination of the abatement plan for the Site.

4.2 Abatement Activities

Soil abatement began during the 4th quarter of 2018 and was completed during the 4th quarter of 2019. Soil which posed a threat to underlying groundwater or the Southwestern flycatcher, an endangered species with suitable habitat along the La Plata River, was abated by removing from the Site for commercial disposal. Soil abatement as required under NMAC 19.15.30.9 (A) has been completed.

Groundwater abatement began during the 4th quarter of 2018 and was completed by October 2019 as demonstrated by the 4Q19 monitoring event. Groundwater abatement as required under NMAC 19.15.30.9 B) has been accomplished.

Surface water was not impacted at the Site, therefore abatement as specified under NMAC 19.15.30.9 (C) is not applicable.

4.3 Quarterly Monitoring Activities

Eight consecutive groundwater monitoring events conducted between 4Q19 and 3Q21 revealed the following:

- Concentrations of benzene, toluene, ethylbenzene, and xylene were below standards presented in NMAC 20.6.2§3103 in all samples
- Concentrations of TPH (i.e., GRO, DRO, and ORO) were below human ingestion PCL in all samples
- The groundwater monitoring events satisfy the requirements of NMAC 19.15.30.9 (D) for site monitoring.

4.4 Termination Request

Hilcorp has successfully completed the standards set forth in NMAC 19.15.30.9, *Abatement Standards and Requirements*, and requests that the director approve this Abatement Completion Report and terminate the abatement plan (AP-0138) for the Kaufman No. 1.

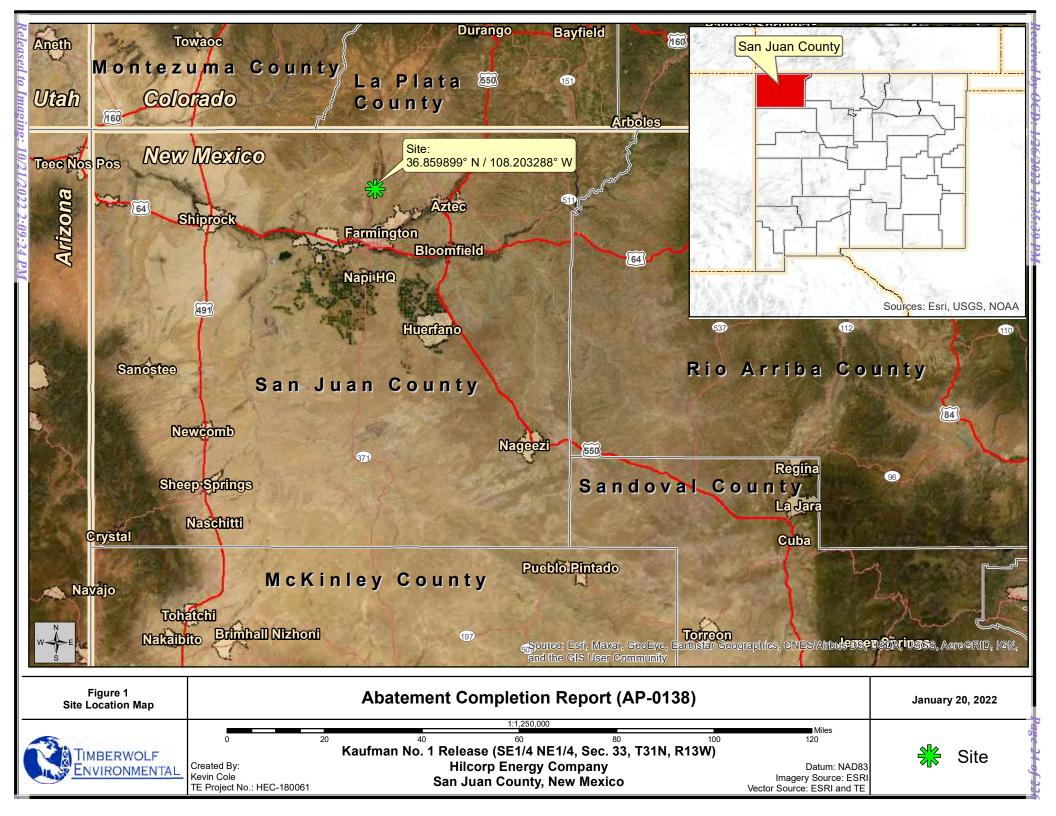
4.5 Final Actions

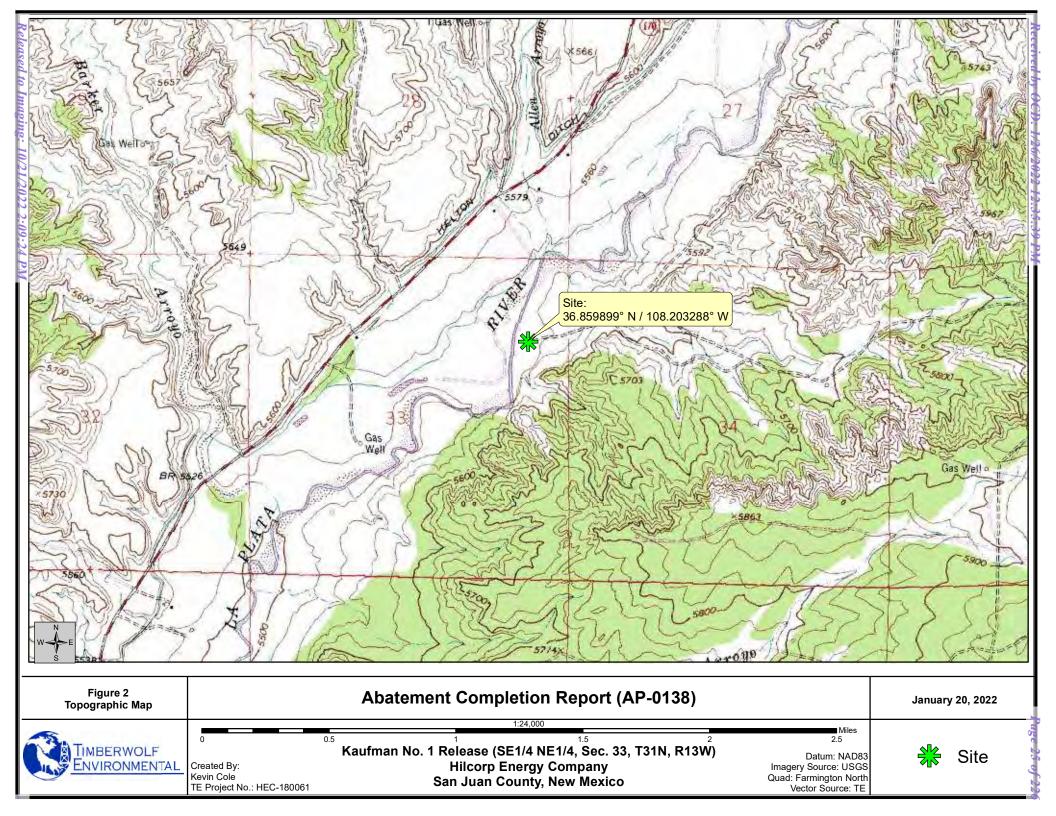
Upon receiving notice that the abatement plan is terminated, Hilcorp will plug and abandon (P&A) all monitor wells at the Site. Plugging reports will be submitted to the Office of State Engineer following P&A activities.

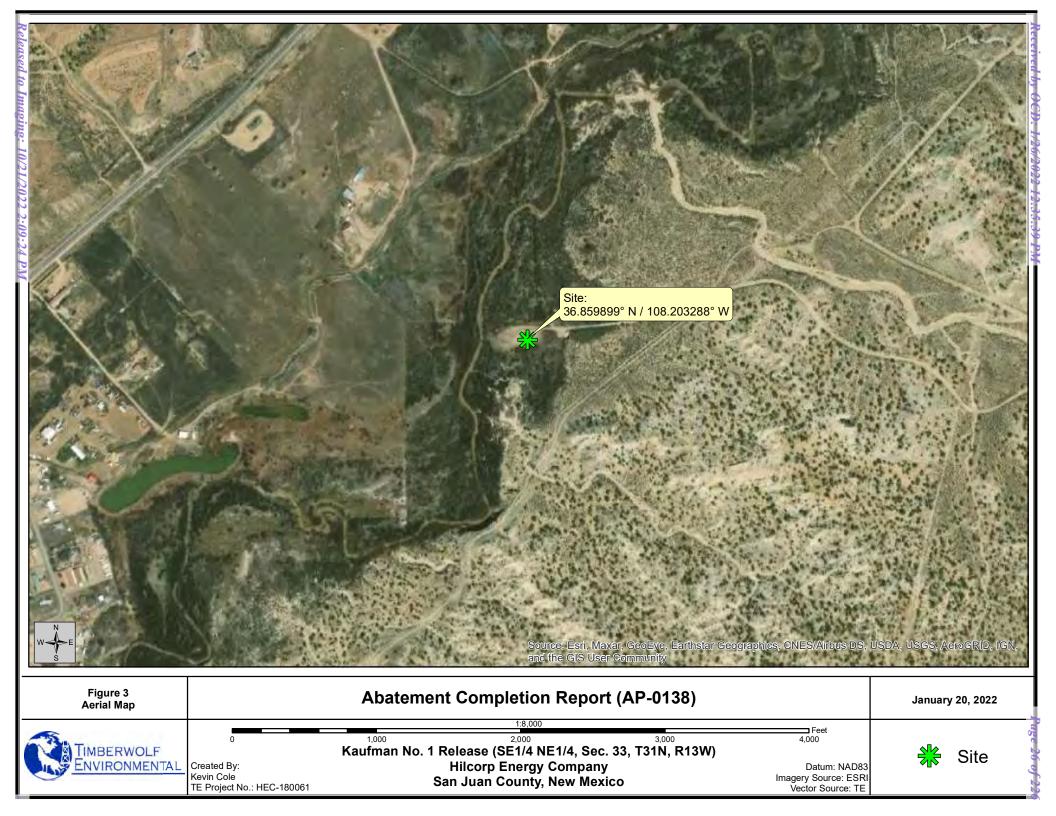


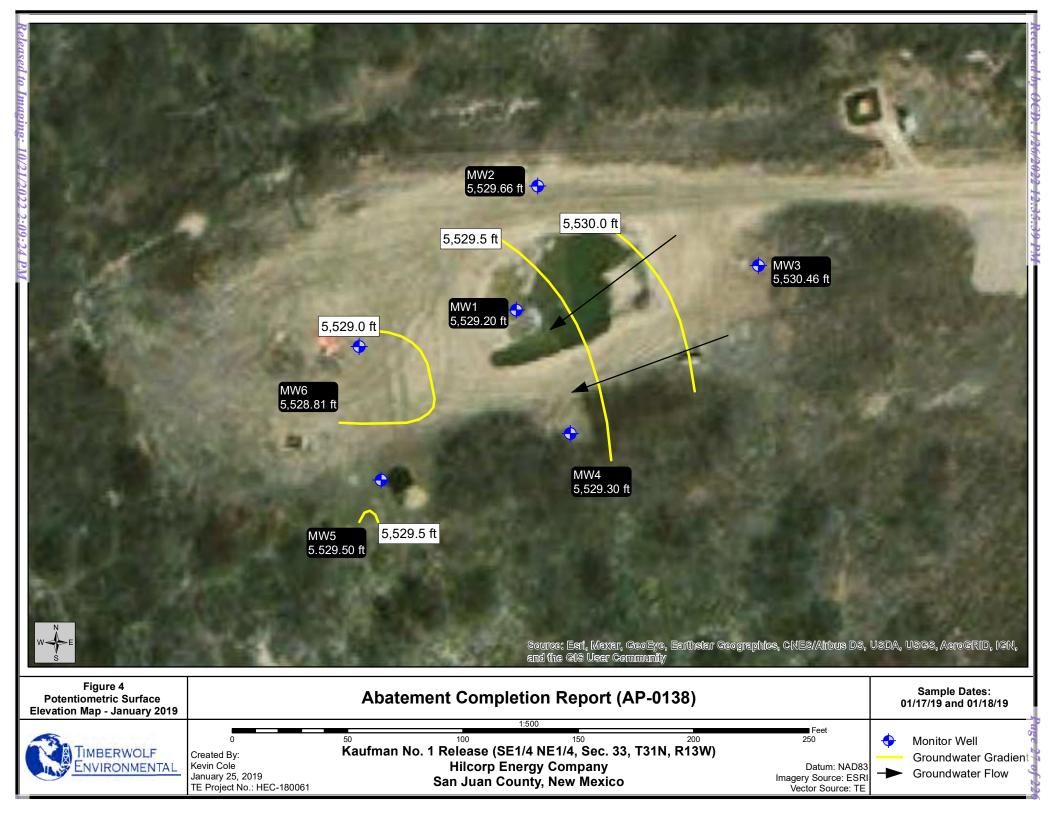
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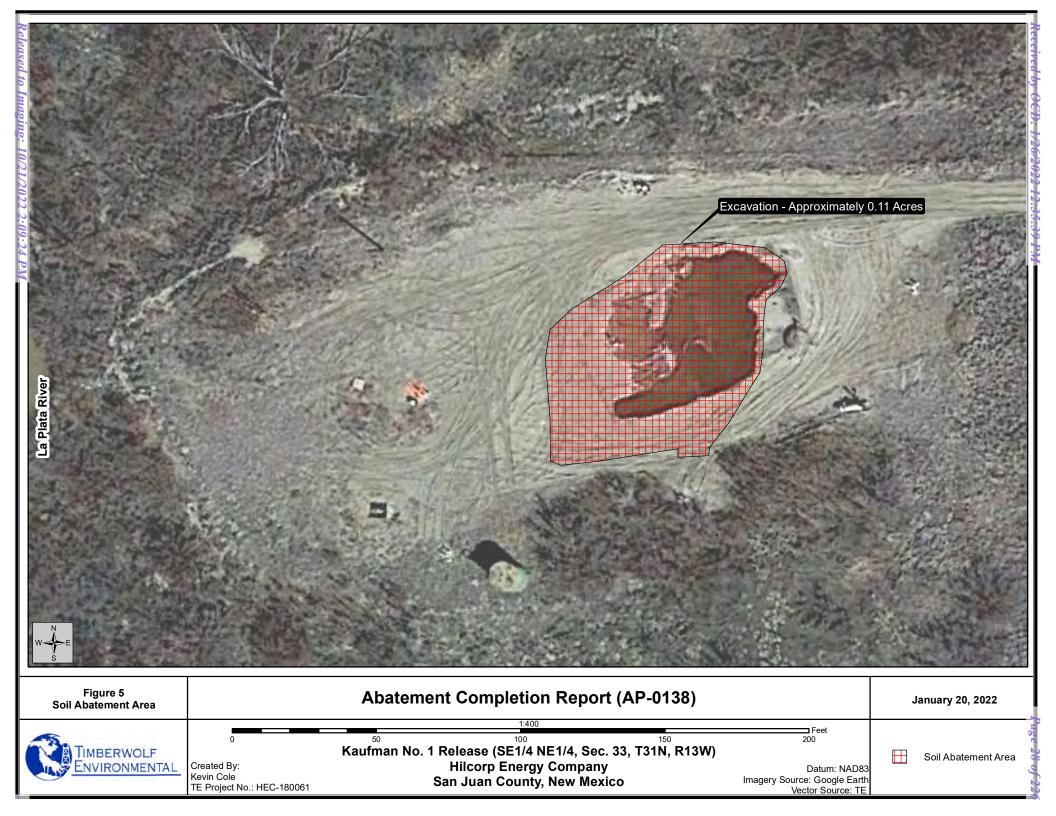
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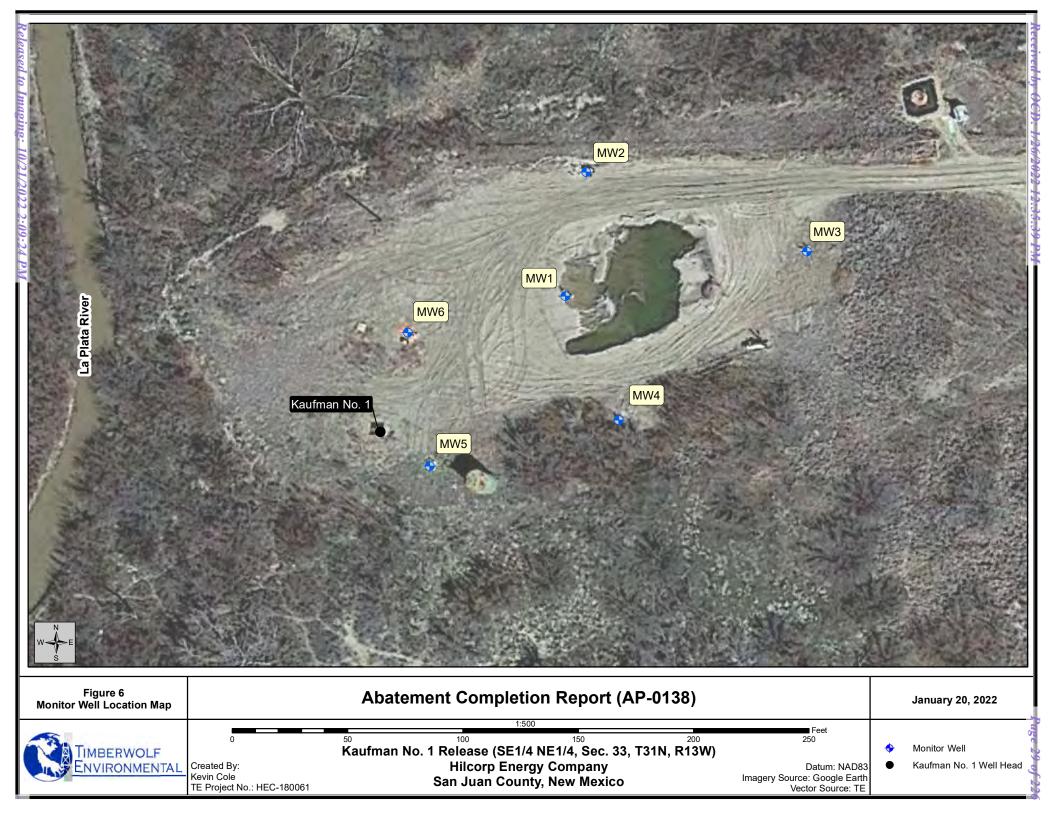


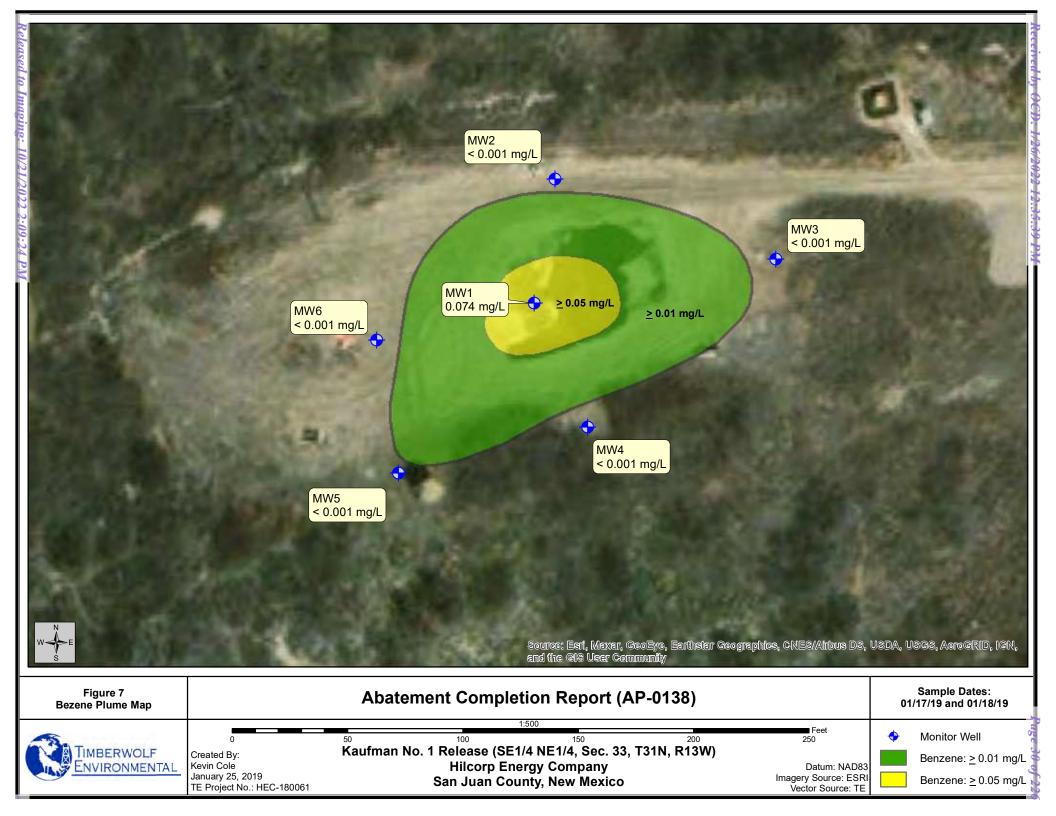


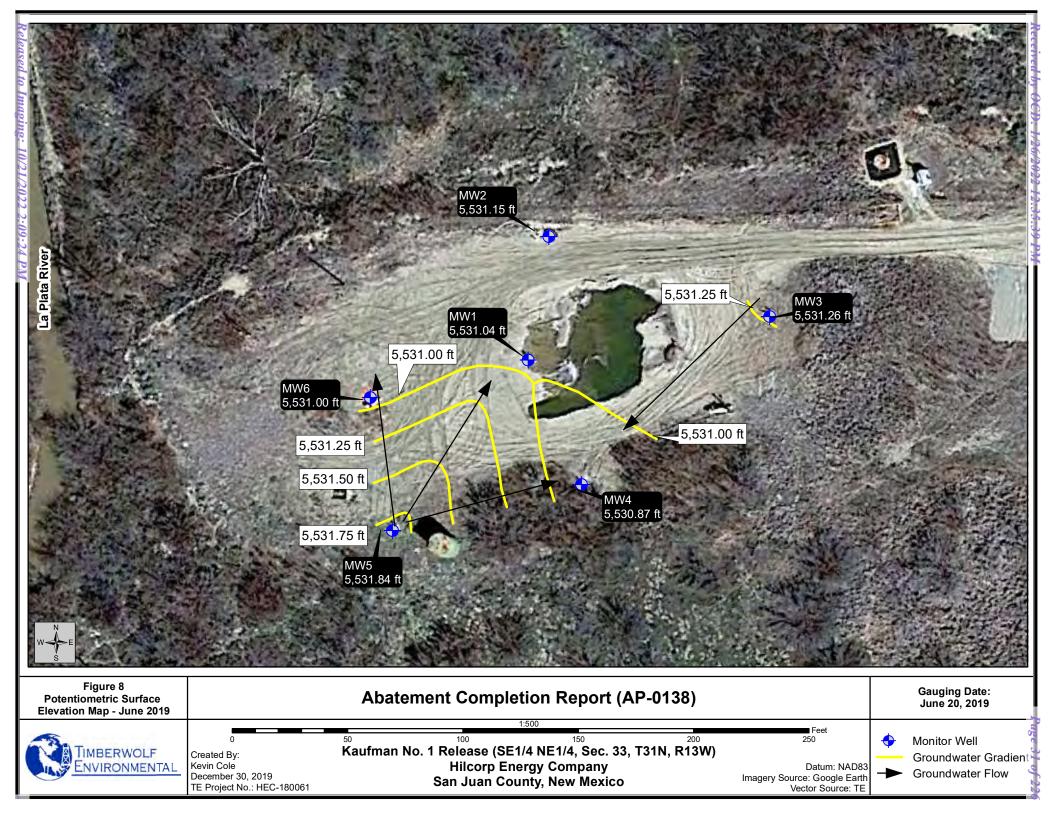


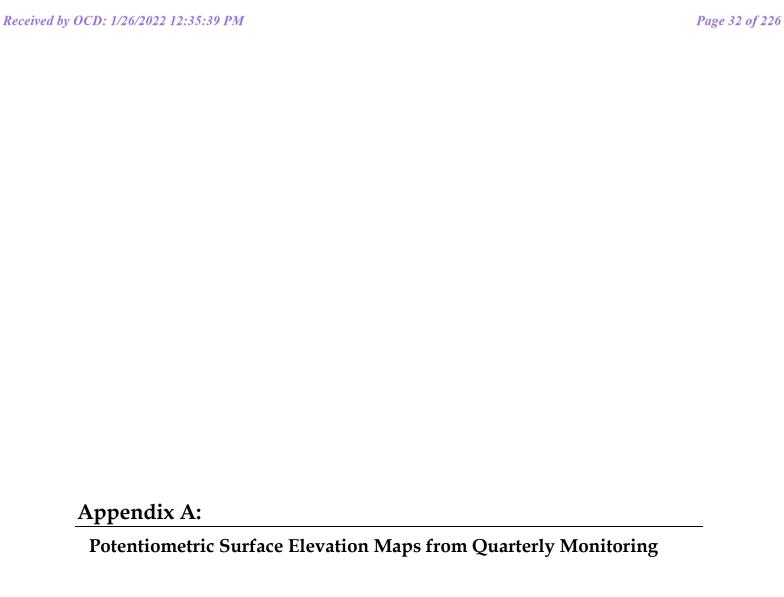


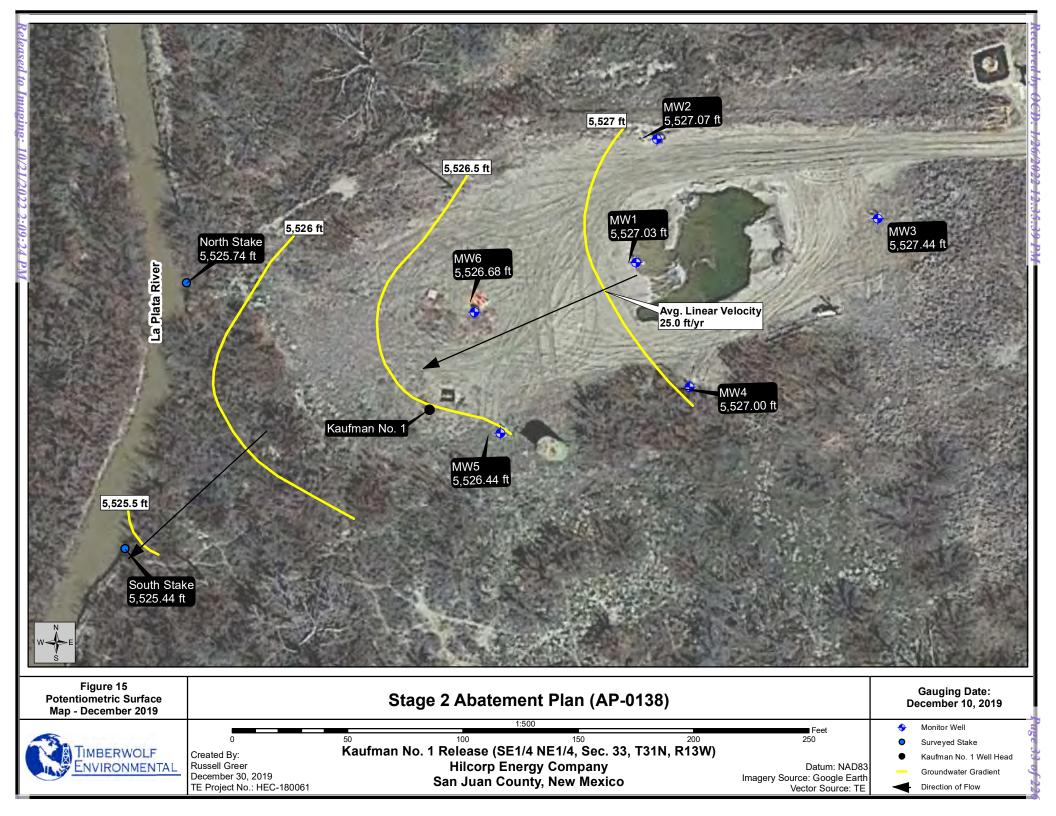


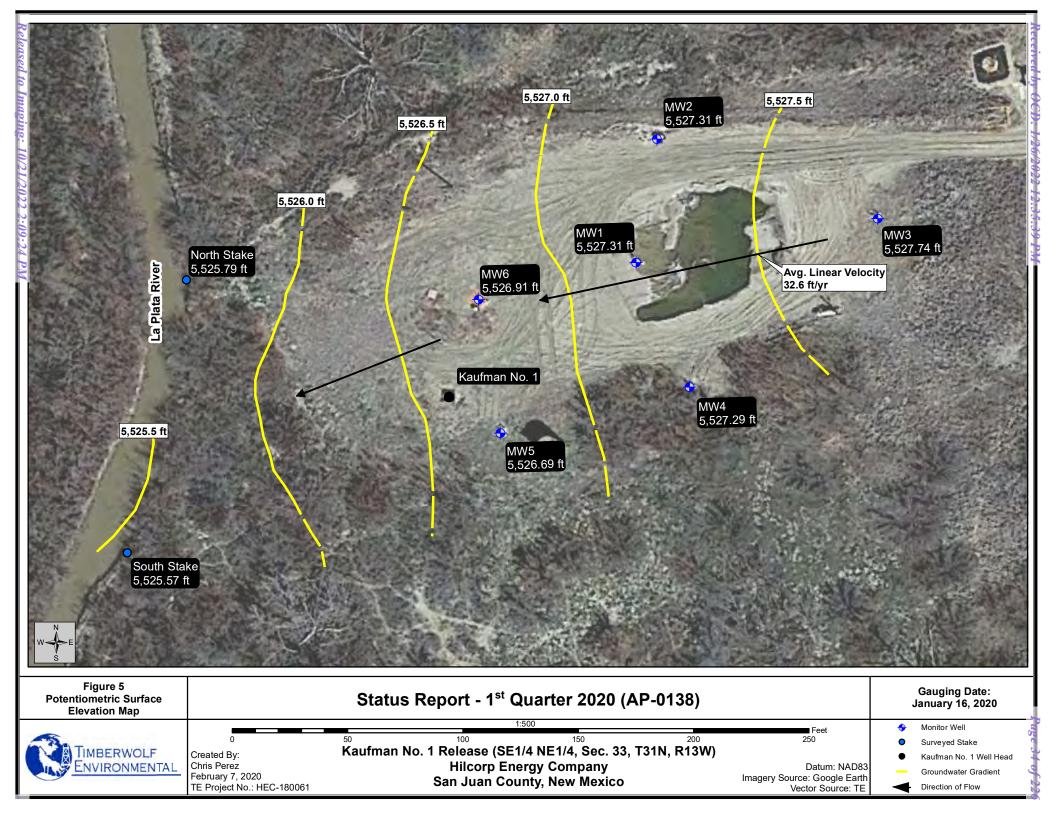


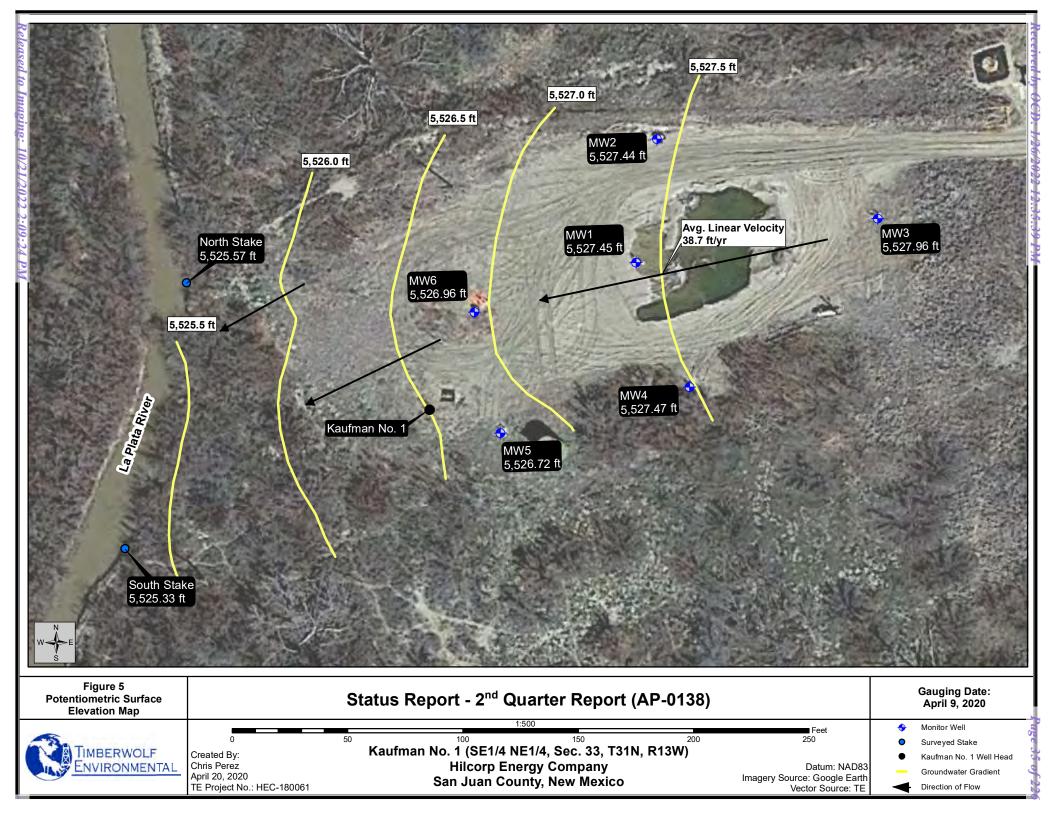


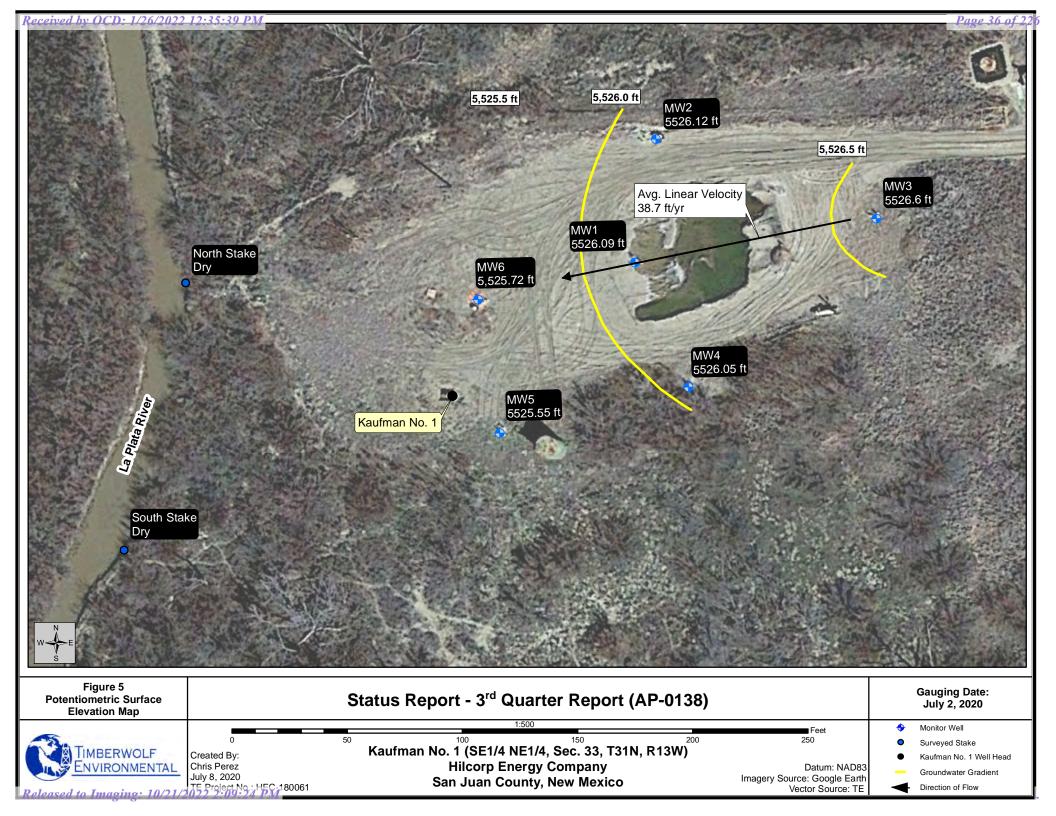


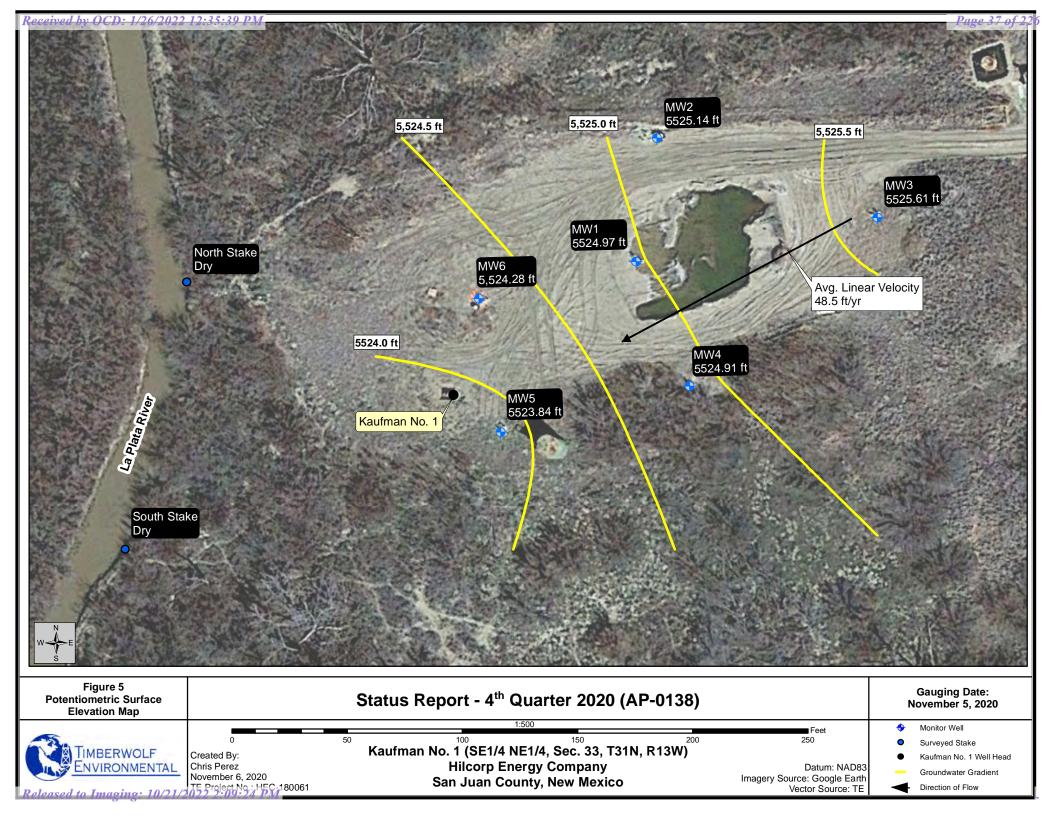


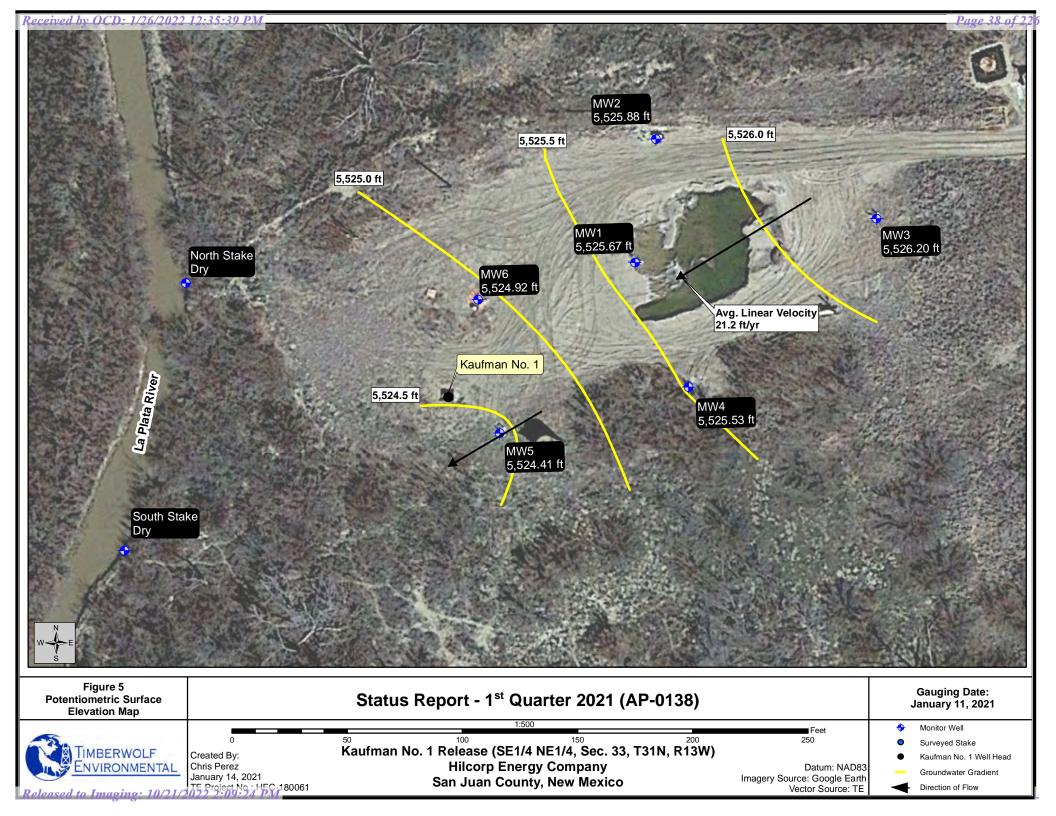


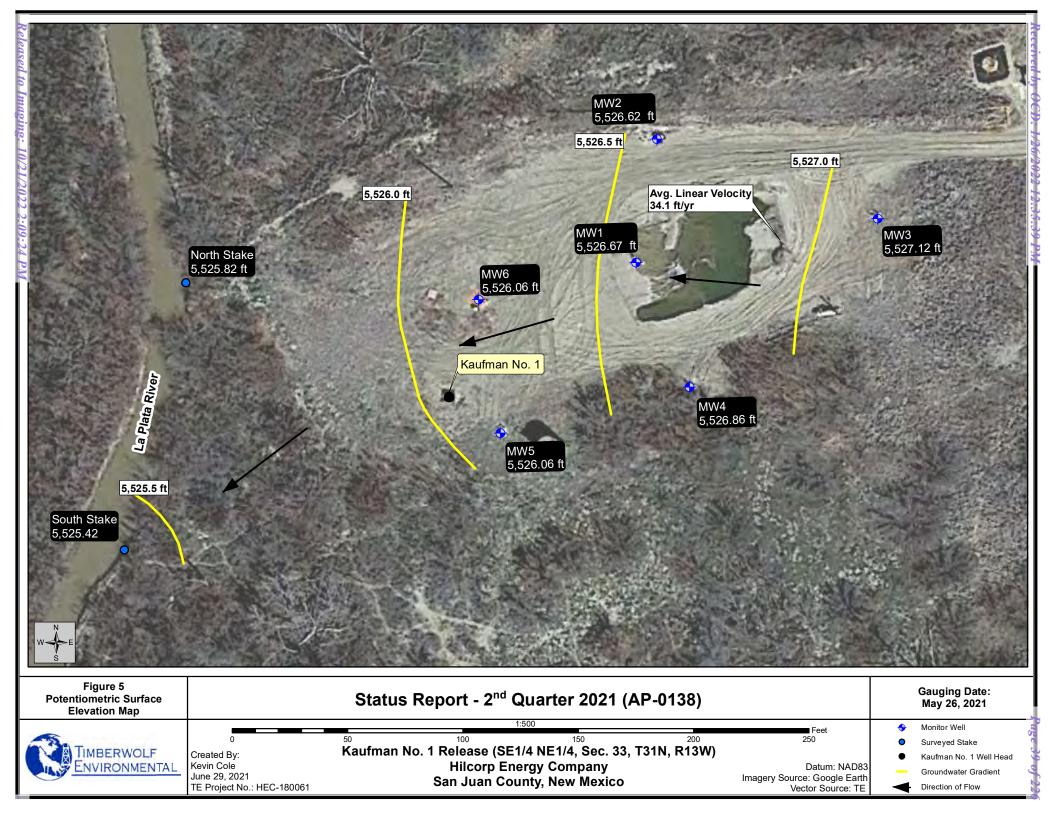


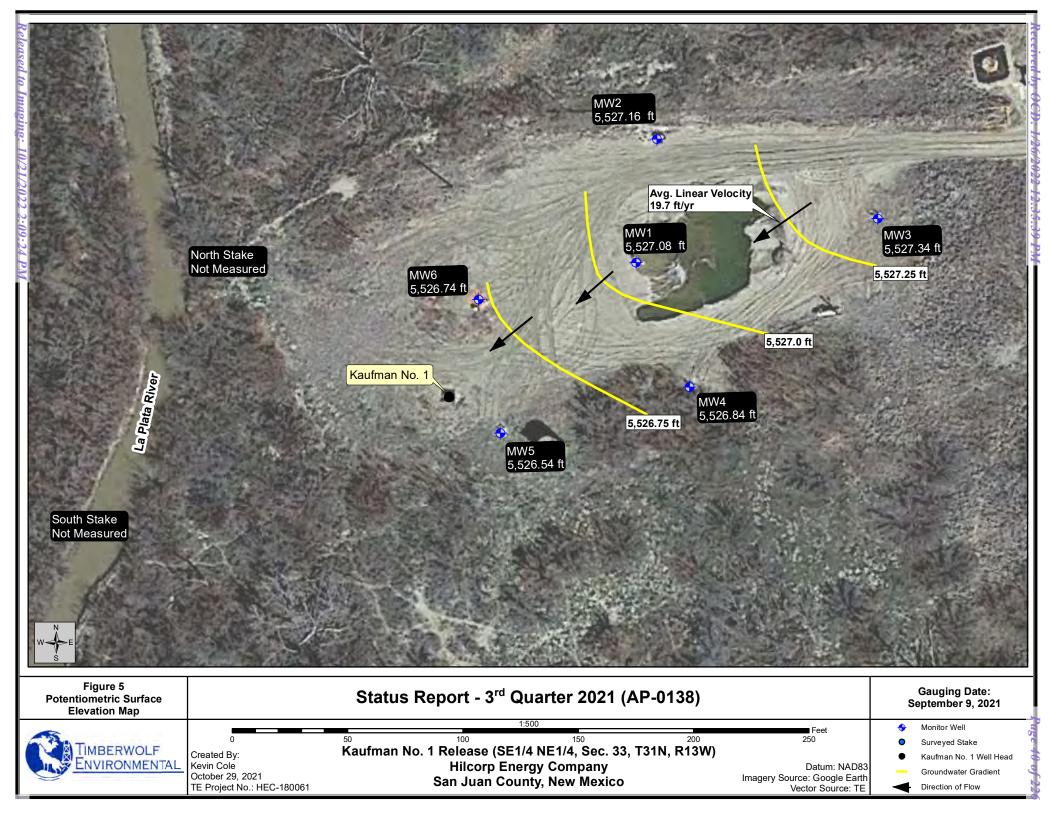


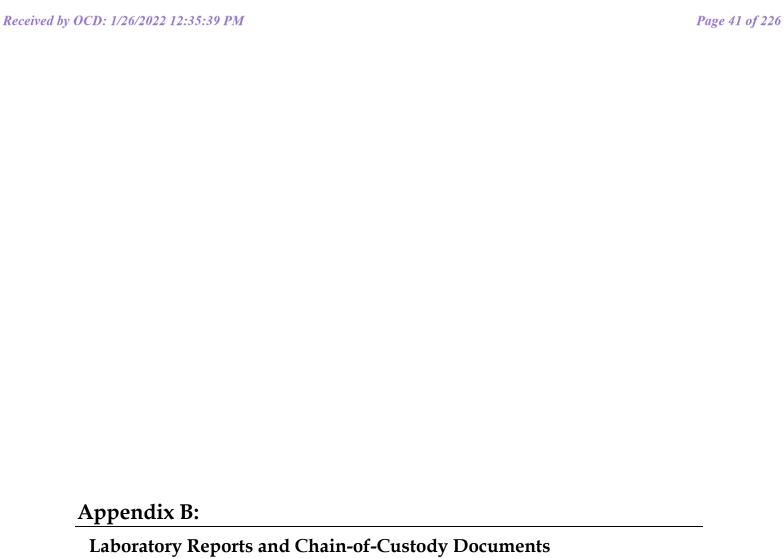














Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

October 16, 2019

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX:

RE: Kaufman No 1 OrderNo.: 1910659

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/10/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report
Lab Order: 1910659

Date Reported: 10/16/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 1910659 **Project:** Kaufman No 1 Lab ID: 1910659-001 **Collection Date:** 10/9/2019 3:22:00 PM **Client Sample ID:** MW1 Matrix: AQUEOUS **Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 10/14/2019 9:41:10 AM B63672 μg/L 1 Toluene ND 1.0 µg/L 10/14/2019 9:41:10 AM B63672 ND Ethylbenzene 1.0 μg/L 1 10/14/2019 9:41:10 AM B63672 Xylenes, Total ND 2.0 10/14/2019 9:41:10 AM B63672 μg/L Surr: 4-Bromofluorobenzene 95.4 80-120 %Rec 10/14/2019 9:41:10 AM B63672 Lab ID: 1910659-002 **Collection Date:** 10/9/2019 1:05:00 PM **Client Sample ID:** Matrix: AQUEOUS Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 10/14/2019 10:28:38 AM B63672 1 Toluene ND 1.0 µg/L 10/14/2019 10:28:38 AM B63672 ND Ethylbenzene 1.0 10/14/2019 10:28:38 AM B63672 µg/L 1 Xylenes, Total ND 2.0 µg/L 1 10/14/2019 10:28:38 AM B63672 Surr: 4-Bromofluorobenzene 95.9 80-120 %Rec 10/14/2019 10:28:38 AM B63672 **Collection Date:** 10/9/2019 12:05:00 PM Lab ID: 1910659-003 Matrix: AQUEOUS Client Sample ID: RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1 0 μg/L 10/14/2019 10:52:22 AM B63672 1 Toluene ND 1.0 μg/L 10/14/2019 10:52:22 AM B63672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

ND

ND

95.3

1.0

2.0

80-120

Qualifiers:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range

μg/L

µg/L

%Rec

1

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 5

10/14/2019 10:52:22 AM B63672

10/14/2019 10:52:22 AM B63672

10/14/2019 10:52:22 AM B63672

Analytical Report

Lab Order: **1910659**Date Reported: **10/16/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 1910659

Project: Kaufman No 1

Lab ID: 1910659-004 **Collection Date:** 10/9/2019 2:50:00 PM

Client Sample ID: MW4 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 10/14/2019 11:16:12 AM B63672 μg/L 1 Toluene ND 1.0 µg/L 10/14/2019 11:16:12 AM B63672 ND Ethylbenzene 1.0 μg/L 1 10/14/2019 11:16:12 AM B63672 Xylenes, Total ND 2.0 10/14/2019 11:16:12 AM B63672 μg/L Surr: 4-Bromofluorobenzene 102 80-120 %Rec 10/14/2019 11:16:12 AM B63672

Lab ID: 1910659-005 **Collection Date:** 10/9/2019 2:05:00 PM

Client Sample ID: MW5 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 4.1 1.0 μg/L 10/14/2019 11:39:45 AM B63672 1 Toluene ND 1.0 µg/L 10/14/2019 11:39:45 AM B63672 ND Ethylbenzene 1.0 10/14/2019 11:39:45 AM B63672 µg/L 1 Xylenes, Total ND 2.0 µg/L 1 10/14/2019 11:39:45 AM B63672 Surr: 4-Bromofluorobenzene 107 80-120 %Rec 10/14/2019 11:39:45 AM B63672

Lab ID: 1910659-006 **Collection Date:** 10/9/2019 1:38:00 PM

Client Sample ID: MW6 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1 0 μg/L 10/14/2019 12:03:11 PM B63672 1 Toluene ND 1.0 μg/L 10/14/2019 12:03:11 PM B63672 Ethylbenzene ND 1.0 10/14/2019 12:03:11 PM B63672 μg/L 1 Xylenes, Total ND 10/14/2019 12:03:11 PM B63672 2.0 µg/L Surr: 4-Bromofluorobenzene 106 80-120 %Rec 10/14/2019 12:03:11 PM B63672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 5

Analytical Report
Lab Order: 1910659

Date Reported: 10/16/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 1910659

Project: Kaufman No 1

Lab ID: 1910659-007 **Collection Date:** 10/9/2019 3:24:00 PM

Client Sample ID: Dup Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 10/14/2019 3:13:09 PM B63672 1 Toluene ND 1.0 μg/L 10/14/2019 3:13:09 PM B63672 Ethylbenzene ND 1.0 μg/L 1 10/14/2019 3:13:09 PM B63672 Xylenes, Total ND 2.0 μg/L 1 10/14/2019 3:13:09 PM B63672 Surr: 4-Bromofluorobenzene 92.7 80-120 %Rec 10/14/2019 3:13:09 PM B63672

Lab ID: 1910659-008 Collection Date:

Client Sample ID: Trip Blank Matrix: TRIP BLANK

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 8021B: VOLATILES					Ana	alyst:	NSB
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
Benzene	ND	1.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
Toluene	ND	1.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
Ethylbenzene	ND	1.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
Xylenes, Total	ND	2.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	10/14/2019 3:36:3	6 PM	B63672
Surr: 4-Bromofluorobenzene	93.2	80-120	%Rec	1	10/14/2019 3:36:3	6 PM	B63672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910659**

16-Oct-19

Client: Timberwolf Environmental

Project: Kaufman No 1

Sample ID: **RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: PBW Batch ID: B63672 RunNo: 63672

Prep Date: Analysis Date: 10/14/2019 SeqNo: 2175702 Units: µg/L Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Methyl tert-butyl ether (MTBE) ND 2.5 Benzene ND 1.0 ND Toluene 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 1,2,4-Trimethylbenzene ND 1.0 1,3,5-Trimethylbenzene ND 1.0 Surr: 4-Bromofluorobenzene 19 20.00 95.4 മറ 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSW Batch ID: **B63672** RunNo: 63672 Prep Date: Analysis Date: 10/14/2019 SeqNo: 2175703 Units: µg/L PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Methyl tert-butyl ether (MTBE) 20 2.5 20.00 0 98.1 80 119 20.00 Benzene 20 1.0 0 99.0 80 120 Toluene 20 1.0 20.00 0 98.6 80 120 Ethylbenzene 20 1.0 20.00 0 99.2 80 120 60 2.0 60.00 0 100 Xylenes, Total 80 119 1,2,4-Trimethylbenzene 20 1.0 20.00 0 98.7 80 120 0 97.8 1,3,5-Trimethylbenzene 20 1.0 20.00 80 120 Surr: 4-Bromofluorobenzene 20 20.00 98.4 80 120

Sample ID: 1910659-001AMS	SampT	ype: MS	5	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: MW1	Batch	1D: B6	3672	F	RunNo: 6	3672				
Prep Date:	Analysis D	ate: 10	/14/2019	8	SeqNo: 2	175705	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17	2.5	20.00	0	84.0	61.3	119			
Benzene	19	1.0	20.00	0.2640	95.5	80	120			
Toluene	19	1.0	20.00	0	95.4	75.5	120			
Ethylbenzene	19	1.0	20.00	0	96.2	80	120			
Xylenes, Total	58	2.0	60.00	0	97.3	77.3	119			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	95.3	72.6	125			
1,3,5-Trimethylbenzene	19	1.0	20.00	0	93.7	68.3	127			
Surr: 4-Bromofluorobenzene	20		20.00		98.0	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910659**

16-Oct-19

Client: Timberwolf Environmental

Project: Kaufman No 1

Sample ID: 1910659-001AM	I SD SampT	ype: MS	SD	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: MW1	Batch	n ID: B6	3672	F	RunNo: 6	3672				
Prep Date:	Analysis D	ate: 10)/14/2019	5	SeqNo: 2	175706	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18	2.5	20.00	0	87.6	61.3	119	4.21	20	
Benzene	20	1.0	20.00	0.2640	96.9	80	120	1.41	20	
Toluene	20	1.0	20.00	0	97.6	75.5	120	2.20	20	
Ethylbenzene	20	1.0	20.00	0	98.9	80	120	2.70	20	
Xylenes, Total	60	2.0	60.00	0	100	77.3	119	3.09	20	
1,2,4-Trimethylbenzene	20	1.0	20.00	0	99.9	72.6	125	4.77	20	
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.9	68.3	127	5.37	20	
Surr: 4-Bromofluorobenzene	21		20.00		105	80	120	0	0	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	TIMBERWOLF ENVIRON	Work Order Nu	mber: 1910659		RcptNo:	1
Received By: *	Juan Roja	10/10/2019 7:55:0	00 AM			
Completed By:	Leah Baca	10/11/2019 8:01:	56 AM	Last Baca	_	
Reviewed By:	LB	10/11/19		Maril Ju		
Chain of Cus	<u>tody</u>					
1. Is Chain of Cu	ustody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
<u>Log In</u> 3. Was an attem	pt made to cool the samples?		Yes 🗹	No 🗆	NA 🗆	
4. Were all samp	oles received at a temperature	of >0° C to 6.0°C	Yes 🗹	No 🗆	na 🗆	
5. Sample(s) in p	proper container(s)?		Yes 🗹	No 🗆		
6. Sufficient sam	ple volume for indicated test(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) proper	y preserved?	Yes 🗹	No 🗆		
8. Was preservat	tive added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. VOA vials have	e zero headspace?		Yes 🗹	No 🗆	No VOA Vials	
10. Were any sam	nple containers received broke	n?	Yes	No 🗹	# of preserved	
	rk match bottle labels?		Yes 🗹	No 🗆	bottles checked for pH: (<2 or	≥12 unless noted)
12. Are matrices c	orrectly identified on Chain of	Custody?	Yes 🗹	No 🗆	Adjusted?	
13. Is it clear what	analyses were requested?		Yes 🗹	No 🗆		
	ng times able to be met? ustomer for authorization.)		Yes 🗹	No 🗌	Checked by:	PAD 10/11/19
Special Handli	ing (if applicable)					
15. Was client not	tified of all discrepancies with	this order?	Yes 🗌	No 🗆	NA 🗹	
Person I	Notified:	Dat	e			
By Who	m:	Via	: eMail P	hone 🔲 Fax	☐ In Person	
Regardi	**************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			2000 A 7 9 8 6 A A A A A A A A A A A A A A A A A A	
	estructions:	A Secretary of Company			1 190	
16. Additional ren	narks:					
17. Cooler Inform Cooler No	Temp C Condition S	eal Intact Seal No t Present	Seal Date	Signed By		

DIDDAY KECOLO										e
Timberwolf Environmental	Standard	. □ Rush	E		I	HALL	EN.	/IRC	ENVIRONMENT,	
l	Project Name:				~	ANALTSIS		4 :	LABORATOR	>
Mailing Address: 782	Kautas	,	No. 1	4901	www.n 4901 Hawkins NE	ww.nall	environ	www.nallenvironmental.com	50m	<i>.D</i> ; 1
	Project #:				505-345.3075	1/		FOR 246	Aibuquelque, ININ 07 103 Eav. 606 246 4407	!/ 20 /
	8	12008		5	TO-000	A 155-7	nalvsis	Analysis Request	2-4 10 <i>f</i>	2041
email or Fax#: 1 in @ team timberwolf.com Project Manager	Project Mana	ger:					⊅ C	(1		12.
QA/QC Package: /	T WITH	1 10st) / MRC)S ' [†] Oc			:35:39
1:	Sampler:	JF/	MM	אם / כ	(1.40	· · · · · · · · · · · · · · · · · · ·	NO ² ; F			<u> </u>
□ EDD (Type)	# of Coolers:	10 T 14		GRO)S b	sje	,£O			
	Cooler Temp(induding CF).		02(+0.1=0.2	leb(eţpo	PM 8				
Time Matrix Sample Name	Container Type and #	Preservative Type	HEAL NO.	8:H9T 08:H9T 9 1808	EDB (M	PAHs b	SI, F, B 20 (V	2) 07S8 S2Y0 (S		
T My m 2251 81-6-01	3 VOA	HCI		-						
1305 W MW 2	3 vo4	HCI	200 -	7						-
6-9-19 1205 W MW 3	3 VOA	HCI	200-	7						
1450 W MWY	3 VOA	HLI	400 -	>				<u> </u>		
10-9-19 1405 W MW 5	3 VO.A	Hci	500-							<u> </u>
1338 W MW G	3 VOA	HCi	90n-	7		 				<u> </u>
10-7-19 15-24 W DUP.	3 VOA	HCI	£00°					<u> </u>		
Trip Blank			Soo -	>						<u> </u>
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7	2	Via:	Date Time	Remarks:		- -	- -	-	- - -	
Date: Time: Relinquished by:	Received by:	Via:	Date Time							age 49
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ANALYTICAL REPORT

November 27, 2019

Timberwolf Environmental, LLC

Sample Delivery Group: L1163631

Samples Received: 11/21/2019

Project Number: 180061

Description: HEC - 180061

Report To:

1920 W Villa Maria, Ste 205

Bryan, TX 77807

¹Cp

²Tc















Entire Report Reviewed By:

Olivia Studebaker
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test open shall not be reproduced, except an full, without writter appropriate of the historiated y three applicables. When expended the produced by Price Analytical National is performed per quidance provided in liaboratory standard operating procedures ENV-SOP-MTLI-0068. When exampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Solve the samples are received.

Sc: Sample Chain of Custody

14

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
MW1 L1163631-01	5
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MW3 L1163631-03	7
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MW5 L1163631-05	9
MW6 L1163631-06	10
Qc: Quality Control Summary	11
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GI: Glossary of Terms	12
Al: Accreditations & Locations	13















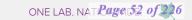








SAMPLE SUMMARY



			Collected by	Collected date/time	Received date	e/time
MW1 L1163631-01 GW			Michael Morse	11/19/19 11:35	11/21/19 08:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1386442	1	11/24/19 16:58	11/25/19 05:48	TH	Mt. Juliet, TN
			Collected by	Collected date/time	Received date	e/time
MW2 L1163631-02 GW			Michael Morse	11/19/19 11:20	11/21/19 08:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1386442	1	11/24/19 16:58	11/25/19 06:02	TH	Mt. Juliet, TN
			Collected by Michael Morse	Collected date/time	Received date	
MW3 L1163631-03 GW				11/19/19 10.40	11/21/19 00.30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1386442	1	11/24/19 16:58	11/25/19 06:16	TH	Mt. Juliet, TN
			Collected by	Collected date/time	Received date	e/time
MW4 L1163631-04 GW			Michael Morse	11/19/19 12:30	11/21/19 08:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1386442	1	11/24/19 16:58	11/25/19 06:29	TH	Mt. Juliet, TN
MW5 L1163631-05 GW			Collected by Michael Morse	Collected date/time 11/19/19 13:45	Received date 11/21/19 08:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1386442	1	11/24/19 16:58	11/25/19 06:43	TH	Mt. Juliet, TN
MW6 L1163631-06 GW			Collected by Michael Morse	Collected date/time 11/19/19 14:00	Received date 11/21/19 08:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

WG1386442



















TPH by TCEQ Method 1005

11/24/19 16:58

11/25/19 06:57

TH

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



















ONE LAB. NAT Page 54 of 226

Collected date/time: 11/19/19 11:35

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 05:48	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 05:48	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 05:48	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 05:48	WG1386442
(S) o-Terphenyl	93.0				70.0-130		11/25/2019 05:48	WG1386442



















ONE LAB. NATRAGE 55 of 226

Collected date/time: 11/19/19 11:20

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 06:02	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 06:02	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:02	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:02	WG1386442
(S) o-Terphenyl	94.5				70.0-130		11/25/2019 06:02	WG1386442



















ONE LAB. NATRAGE 56 of 226

Collected date/time: 11/19/19 10:40

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 06:16	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 06:16	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:16	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:16	WG1386442
(S) o-Terphenyl	95.3				70.0-130		11/25/2019 06:16	WG1386442



















ONE LAB. NAT Page 57. of 226

Collected date/time: 11/19/19 12:30

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 06:29	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 06:29	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:29	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:29	WG1386442
(S) o-Terphenyl	94.4				70.0-130		11/25/2019 06:29	WG1386442



















ONE LAB. NATRAGE 58 of 226

Collected date/time: 11/19/19 13:45

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 06:43	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 06:43	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:43	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:43	WG1386442
(S) o-Terphenyl	95.3				70.0-130		11/25/2019 06:43	WG1386442



















ONE LAB. NATRAGE 59 of 226

Collected date/time: 11/19/19 14:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/25/2019 06:57	WG1386442
TPH C12 - C28	U		0.600	0.900	0.900	1	11/25/2019 06:57	WG1386442
TPH C28 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:57	WG1386442
TPH C6 - C35	U		0.600	0.900	0.900	1	11/25/2019 06:57	WG1386442
(S) o-Terphenyl	86.6				70.0-130		11/25/2019 06:57	WG1386442



















QUALITY CONTROL SUMMARY

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TPH by TCEQ Method 1005

L1163631-01,02,03,04,05,06

Method Blank (MB)

(MB) R3476219-1 11/2	24/19 22:01			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	102			70.0-130









Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3476219-2 11/2	24/19 22:15 • (LCSD)) R3476219-3	11/24/19 22:29								
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	45.1	44.0	108	106	75.0-125			2.47	20	
TPH C12 - C28	41.7	44.5	41.7	107	100	75.0-125			6.50	20	
TPH C6 - C35	83.4	89.6	85.7	107	103	75.0-125			4.45	20	
(S) o-Terphenyl				97.7	90.2	70.0-130					











Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

	d Definitions
MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resul reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

















Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1 6}	90010
Kentucky ²	16
Louisiana	Al30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

















eived by OCD: 1/26/2022 12.	:35:39 PM		Billing Info	rmation:		No. of			Analysis	/ Containe	er / Pres	servative		1.2	Chain of Custody Page					
Timberwolf Environm 1920 W Villa Maria, Ste 205 Bryan, TX 77807	ental, LL	С		s Payable Villa Maria, St X 77807	Pres Chk	5									Pace / National Ce	Analytical * nter for Testing & Innova				
Report to: Jim Foster			Email To:	@teamtim	berwolf.	(om	100	S15557								12065 Lebanon Rd Mount Juliet, TN 37 Phone: 615-758-585	8 20 1			
Project Description: HEC-1800	Col			City/State	NM		Method		1. 10						-	Phone: 800-767-585 Fax: 615-758-5859				
Phone: 361-772-8706 Fax:	Client Project			Lab Project #							12					F18	3631			
Collected by (print): Michael Morse	Site/Facility ID			P.O. #	7 A		ER									Acctnum: TIM	ENVBTX			
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Immediately Packed on Ice N Y	y 30 ay	y (Rad Only)	Date Nes	Date Results Needed No.		H									PB:	la Studebaker				
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	7									Shipped Via:	Sample # (lab o			
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MWZ		GW			1120	4	/						(3)				02			
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MW4		GW		11-19-19	1230	4	1	- tri			4.						04			
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1922	100 170 17														7.4					
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* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Soil AIR - Air F - Filter - Groundwater B - Bioassay									pH		o	-	Sample Receipt Checklist COC Seal Present/Intact: NP COC Signed/Accurate: Bottles arrive intact: Correct bottles used:			hecklist : NP Y			
DW - Drinking Water OT - Other	Samples retur UPS Fe	ned via: dEx Cou	ırier	Т	racking# 7	78	1 -	787	30	299	30	1		Suffic	ient	volume sent: If Applicate adspace:				
Relinquished by : (Signature)			-19	Time: R	Received by: (Signa	ture)			Trip BI	ank Receiv	ved: (Y	es /No HCL Me	оН	Preser	vatio	on Correct/Ch				
Relinquished by : (Signature)					Received by: (Signa	ture)			Temp:	1-1.00	¥	les Receive	d	If prese	rvation	required by Lo	gin: Date/Time			
linquished by : (Signature) Date:				Time: R	Received for lab by	(Signa	ture)		Date:	21/10	7 Tim	33	3	Hold:			Condition			



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

January 24, 2020

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX

RE: Kaufman NO 1 OrderNo.: 2001688

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/17/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report
Lab Order: 2001688

Date Reported: 1/24/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2001688 **Project:** Kaufman NO 1 Lab ID: 2001688-001 Collection Date: 1/16/2020 12:15:00 PM **Client Sample ID:** MW1 Matrix: GROUNDWATER **Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB 1/23/2020 2:18:32 PM Benzene ND 1.0 B66017 μg/L 1 Toluene ND 1.0 μg/L 1 1/23/2020 2:18:32 PM B66017 ND Ethylbenzene 1.0 μg/L 1 1/23/2020 2:18:32 PM B66017 Xylenes, Total ND 2.0 μg/L 1/23/2020 2:18:32 PM B66017 Surr: 4-Bromofluorobenzene 99.4 80-120 %Rec 1/23/2020 2:18:32 PM B66017 Lab ID: 2001688-002 **Collection Date:** 1/16/2020 9:19:00 AM **Client Sample ID: Matrix:** GROUNDWATER Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 1/23/2020 3:05:19 PM B66017 1 Toluene ND 1.0 μg/L 1 1/23/2020 3:05:19 PM B66017 ND Ethylbenzene 1.0 B66017 μg/L 1 1/23/2020 3:05:19 PM Xylenes, Total ND 2.0 μg/L 1 1/23/2020 3:05:19 PM B66017 Surr: 4-Bromofluorobenzene 99.8 80-120 %Rec 1/23/2020 3:05:19 PM B66017 Lab ID: 2001688-003 **Collection Date:** 1/16/2020 9:52:00 AM **Matrix:** GROUNDWATER Client Sample ID: RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1 0 μg/L 1/23/2020 3:28:36 PM B66017 1 Toluene ND 1.0 μg/L 1/23/2020 3:28:36 PM B66017 Ethylbenzene ND 1.0 B66017 μg/L 1 1/23/2020 3:28:36 PM Xylenes, Total ND 1/23/2020 3:28:36 PM B66017 2.0 µg/L 1 Surr: 4-Bromofluorobenzene 105 80-120 %Rec 1/23/2020 3:28:36 PM B66017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 4

CLIENT:

Analytical Report

Lab Order: 2001688 Date Reported: 1/24/2020

Hall Environmental Analysis Laboratory, Inc.

Timberwolf Environmental

Lab Order: 2001688 **Project:** Kaufman NO 1

Lab ID: 2001688-004 Collection Date: 1/16/2020 10:21:00 AM **Client Sample ID:** MW4 Matrix: GROUNDWATER

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB 1/23/2020 3:52:02 PM Benzene ND 1.0 B66017 μg/L 1 Toluene ND 1.0 μg/L 1 1/23/2020 3:52:02 PM B66017 ND Ethylbenzene 1.0 μg/L 1 1/23/2020 3:52:02 PM B66017 Xylenes, Total ND 2.0 μg/L 1/23/2020 3:52:02 PM B66017 Surr: 4-Bromofluorobenzene 99.8 80-120 %Rec 1/23/2020 3:52:02 PM B66017

Lab ID: 2001688-005 **Collection Date:** 1/16/2020 11:37:00 AM **Client Sample ID: Matrix:** GROUNDWATER

Analyses Result RL Qual Units DF Date Analyzed **Batch ID**

EPA METHOD 8021B: VOLATILES Analyst: NSB Benzene 1.2 1.0 μg/L 1/23/2020 4:15:32 PM B66017 1 Toluene ND 1.0 μg/L 1 1/23/2020 4:15:32 PM B66017 ND Ethylbenzene 1.0 1/23/2020 4:15:32 PM B66017 μg/L 1 Xylenes, Total ND 2.0 μg/L 1 1/23/2020 4:15:32 PM B66017 Surr: 4-Bromofluorobenzene 101 80-120 %Rec 1/23/2020 4:15:32 PM B66017

Lab ID: 2001688-006 **Collection Date:** 1/16/2020 10:58:00 AM **Matrix:** GROUNDWATER Client Sample ID:

RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1 0 μg/L 1/23/2020 4:39:01 PM B66017 1 Toluene ND 1.0 μg/L 1/23/2020 4:39:01 PM B66017 Ethylbenzene ND 1.0 B66017 μg/L 1 1/23/2020 4:39:01 PM Xylenes, Total ND 1/23/2020 4:39:01 PM B66017 2.0 μg/L Surr: 4-Bromofluorobenzene 99.6 80-120 %Rec 1/23/2020 4:39:01 PM B66017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- \mathbf{E} Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL

Page 2 of 4

Analytical Report

Lab Order: **2001688**Date Reported: **1/24/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2001688

Project: Kaufman NO 1

Lab ID: 2001688-007 **Collection Date:** 1/16/2020 11:39:00 AM

Client Sample ID: DUP Matrix: GROUNDWATER

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 1.0 1/23/2020 5:02:32 PM B66017 1.6 μg/L 1 Toluene ND 1.0 μg/L 1/23/2020 5:02:32 PM B66017 ND Ethylbenzene 1.0 μg/L 1 1/23/2020 5:02:32 PM B66017 Xylenes, Total ND 2.0 μg/L 1/23/2020 5:02:32 PM B66017 1 Surr: 4-Bromofluorobenzene 99.6 80-120 %Rec 1/23/2020 5:02:32 PM B66017

Lab ID: 2001688-008 Collection Date:

Client Sample ID: Trip Blank Matrix: TRIP BLANK

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Methyl tert-butyl ether (MTBE) ND 2.5 μg/L 1/23/2020 5:25:56 PM B66017 1 Benzene ND 1.0 μg/L 1 1/23/2020 5:25:56 PM B66017 Toluene ND 1.0 1/23/2020 5:25:56 PM B66017 μg/L 1 ND Ethylbenzene 1.0 μg/L 1 1/23/2020 5:25:56 PM B66017 Xylenes, Total ND 2.0 μg/L 1 1/23/2020 5:25:56 PM B66017 1,2,4-Trimethylbenzene ND 1.0 μg/L 1 1/23/2020 5:25:56 PM B66017 1,3,5-Trimethylbenzene ND 1.0 μg/L 1 1/23/2020 5:25:56 PM B66017 Surr: 4-Bromofluorobenzene 96.5 80-120 %Rec 1/23/2020 5:25:56 PM B66017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 4

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001688**

24-Jan-20

Client: Timberwolf Environmental

Project: Kaufman NO 1

Sample ID: mb-1 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBW Batch ID: B66017 RunNo: 66017

Prep Date: Analysis Date: 1/23/2020 SeqNo: 2267714 Units: µg/L Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Methyl tert-butyl ether (MTBE) ND 2.5 Benzene ND 1.0 ND Toluene 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 1,2,4-Trimethylbenzene ND 1.0 1,3,5-Trimethylbenzene ND 1.0 Surr: 4-Bromofluorobenzene 23 20.00 116 80 120

Sample ID: 100ng btex Ics SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSW Batch ID: **B66017** RunNo: 66017 Prep Date: Analysis Date: 1/23/2020 SeqNo: 2267715 Units: µg/L PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Methyl tert-butyl ether (MTBE) 19 2.5 20.00 0 95.6 80 119 Benzene 20 1.0 20.00 0 101 80 120 Toluene 20 20.00 0 100 80 120 1.0 Ethylbenzene 20 1.0 20.00 0 99.7 80 120 60 2.0 60.00 0 101 Xylenes, Total 80 119 1,2,4-Trimethylbenzene 20 1.0 20.00 0 99.1 80 120 1,3,5-Trimethylbenzene 20 0 98.0 120 1.0 20.00 80 Surr: 4-Bromofluorobenzene 21 20.00 104 80 120

Sample ID: 100ng btex lcsd	SampT	ype: LC	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS02	Batch	ID: B6	6017	F	RunNo: 60	6017				
Prep Date:	Analysis D	ate: 1/	23/2020	8	SeqNo: 2	267716	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18	2.5	20.00	0	89.0	80	119	7.11	20	
Benzene	20	1.0	20.00	0	100	80	120	0.608	20	
Toluene	20	1.0	20.00	0	98.9	80	120	1.08	20	
Ethylbenzene	20	1.0	20.00	0	98.4	80	120	1.25	20	
Xylenes, Total	60	2.0	60.00	0	99.2	80	119	1.59	20	
1,2,4-Trimethylbenzene	19 1.0 20.00		0	95.7	80	120	3.51	20		
1,3,5-Trimethylbenzene	19	1.0	20.00	0	94.7	80	120	3.38	20	
Surr: 4-Bromofluorobenzene	19		20.00		94.3	80	120	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 4



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: TIMBERWOLF ENVIRON	Work Order Numbe	r: 200	1688		RcptNo	: 1
Received By: Desiree Dominguez	1/17/2020 9:30:00 AM	Л		D3		
Completed By: Isaiah Ortiz	1/17/2020 11:05:05 A	М		ILC	24	
Reviewed By: ENH	1/17/20				,	
Chain of Custody						
1. Is Chain of Custody sufficiently complete?		Yes	~	No 🗌	Not Present	
2. How was the sample delivered?		Cou	rier			
Laute						
Log In 3. Was an attempt made to cool the samples?		Von	~	No 🗌	NA 🗆	
o. Was an attempt made to coor the samples:		168		140	INA L	
4. Were all samples received at a temperature	of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes	V	No 🗆		
6. Sufficient sample volume for indicated test(s)	?	Yes	~	No 🗆		
7. Are samples (except VOA and ONG) properly		Yes	V	No 🗆		
8. Was preservative added to bottles?		Yes		No 🗹	NA 🗆	
9. Received at least 1 vial with headspace <1/4	for AQ VOA?	Yes	✓	No 🗌	NA 🗆	
10. Were any sample containers received broke	n?	Yes		No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	V	No 🗆	bottles checked for pH: (<2 g	y>12 unless noted)
12. Are matrices correctly identified on Chain of	Custody?	Yes	V	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?		Yes	V	No 🗌		1-11
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	V	No 🗆	Checked by:	JR 1/17/20
Special Handling (if applicable)				/		
15. Was client notified of all discrepancies with t	his order?	Yes		No 🗌	NA 🗹	
Person Notified:	Date:		-			
By Whom:	Via:	eM	lail 🔲 F	Phone Fax	☐ In Person	
Regarding:		#54# GINOS			MANAGEMENT AND	
Client Instructions:		esedeti				
16. Additional remarks: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	samples	00	JUA	Rink	900 70	11-60
17. Cooler Information	Joe Pics			131011	01/2	111111
Evidential House reports of assessment from	eal Intact Seal No	Seal D	ate	Signed By		
1 3.0 Good Not	Present					

Rece		>	<i>0C1</i>			022	/2:3	35:3	9 P A	И														Pa	ige 70 o _j	
	HALL ENVIRONMENTAL			4901 Hawkins NE - Albuquerque, NM 87109	10	Analysis		S 'Þ	ОЧ	10 ² ,	or s ,, h	110 103 103	y 83 8 Me 3r, 18 (AO)	EDB (M PAHs b CI, F, E 8260 (V 8270 (S Total Co												f necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
				4901 H	Tel. 50		(C							08:H9T 9 1808						Ħ				arks:		ity. Any su
_	1													(X3T8	>	1	/	/	1/	/	1	>		Remarks:		i possibil
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Time.	j	□ Rush	3: Kaufmon			180061	ger:	Foster	teon thub	Michael Horse	Ma ∀es		(including CF): 3	Preservative Type	HCI	HCI	HC() JH	HCl	HCI	HCl	HCl		Via:	Via:	ccredited laboratorie
Tirn-Around Time.		Standard Standard	Project Name:		Project #:	HFC-	Project Manager	N. S.	Jine	Sampler: M.	On Ice:	Iڄ	Cooler Temp(including CF):3	Container Type and #		2 YOU	2 401	2 401	2 YOA	2 401	2 701	VOA 2		Received by:	Received by:	ontracted to other a
La cool vibration	Chain-oi-Custody Record	f Environmental		(R233, Suite B4	8130	9215-y	JIME from timberwolf. Com		☐ Level 4 (Full Validation)	☐ Az Compliance				Sample Name	1 mm	2MW	EMM 3	han	5 MW	NW Co	Dup.	Trip Blank		od by:	ed by:	mitted to Hall Environmental may be subc
,	10-io	Imberwolf		691	9	4-324	TMET			□ Az Co	□ Other			Matrix	an						>			Relinquished by:	Relinquished by:	amples sub
	lall-	Imbe		Mailing Address:	Duango,	-666 :			lard			_		Time	5121	616	256	120	1130	1058	1139	*			Fime:	necessary, s
Rele	Clien	Clein	T.			Phon	email or Fax#:	QA/QC Package:	Standard Standard	Accreditation:	□ NELAC	□ EDD (Type)		Date	02-91-1	1-16-20	02-71-1	02-97-1	02-91-1	1-16-20 10 58	1-16-20 1139	02-51-1		Date: Time: 1-16-70 13:30	Date:	3



ANALYTICAL REPORT

January 24, 2020

Timberwolf Environmental, LLC

Sample Delivery Group: L1180702 Samples Received: 01/17/2020 Project Number: HEC-180061 Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

















Entire Report Reviewed By:

Olivia Studebaker Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
MW 1 L1180702-01	5
MW 2 L1180702-02	6
MW 3 L1180702-03	7
MW 4 L1180702-04	8
MW 5 L1180702-05	9
MW 6 L1180702-06	10
TRIP BLANK L1180702-07	11
Qc: Quality Control Summary	12
TPH by TCEQ Method 1005	12
GI: Glossary of Terms	13
Al: Accreditations & Locations	14
Sc: Sample Chain of Custody	15



















SAMPLE SUMMARY



NWA 14400700 04 0W			Collected by MM/JF	Collected date/time 01/16/20 12:15	Received dat 01/17/20 08:4	
MW 1 L1180702-01 GW			101101/31	01/10/20 12.13	01/17/20 06.4	1 J
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	date/time 01/22/20 12:20	01/22/20 19:02	FM	Mt. Juliet, TN
MW 2 L1180702-02 GW			Collected by MM/JF	Collected date/time 01/16/20 09:19	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	01/22/20 12:20	01/22/20 19:16	FM	Mt. Juliet, TN
MW 3 L1180702-03 GW			Collected by MM/JF	Collected date/time 01/16/20 09:52	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	01/22/20 12:20	01/22/20 19:30	FM	Mt. Juliet, TN
MW 4 L1180702-04 GW			Collected by MM/JF	Collected date/time 01/16/20 10:21	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	01/22/20 12:20	01/22/20 19:43	FM	Mt. Juliet, Ti
MW 5 L1180702-05 GW			Collected by MM/JF	Collected date/time 01/16/20 11:37	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	01/22/20 12:20	01/22/20 19:57	FM	Mt. Juliet, Ti
MW 6 L1180702-06 GW			Collected by MM/JF	Collected date/time 01/16/20 10:58	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1415146	1	01/22/20 12:20	01/22/20 20:11	FM	Mt. Juliet, TN
TRIP BLANK L1180702-07 GW			Collected by MM/JF	Collected date/time 01/16/20 11:39	Received dat 01/17/20 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location



















TPH by TCEQ Method 1005

WG1415146

01/22/20 12:20

01/22/20 20:25

FM

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



















ONE LAB. NATRAGE 75 of 226

Collected date/time: 01/16/20 12:15

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 19:02	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 19:02	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:02	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:02	WG1415146
(S) o-Terphenyl	101				70.0-130		01/22/2020 19:02	WG1415146



















ONE LAB. NATRAGE 76 of 226

Collected date/time: 01/16/20 09:19

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 19:16	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 19:16	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:16	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:16	WG1415146
(S) o-Terphenyl	105				70.0-130		01/22/2020 19:16	WG1415146



















ONE LAB. NATRAGE 77. of 226

Collected date/time: 01/16/20 09:52

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 19:30	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 19:30	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:30	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:30	WG1415146
(S) o-Terphenyl	101				70.0-130		01/22/2020 19:30	WG1415146



















ONE LAB. NATROSCO 78 of 226

Collected date/time: 01/16/20 10:21

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 19:43	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 19:43	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:43	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:43	WG1415146
(S) o-Terphenyl	92.6				70.0-130		01/22/2020 19:43	WG1415146



















ONE LAB. NATRAGE 79 of 226

Collected date/time: 01/16/20 11:37

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 19:57	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 19:57	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:57	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 19:57	WG1415146
(S) o-Terphenyl	92.1				70.0-130		01/22/2020 19:57	WG1415146



















ONE LAB. NATRAGE 80 of 226

Collected date/time: 01/16/20 10:58

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 20:11	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 20:11	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 20:11	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 20:11	WG1415146
(S) o-Terphenyl	93.6				70.0-130		01/22/2020 20:11	WG1415146



















ONE LAB. NATRAGE 81 of 226

Collected date/time: 01/16/20 11:39

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/22/2020 20:25	WG1415146
TPH C12 - C28	U		0.600	0.900	0.900	1	01/22/2020 20:25	WG1415146
TPH C28 - C35	U		0.600	0.900	0.900	1	01/22/2020 20:25	WG1415146
TPH C6 - C35	U		0.600	0.900	0.900	1	01/22/2020 20:25	WG1415146
(S) o-Terphenyl	90.9				70.0-130		01/22/2020 20:25	WG1415146



















QUALITY CONTROL SUMMARY

ONE LAB. NAT Page 82 of 226

TPH by TCEQ Method 1005

L1180702-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3493111-1 01/22	2/20 14:49			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	86.5			70.0-130







Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

// OC) DO 400444 0 04/0	0/00 45 00 // 000) DO 400444 0	04/00/00 45 46							
(LCS) R3493111-2 01/22/20 15:02 • (LCSD) R3493111-3 01/22/20 15:16										
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
TPH C6 - C12	41.7	36.5	36.5	87.5	87.5	75.0-125			0.000	20
TPH C12 - C28	41.7	42.4	42.2	102	101	75.0-125			0.473	20
TPH C6 - C35	83.4	78.9	78.7	94.6	94.4	75.0-125			0.254	20
(S) o-Terphenyl				89.9	93.1	70.0-130				









Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resu reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section fo each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.





















Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1 6}	90010
Kentucky ²	16
Louisiana	Al30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA - ISO 17025 5	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



















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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

April 20, 2020

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX:

RE: Kaufman No 1 OrderNo.: 2004514

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/10/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: **2004514**Date Reported: **4/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2004514

Project: Kaufman No 1

Lab ID: 2004514-001 **Collection Date:** 4/9/2020 2:19:00 PM

Client Sample ID: MW1 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM ND 4/18/2020 12:48:00 AM B68201 Benzene 1.0 μg/L 1 Toluene ND 1.0 µg/L 4/18/2020 12:48:00 AM B68201 ND Ethylbenzene 1.0 μg/L 1 4/18/2020 12:48:00 AM B68201 Xylenes, Total ND 4/18/2020 12:48:00 AM 1.5 μg/L 1 96.9 70-130 Surr: 1,2-Dichloroethane-d4 %Rec 1 4/18/2020 12:48:00 AM B68201 Surr: Dibromofluoromethane 96.8 70-130 %Rec 4/18/2020 12:48:00 AM B68201 Surr: Toluene-d8 105 70-130 %Rec 4/18/2020 12:48:00 AM B68201

Lab ID: 2004514-002 **Collection Date:** 4/9/2020 10:53:00 AM

Client Sample ID: MW2 Matrix: AQUEOUS

Analyses Result **RL Oual Units DF** Date Analyzed **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 4/18/2020 1:13:00 AM B68201 µg/L Toluene ND 1.0 µg/L 1 4/18/2020 1:13:00 AM B68201 Ethylbenzene ND 4/18/2020 1:13:00 AM B68201 1.0 μg/L 1 Xylenes, Total ND 1.5 μg/L 1 4/18/2020 1:13:00 AM B68201 Surr: 1,2-Dichloroethane-d4 %Rec 99.4 70-130 4/18/2020 1:13:00 AM B68201 Surr: Dibromofluoromethane 98.9 70-130 %Rec 4/18/2020 1:13:00 AM B68201 Surr: Toluene-d8 105 70-130 %Rec 4/18/2020 1:13:00 AM B68201

Lab ID: 2004514-003 **Collection Date:** 4/9/2020 11:32:00 AM

Client Sample ID: MW3 Matrix: AQUEOUS

Result **RL Qual Units DF** Date Analyzed **Batch ID Analyses EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 4/18/2020 1:36:00 AM B68201 µg/L 1 Toluene ND 1.0 μg/L 1 4/18/2020 1:36:00 AM B68201 Ethylbenzene ND 1.0 μg/L 1 4/18/2020 1:36:00 AM B68201 Xylenes, Total ND 1.5 μg/L 1 4/18/2020 1:36:00 AM B68201 Surr: 1,2-Dichloroethane-d4 99.9 70-130 %Rec 1 4/18/2020 1:36:00 AM B68201 Surr: Dibromofluoromethane 98.3 70-130 %Rec 1 4/18/2020 1:36:00 AM B68201 Surr: Toluene-d8 105 70-130 %Rec 4/18/2020 1:36:00 AM B68201

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 5

Analytical Report

Lab Order: **2004514**Date Reported: **4/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2004514

Project: Kaufman No 1

Lab ID: 2004514-004 **Collection Date:** 4/9/2020 11:59:00 AM

Client Sample ID: MW4 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM ND 4/18/2020 2:01:00 AM B68201 Benzene 1.0 μg/L 1 Toluene ND 1.0 µg/L 4/18/2020 2:01:00 AM B68201 ND Ethylbenzene 1.0 μg/L 1 4/18/2020 2:01:00 AM B68201 Xylenes, Total ND 4/18/2020 2:01:00 AM B68201 1.5 μg/L 1 70-130 Surr: 1,2-Dichloroethane-d4 100 %Rec 1 4/18/2020 2:01:00 AM B68201 Surr: Dibromofluoromethane 99.2 70-130 %Rec 4/18/2020 2:01:00 AM B68201 Surr: Toluene-d8 104 70-130 %Rec 4/18/2020 2:01:00 AM B68201

Lab ID: 2004514-005 **Collection Date:** 4/9/2020 12:50:00 PM

Client Sample ID: MW5 Matrix: AQUEOUS

Analyses Result **RL Oual Units DF** Date Analyzed **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 4/18/2020 2:24:00 AM B68201 µg/L Toluene ND 1.0 µg/L 1 4/18/2020 2:24:00 AM B68201 Ethylbenzene ND B68201 1.0 μg/L 1 4/18/2020 2:24:00 AM Xylenes, Total ND 1.5 μg/L 1 4/18/2020 2:24:00 AM B68201 Surr: 1,2-Dichloroethane-d4 %Rec 98.4 70-130 1 4/18/2020 2:24:00 AM B68201 Surr: Dibromofluoromethane 98.8 70-130 %Rec 4/18/2020 2:24:00 AM B68201 Surr: Toluene-d8 105 70-130 %Rec 4/18/2020 2:24:00 AM B68201

Lab ID: 2004514-006 **Collection Date:** 4/9/2020 1:38:00 PM

Client Sample ID: MW6 Matrix: AQUEOUS

Result **RL Qual Units DF** Date Analyzed **Batch ID Analyses EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 4/18/2020 2:48:00 AM B68201 µg/L 1 Toluene ND 1.0 μg/L 1 4/18/2020 2:48:00 AM B68201 Ethylbenzene ND 1.0 μg/L 1 4/18/2020 2:48:00 AM B68201 Xylenes, Total ND 1.5 μg/L 1 4/18/2020 2:48:00 AM B68201 Surr: 1,2-Dichloroethane-d4 94.1 70-130 %Rec 1 4/18/2020 2:48:00 AM B68201 Surr: Dibromofluoromethane 95.6 70-130 %Rec 1 4/18/2020 2:48:00 AM B68201 Surr: Toluene-d8 106 70-130 %Rec 4/18/2020 2:48:00 AM B68201

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Lab Order: **2004514**Date Reported: **4/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2004514

Project: Kaufman No 1

Lab ID: 2004514-007 **Collection Date:** 4/9/2020 12:51:00 PM

Client Sample ID: Dup Matrix: AQUEOUS

Analyses	Result	RL Qual	Units	DF	Date Analyzed B	atch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	4/18/2020 3:12:00 AM	B68201
Toluene	ND	1.0	μg/L	1	4/18/2020 3:12:00 AM	B68201
Ethylbenzene	ND	1.0	μg/L	1	4/18/2020 3:12:00 AM	B68201
Xylenes, Total	ND	1.5	μg/L	1	4/18/2020 3:12:00 AM	B68201
Surr: 1,2-Dichloroethane-d4	97.8	70-130	%Rec	1	4/18/2020 3:12:00 AM	B68201
Surr: Dibromofluoromethane	97.0	70-130	%Rec	1	4/18/2020 3:12:00 AM	B68201
Surr: Toluene-d8	107	70-130	%Rec	1	4/18/2020 3:12:00 AM	B68201

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: **2004514**

20-Apr-20

Client: Timberwolf Environmental

Project: Kaufman No 1

Sample ID: mb2

Sample ID: 100ng lcs2	SampT	ype: LC	S	Tes	tCode: El	PA Method	8260: Volatile	s Short L	.ist	
Client ID: LCSW	Batch	n ID: B6	8201	F	RunNo: 6	8201				
Prep Date:	Analysis D	Date: 4/	17/2020	S	SeqNo: 2	358926	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.6	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.8	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

TestCode: EPA Method 8260: Volatiles Short List

		71								
Client ID: PBW	Batch	n ID: B6	8201	F	RunNo: 6	8201				
Prep Date:	Analysis D	Date: 4/	17/2020	\$	SeqNo: 2	358942	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.0	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: 2004514-001ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: MW1	Batcl	n ID: B6	8201	F	RunNo: 6	8201				
Prep Date:	Analysis D	Date: 4/	18/2020	5	SeqNo: 2	358960	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	92.3	70	130			
Toluene	20	1.0	20.00	0	98.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.5	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: 2004514-001amsd	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: MW1	Batch	ID: B6	8201	R	RunNo: 6	3201				
Prep Date:	Analysis D	ate: 4/	18/2020	S	SeqNo: 2	358961	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.5	70	130	4.29	20	
Toluene	19	1.0	20.00	0	93.6	70	130	4.79	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004514**

20-Apr-20

Client: Timberwolf Environmental

Project: Kaufman No 1

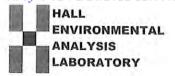
Sample ID: 2004514-001amsd SampType: MSD TestCode: EPA Method 8260: Volatiles Short List Client ID: MW1 Batch ID: **B68201** RunNo: 68201 Prep Date: Analysis Date: 4/18/2020 SeqNo: 2358961 Units: µg/L Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 9.9 10.00 99.3 70 130 0 0 Surr: 4-Bromofluorobenzene 9.7 10.00 96.9 70 130 0 0 0 Surr: Dibromofluoromethane 10 10.00 99.8 70 0 130 Surr: Toluene-d8 10 104 70 0 0 10.00 130

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: TIMBERWOLF ENVIRON Work Order Number: 2004514 RcptNo: 1 Received By: **Desiree Dominguez** 4/10/2020 8:10:00 AM Completed By: Leah Baca 4/10/2020 9:42:02 AM 4/10/20 Reviewed By: Chain of Custody 1. Is Chain of Custody sufficiently complete? Yes 🗸 No Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? Yes V No NA 🗍 4. Were all samples received at a temperature of >0° C to 6.0°C No [Yes 🗸 NA 🗌 5. Sample(s) in proper container(s)? Yes V No L 6. Sufficient sample volume for indicated test(s)? Yes V No 🗌 7. Are samples (except VOA and ONG) properly preserved? Yes V No No V 8. Was preservative added to bottles? NA 🗌 Yes 9. Received at least 1 vial with headspace <1/4" for AQ VOA? NA 🗌 Yes V No 🗌 10. Were any sample containers received broken? Yes No V # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 for pH: Yes V (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 12. Are matrices correctly identified on Chain of Custody? Yes V No 🗌 13. Is it clear what analyses were requested? Yes V No Checked by: PAD 4/10/20 14. Were all holding times able to be met? Yes V No. (If no, notify customer for authorization.) Special Handling (if applicable) Yes 15. Was client notified of all discrepancies with this order? No 🗌 NA V Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 2.0 Good

Chain-	Chain-ot-Custody Record	l urn-Around i ime:				M II II		MARK NT	PARAMETER	BITTAL
Client: 7 m bg	I'm bernolf	Standard	□ Rush			ANAL		YSTS	STS I ABORATOR	ATORY
		Project Name:				M	=	ironme	ntal.com	
Mailing Address:		Kautman	MCN No.	4	4901	4901 Hawkins NE		ondnerd	Albuquerque, NM 87109	
		Project #:			Tel. 5	505-345-3975		Fax 50	505-345-4107	
Phone #: 979-	1924-2139	HEC-180061	300Cel				Anal	/sis Re	Request	
email or Fax#:		Project Manager	iger:				[†] O ⁵		(ţu	
QA/QC Package:	☐ Level 4 (Full Validation)	Jim Fost	oster		AM \ O				əsdA\tn	
Accreditation:	□ Az Compliance	Sampler: N	Michael 1	Morse	O \ DE	(1.40		(A		
ype)		# of Coolers:	1-		(GE	g po	stals			
		Cooler Temp(including CF): 1	(including CF): 1.9	to.1=2.0%	12D	eţpo	∍W :		- 4.5	
Date Time I	Matrix Sample Name	Container Type and #	Preservative Type	HEAL No.		EDB (M	RCRA 8	V) 0328 S) 0728	oO lstoT	
2-6-14 19 Water	water NW!	Voa 2	HCI	100-	7					
8501 02-6-h	W MWZ	Voa 2	101	-002	>					
2811 2-6-4	W MW3	Voa 7	エンエ	-003	>					
6511 27-6-h	W MWY	Voa 2	101	100°	/					
0521 02-6h	W MW S	Joa Z	Hol	-005	/					
8851 02-64	W MW G	Voa 2	FCI	900-	>					
1521026-6	W Dup	Voa 7	エン	-003	>					
Date: Time: F	Relinquished by:	Received by:	via: the Mode	Date Time	Remarks:					
Date: Time: F	Rejulguished by: Make Walk	Received by:	Via: Courier	Date 'Time						
a massacra J	THE PARTY OF THE P	a rotto of botonstar	Section of the Contract							



ANALYTICAL REPORT

April 17, 2020







Cn

Sr

СQс

Gl

ΑI



Timberwolf Environmental, LLC

Sample Delivery Group: L1208080 04/11/2020 Samples Received: Project Number: HEL-180061 Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

Entire Report Reviewed By:

Olivia Studebaker

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Cp: Cover Page	1
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			Collected by	Collected date/time	Received dat	e/time
MW1 L1208080-01 GW			Michael Morse	04/09/20 14:19	04/11/20 08:3	0
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1460456	1	04/14/20 17:30	04/14/20 23:35	AEG	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	e/time
MW2 L1208080-02 GW			Michael Morse	04/09/20 10:53	04/11/20 08:3	0
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1460456	1	04/14/20 17:30	04/14/20 23:51	AEG	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	
MW3 L1208080-03 GW			Michael Morse	04/09/20 11:32	04/11/20 08:3	10
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1460456	1	04/14/20 17:30	04/15/20 00:07	AEG	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	
MW4 L1208080-04 GW			Michael Morse	04/09/20 11:59	04/11/20 08:3	0
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1460456	1	04/14/20 17:30	04/15/20 00:23	AEG	Mt. Juliet, TN
MW5 L1208080-05 GW			Collected by Michael Morse	Collected date/time 04/09/20 12:50	Received dat 04/11/20 08:3	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1460456	1	04/14/20 17:30	04/15/20 00:40	AEG	Mt. Juliet, TN
MW6 L1208080-06 GW			Collected by Michael Morse	Collected date/time 04/09/20 13:38	Received dat 04/11/20 08:3	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

WG1460456



















TPH by TCEQ Method 1005

04/14/20 17:30

04/15/20 00:56

AEG

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

¹Cp

















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Collected date/time: 04/09/20 14:19

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/14/2020 23:35	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/14/2020 23:35	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/14/2020 23:35	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/14/2020 23:35	WG1460456
(S) o-Terphenyl	107				70.0-130		04/14/2020 23:35	WG1460456



















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Collected date/time: 04/09/20 10:53

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/14/2020 23:51	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/14/2020 23:51	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/14/2020 23:51	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/14/2020 23:51	WG1460456
(S) o-Terphenyl	107				70.0-130		04/14/2020 23:51	WG1460456



















ONE LAB. NAPagev100 of 226

Collected date/time: 04/09/20 11:32

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/15/2020 00:07	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/15/2020 00:07	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:07	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:07	WG1460456
(S) o-Terphenyl	104				70.0-130		04/15/2020 00:07	WG1460456



















ONE LAB. NAPage 101 of 226

Collected date/time: 04/09/20 11:59

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/15/2020 00:23	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/15/2020 00:23	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:23	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:23	WG1460456
(S) o-Terphenyl	108				70.0-130		04/15/2020 00:23	WG1460456



















ONE LAB. NAPage 192 of 226

Collected date/time: 04/09/20 12:50

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/15/2020 00:40	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/15/2020 00:40	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:40	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:40	WG1460456
(S) o-Terphenyl	106				70.0-130		04/15/2020 00:40	WG1460456



















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Collected date/time: 04/09/20 13:38

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	04/15/2020 00:56	WG1460456
TPH C12 - C28	U		0.600	0.900	0.900	1	04/15/2020 00:56	WG1460456
TPH C28 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:56	WG1460456
TPH C6 - C35	U		0.600	0.900	0.900	1	04/15/2020 00:56	WG1460456
(S) o-Terphenyl	108				70.0-130		04/15/2020 00:56	WG1460456



















QUALITY CONTROL SUMMARY

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TPH by TCEQ Method 1005

L1208080-01,02,03,04,05,06

Method Blank (MB)

(MB) R3518990-1 04/	/14/20 22:14			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	109			70.0-130









Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3518990-2 04/14/20 22:30 • (LCSD) R3518990-3 04/14/20 22:46											
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	38.1	37.7	91.4	90.4	75.0-125			1.06	20	
TPH C12 - C28	41.7	40.6	40.6	97.4	97.4	75.0-125			0.000	20	
TPH C6 - C35	83.4	78.7	78.3	94.4	93.9	75.0-125			0.510	20	
(S) o-Terphenyl				102	102	70.0-130					









Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resu reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section fo each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.





















Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
lowa	364
Kansas	E-10277
Kentucky ^{1 6}	90010
Kentucky ²	16
Louisiana	Al30792
Louisiana 1	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	
A2LA - ISO 17025 5	1461.02	
Canada	1461.01	
EPA-Crypto	TN00003	

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

















Talograff England	E 10 H	Billing Information:					Analysis / Container / Preservative						Chain of Custody Page of		
Timberwolf Environmental			Timberwolf Environmental Pres 1920 W. Villa Maria Sto #2. Bryan, Tx.										Pace Analytical * tradional Center for realing & Innovation		
Report to: Foster Since				e team time					12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858						
Project Description: Kaufman No. 1				City/State Collected:								Phone: 800-767-5859 Fax: 615-758-5859 Pax: 615-758-5859 Pax: 2 0800			
Phone: 979-374-2139 Fax:	Glient Project # HEC-1800G			Lab Project #			00 5						L# E2	219	
Collected by (print): Michael Morse	Site/Facility ID #			P.O.#			2 2					Acctnum:TIME BTX			
Collected by (signature):	Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only)			Quote # Date Results Needed									Template: Prelogin: TSR: 823 - Oliva Studebal		
Immediately Packed on Ice N Y	Three D		Y (Kau Olliy)	Standon	d	No. of	U						PB: Shipped Via:	Tracgare	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	1			100 - 1 - 175			Remarks	Sample # (lab only)	
MWI		GW	N/A	4-9-20	1419	2	V,			14	181			-01	
MWZ		GW	1	4-9-70	1053	1	V,							02	
MW3	Committee of the Commit	GW		4-9-20		1	1						Services	03	
MWY		GW		4-9-20	1159	1	V						一一生为能	64	
MWS		GW,		4-9-20		Z	1							05	
MWG		GW	1	4-9-20	1338	2	V							06	
		40													
* Matrix: Remarks: SS - Soil AIR - Air F - Filter GW'- Groundwater B - Bioassay WW - WasteWater					FlowOther					COC Seal COC Sign Bottles	Sample Receipt Checklist COC Seal Present/Intact: NP Y N COC Signed/Accurate: N N Bottles arrive intact: N N Correct bottles used: N				
DW - Drinking Water OT - Other	Samples returned via:UPSFedExCourier			Tracking # 27 ' Time: Received by: (Signature)						Sufficient volume sent: If Applicable VOA Zero Headspace: Y N					
Relinquished by : (Signature)	Date: 4-10-20						79.		Trip Blank Re	Trip Blank Received: Yes / No HCL / MeoH TBR			Preservation Correct/Checked: _Y _N RAD SOREGN: ~25 mR/hr		
		Date:		Time: Received by: (Signature)			TEMPAS °C Bottles Received:				If preservation required by Login: Date/Time				
Relinquished by: (Signature)		Date:		Time: Re	Received for lab by: (Signat)	Date: Time:			Hold:		Condition: NCF / OK	

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: clients.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 14, 2020

Jim Foster

Timberwolf Environmental 1920 W Villa Maria Ste 205

Bryan, TX 77807

TEL: (979) 324-2139

FAX:

RE: Kaufman No. 1 OrderNo.: 2007230

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 7/7/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Batch ID

Datah ID

Analytical Report

RL Qual Units DF Date Analyzed

DI Qual Unita DE Data Analyzad

Lab Order: 2007230 Date Reported: 7/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2007230 **Project:** Kaufman No. 1

Analyses

Analyces

Lab ID: 2007230-001 Collection Date: 7/2/2020 11:50:00 AM

Client Sample ID: MW1 **Matrix:** GROUNDWATER Result

EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	CCM
Benzene	ND	1.0	μg/L	1	7/12/2020 3:09:00 PM	SL7026
Toluene	ND	1.0	μg/L	1	7/12/2020 3:09:00 PM	SL7026
Ethylbenzene	ND	1.0	μg/L	1	7/12/2020 3:09:00 PM	SL7026
Xylenes, Total	ND	1.5	μg/L	1	7/12/2020 3:09:00 PM	SL7026
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	7/12/2020 3:09:00 PM	SL7026
Surr: Dibromofluoromethane	100	70-130	%Rec	1	7/12/2020 3:09:00 PM	SL7026
Surr: Toluene-d8	101	70-130	%Rec	1	7/12/2020 3:09:00 PM	SL7026
Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4 Surr: Dibromofluoromethane	ND ND 103 100	1.0 1.5 70-130 70-130	μg/L μg/L %Rec %Rec	1 1 1 1 1	7/12/2020 3:09:00 PM 7/12/2020 3:09:00 PM 7/12/2020 3:09:00 PM 7/12/2020 3:09:00 PM	3

Lab ID: Collection Date: 7/2/2020 9:00:00 AM 2007230-002 Client Sample ID: MW2 Matrix: GROUNDWATER

Dogult

Allalyses	Kesuit	KL Qua	1 Ullits	DF	Date Allalyzeu	Datell ID
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	st: CCM
Benzene	ND	1.0	μg/L	1	7/12/2020 3:34:00 PM	SL7026
Toluene	ND	1.0	μg/L	1	7/12/2020 3:34:00 PM	SL7026
Ethylbenzene	ND	1.0	μg/L	1	7/12/2020 3:34:00 PM	SL7026
Xylenes, Total	ND	1.5	μg/L	1	7/12/2020 3:34:00 PM	SL7026
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	7/12/2020 3:34:00 PM	SL7026
Surr: Dibromofluoromethane	103	70-130	%Rec	1	7/12/2020 3:34:00 PM	SL7026
Surr: Toluene-d8	99.3	70-130	%Rec	1	7/12/2020 3:34:00 PM	SL7026

Lab ID: 2007230-003 Collection Date: 7/2/2020 9:50:00 AM Client Sample ID: MW3 Matrix: GROUNDWATER

Result	RL Qu	ual Units	DF	Date Analyzed	Ba	tch ID
				Ana	ılyst:	ССМ
ND	1.0	μg/L	1	7/12/2020 3:59:00 I	PM	SL7026
ND	1.0	μg/L	1	7/12/2020 3:59:00 I	PM	SL7026
ND	1.0	μg/L	1	7/12/2020 3:59:00 I	PM	SL7026
ND	1.5	μg/L	1	7/12/2020 3:59:00 I	PM	SL7026
105	70-130	%Rec	1	7/12/2020 3:59:00 I	PM	SL7026
101	70-130	%Rec	1	7/12/2020 3:59:00 I	PM	SL7026
99.7	70-130	%Rec	1	7/12/2020 3:59:00 I	PM	SL7026
	ND ND ND ND 105 101	ND 1.0 ND 1.0 ND 1.0 ND 1.5 105 70-130 101 70-130	ND 1.0 μg/L ND 1.0 μg/L ND 1.0 μg/L ND 1.5 μg/L 105 70-130 %Rec 101 70-130 %Rec	ND 1.0 μg/L 1 ND 1.0 μg/L 1 ND 1.0 μg/L 1 ND 1.5 μg/L 1 105 70-130 %Rec 1 101 70-130 %Rec 1	Ana ND 1.0 μg/L 1 7/12/2020 3:59:00 ND 1.0 μg/L 1 7/12/2020 3:59:00 ND 1.0 μg/L 1 7/12/2020 3:59:00 ND 1.5 μg/L 1 7/12/2020 3:59:00 ND	Analyst: ND 1.0 μg/L 1 7/12/2020 3:59:00 PM ND 1.0 μg/L 1 7/12/2020 3:59:00 PM ND 1.0 μg/L 1 7/12/2020 3:59:00 PM ND 1.5 μg/L 1 7/12/2020 3:59:00 PM 105 70-130 %Rec 1 7/12/2020 3:59:00 PM 101 70-130 %Rec 1 7/12/2020 3:59:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 1 of 4

Batch ID

Analytical Report

RL Qual Units DF Date Analyzed

Lab Order: 2007230 Date Reported: 7/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2007230 **Project:** Kaufman No. 1

Analyses

Lab ID: 2007230-004 Collection Date: 7/2/2020 11:05:00 AM

Result

Client Sample ID: MW4 Matrix: GROUNDWATER

EPA METHOD 8260: VOLATILES SHORT LIST Analyst: CCM ND 7/12/2020 4:23:00 PM SL7026 Benzene 1.0 μg/L 1 Toluene ND 1.0 μg/L 7/12/2020 4:23:00 PM SL7026 ND Ethylbenzene 1.0 μg/L 1 7/12/2020 4:23:00 PM SL7026 Xylenes, Total ND 7/12/2020 4:23:00 PM SL7026 1.5 μg/L 1 105 70-130 Surr: 1,2-Dichloroethane-d4 %Rec 1 7/12/2020 4:23:00 PM SL7026 Surr: Dibromofluoromethane 70-130 %Rec 7/12/2020 4:23:00 PM 102 SL7026 Surr: Toluene-d8 98.7 70-130 %Rec 7/12/2020 4:23:00 PM SL7026

Lab ID: 2007230-005 **Collection Date:** 7/2/2020 1:44:00 PM Client Sample ID: MW5 **Matrix:** GROUNDWATER

Analyses Result **RL Oual Units DF** Date Analyzed **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM ND 7/12/2020 4:48:00 PM Benzene 1.0 SL7026 µg/L Toluene ND 1.0 µg/L 1 7/12/2020 4:48:00 PM SL7026 Ethylbenzene ND 7/12/2020 4:48:00 PM SL7026 1.0 μg/L 1 Xylenes, Total ND 1.5 μg/L 1 7/12/2020 4:48:00 PM SL7026 Surr: 1,2-Dichloroethane-d4 %Rec 106 70-130 1 7/12/2020 4:48:00 PM SL7026 Surr: Dibromofluoromethane 101 70-130 %Rec 7/12/2020 4:48:00 PM SL7026 Surr: Toluene-d8 99.8 70-130 %Rec 7/12/2020 4:48:00 PM SL7026

Lab ID: 2007230-006 **Collection Date:** 7/2/2020 12:53:00 PM Client Sample ID: MW₆ Matrix: GROUNDWATER

Result **RL Qual Units DF** Date Analyzed **Batch ID Analyses EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 7/12/2020 5:13:00 PM SL7026 µg/L 1 Toluene ND 1.0 μg/L 1 7/12/2020 5:13:00 PM SL7026 Ethylbenzene ND 1.0 μg/L 1 7/12/2020 5:13:00 PM SL7026 Xylenes, Total ND 1.5 μg/L 1 7/12/2020 5:13:00 PM SL7026 Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 1 7/12/2020 5:13:00 PM SL7026 Surr: Dibromofluoromethane 101 70-130 %Rec 1 7/12/2020 5:13:00 PM SL7026 Surr: Toluene-d8 100 70-130 %Rec 1 7/12/2020 5:13:00 PM SL7026

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- \mathbf{E} Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 2 of 4

Analytical Report

Lab Order: 2007230

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/14/2020

CLIENT: Timberwolf Environmental Lab Order: 2007230

Project: Kaufman No. 1

Lab ID: 2007230-007 **Collection Date:** 7/2/2020 1:44:00 PM

Client Sample ID: DUP Matrix: GROUNDWATER

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene ND 1.0 7/12/2020 5:37:00 PM SL7026 μg/L 1 Toluene ND 1.0 μg/L 7/12/2020 5:37:00 PM SL7026 ND Ethylbenzene 1.0 μg/L 1 7/12/2020 5:37:00 PM SL7026 Xylenes, Total ND 1.5 μg/L 1 7/12/2020 5:37:00 PM SL7026 107 70-130 Surr: 1,2-Dichloroethane-d4 %Rec 1 7/12/2020 5:37:00 PM SL7026 Surr: Dibromofluoromethane 102 70-130 %Rec 7/12/2020 5:37:00 PM SL7026 Surr: Toluene-d8 99.0 70-130 %Rec 7/12/2020 5:37:00 PM SL7026

Lab ID: 2007230-008 Collection Date:

Client Sample ID: Trip Blank Matrix: GROUNDWATER

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Analy	st: CCM
Benzene	ND	1.0	μg/L	1	7/12/2020 6:02:00 PM	M SL7026
Toluene	ND	1.0	μg/L	1	7/12/2020 6:02:00 PM	M SL7026
Ethylbenzene	ND	1.0	μg/L	1	7/12/2020 6:02:00 PM	M SL7026
Xylenes, Total	ND	1.5	μg/L	1	7/12/2020 6:02:00 PM	M SL7026
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	7/12/2020 6:02:00 PM	M SL7026
Surr: Dibromofluoromethane	100	70-130	%Rec	1	7/12/2020 6:02:00 PM	M SL7026
Surr: Toluene-d8	99.1	70-130	%Rec	1	7/12/2020 6:02:00 PM	M SL7026

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 4

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007230**

14-Jul-20

Client: Timberwolf Environmental

Project: Kaufman No. 1

Sample ID: 100ng lcs	SampT	ype: LC	s	Tes	8260: Volatile	s Short L	ist						
Client ID: LCSW	Batch	Batch ID: SL70266			RunNo: 70266								
Prep Date:	Analysis D	ate: 7/	12/2020	S	SeqNo: 2	442593	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	19	1.0	20.00	0	96.6	70	130						
Toluene	20	1.0	20.00	0	101	70	130						
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130						
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130						
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130						
Surr: Toluene-d8	10		10.00		99.8	70	130						

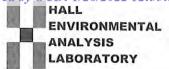
Sample ID: mb	SampT	SampType: MBLK TestCode: EPA Method 8260: Volatiles Short List											
Client ID: PBW	Batch	n ID: SL	70266	F	RunNo: 7	0266							
Prep Date:	Analysis D	Date: 7/	12/2020	9	SeqNo: 2442594 U			Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	ND	1.0					_						
Toluene	ND	1.0											
Ethylbenzene	ND	1.0											
Xylenes, Total	ND	1.5											
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130						
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130						
Surr: Dibromofluoromethane	10		10.00		99.8	70	130						
Surr: Toluene-d8	9.9		10.00		99.1	70	130						

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 4



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Ti	imberwolf Environmental	Work Order Number	200	7230			RcptNo: 1
Received By:	Scott Anderson	7/7/2020 8:25:00 AM					
Completed By: E	Emily Mocho	7/7/2020 8:48:20 AM					
Reviewed By:	DR 717126						
Chain of Custo							
1. Is Chain of Custo	ody complete?		Yes	V	No		Not Present
2. How was the sar	mple delivered?		Cou	rier			
Log In							
ATT	made to cool the samples?		Yes	V	No		NA 🗆
4. Were all samples	s received at a temperature	of >0° C to 6.0°C	Yes	V	No		NA 🗆
5. Sample(s) in pro	per container(s)?		Yes	~	No		
6. Sufficient sample	volume for indicated test(s)?	Yes	v	No		
7. Are samples (exc	cept VOA and ONG) proper	ly preserved?	Yes	V	No		
8. Was preservative	added to bottles?		Yes		No	V	NA 🗆
9. Received at least	1 vial with headspace <1/4	" for AQ VOA?	Yes	V	No		NA 🗆
10, Were any sample	e containers received broke	n?	Yes		No	V	# of preserved
11. Does paperwork (Note discrepanc	match bottle labels? ies on chain of custody)		Yes	V	No		bottles checked for pH: (<2 or >12 unless noted)
	ectly identified on Chain of	Custody?	Yes	V	No		Adjusted?
3. Is it clear what ar	nalyses were requested?		Yes	V	No		100-
	times able to be met? omer for authorization.)		Yes	v	No		Checked by: SH 7.7
Special Handling	g (if applicable)						
15. Was client notifie	ed of all discrepancies with	this order?	Yes		No		NA 🗹
Person No	tified:	Date:	_	_		-	
By Whom:		Via: [eM	ail [Phone	Fax	In Person
Regarding							
Client Instr	ructions:						
16. Additional rema	rks:						
	Temp °C Condition S	eal Intact Seal No St	Seal D	ate	Signed I	Зу	

ceive INTERNATIONAL PROPERTY OF THE PROPERTY O	AL ORY					2 1	2:3	5:39	PA																	Pag	ge 114 of
NO	ABO	www.hallenvironmental.com	Albuquerque NM 87109	7 247 440	505-345-4107	rednest	(ju	əsq	//tn	iəse				oO lsto													
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urn-Around me:	Standard	Project Name:	ス	Project #:	Th	-	Project Manager	1	SI C	Sampler: N		# of Coolers:	Cooler Temp(including CF):	Container Type and #	Vox 3		195	VOA 3	Vot 3	VOA 3	VOA 3	VOA 2.			i.	Kecewed by:	Received by: Vii
Chain-of-Custody Record	Environmental		W. Villa Maria	7 79	27 11: 7 120	64 613	team + Targe work. Con		☐ Level 4 (Full Validation)	☐ Az Compliance				Samula Nama	Mw (2 mm	MW3	N. 4	MWS	NW G	Dup	Trip Blank				M.	ed by:
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ANALYTICAL REPORT

July 13, 2020

















Timberwolf Environmental, LLC

Sample Delivery Group: L1236413

Samples Received: 07/03/2020

Project Number: HEL-180061 Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

Entire Report Reviewed By:

Olivia Studebaker

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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SAMPLE SUMMARY



			Collected by	Collected date/time		
MW 1 L1236413-01 GW			Michael Morse	07/02/20 00:00	07/03/20 08	:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1505807	1	07/09/20 06:00	07/09/20 16:56	FM	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	
MW 2 L1236413-02 GW			Michael Morse	07/02/20 00:00	07/03/20 08:	:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1505807	1	07/09/20 06:00	07/09/20 16:56	FM	Mt. Juliet, TN
			Collected by	Collected date/time		
MW 3 L1236413-03 GW			Michael Morse	07/02/20 00:00	07/03/20 08	:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1505807	1	07/09/20 06:00	07/09/20 17:13	FM	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	te/time
MW 4 L1236413-04 GW			Michael Morse	07/02/20 00:00	07/03/20 08	:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1505807	1	07/09/20 06:00	07/09/20 17:13	FM	Mt. Juliet, TN
MW 5 L1236413-05 GW			Collected by Michael Morse	Collected date/time 07/02/20 00:00	Received dat 07/03/20 08	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1505807	1	07/09/20 06:00	07/09/20 17:29	FM	Mt. Juliet, TN
MW 6 L1236413-06 GW			Collected by Michael Morse	Collected date/time 07/02/20 00:00	Received dat 07/03/20 08	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

WG1505807

1.05

07/09/20 06:00

07/09/20 17:29

FM

Mt. Juliet, TN



















Olivia Studebaker Project Manager

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Cp

















ONE LAB. NAPagev119 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C12 - C28	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C28 - C35	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C6 - C35	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
(S) o-Terphenyl	118				70.0-130		07/09/2020 16:56	WG1505807



















ONE LAB. NAPagev120 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C12 - C28	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C28 - C35	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
TPH C6 - C35	U		0.600	0.900	0.900	1	07/09/2020 16:56	WG1505807
(S) o-Terphenyl	108				70.0-130		07/09/2020 16:56	WG1505807



















ONE LAB. NAPagev121 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C12 - C28	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C28 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C6 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
(S) o-Terphenyl	115				70.0-130		07/09/2020 17:13	WG1505807



















ONE LAB. NAPagev122 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C12 - C28	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C28 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
TPH C6 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:13	WG1505807
(S) o-Terphenyl	106				70.0-130		07/09/2020 17:13	WG1505807



















ONE LAB. NAPagev123 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL Dilution		Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	07/09/2020 17:29	WG1505807
TPH C12 - C28	U		0.600	0.900	0.900	1	07/09/2020 17:29	WG1505807
TPH C28 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:29	WG1505807
TPH C6 - C35	U		0.600	0.900	0.900	1	07/09/2020 17:29	WG1505807
(S) o-Terphenyl	120				70.0-130		07/09/2020 17:29	WG1505807



















SAMPLE RESULTS - 06 L1236413

ONE LAB. NAPagev124 of 226

Collected date/time: 07/02/20 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.630	0.900	0.945	1.05	07/09/2020 17:29	WG1505807
TPH C12 - C28	U		0.630	0.900	0.945	1.05	07/09/2020 17:29	WG1505807
TPH C28 - C35	U		0.630	0.900	0.945	1.05	07/09/2020 17:29	WG1505807
TPH C6 - C35	U		0.630	0.900	0.945	1.05	07/09/2020 17:29	WG1505807
(S) o-Terphenyl	105				70.0-130		07/09/2020 17:29	WG1505807



















QUALITY CONTROL SUMMARY

ONE LAB. NA Rage 125 of 226

TPH by TCEQ Method 1005

L1236413-01,02,03,04,05,06

Method Blank (MB)

(MB) R3548367-1 07	/09/20 16:05			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	116			70.0-130











(LCS) R3548367-2 07	LCS) R3548367-2 07/09/20 16:22 • (LCSD) R3548367-3 07/09/20 16:39												
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits			
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%			
TPH C6 - C12	41.7	37.0	37.3	88.7	89.4	75.0-125			0.808	20			
TPH C12 - C28	41.7	40.4	40.3	96.9	96.6	75.0-125			0.248	20			
TPH C6 - C35	83.4	77.4	77.6	92.8	93.0	75.0-125			0.258	20			
(S) o-Terphenyl				112	114	70.0-130							





Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
J	Not detected at the Sample Detection Limit.
Jnadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resureported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.





















Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

40660
17-026
AZ0612
88-0469
2932
TN00003
PH-0197
E87487
NELAP
923
TN00003
200008
C-TN-01
364
E-10277
90010
16
Al30792
LA180010
TN0002
324
M-TN003
9958
047-999-395
TN00003
340
CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA - ISO 17025 5	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



















			Billing Inform	mation:				A	nalysis / Conta	iner / Prese	rvative		С	hain of Custody	Page of
			Jim	Foster	vironmental	Pres Chk								Pace	Analytical*
			1920 U Bryon	v. Villa	Maria #2	05							1	/ National Cer	nter for Testing & Innovation
Report to: Email 1				etecntimberwolf.com									N P	2065 Lebanon Rd Mount Juliet, TN 371 Phone: 615-758-585	8
Project Description: Kaufman	No. 1			City/State	NM	-								Phone: 800-767-585 ax: 615-758-5859	36413
Phone:	Client Project #			Lab Project #			7						l	# 610	E179
Fax:	HEC-		61	P.O. #			0							Table #	
Collected by (print): Michael Morse	Site/Facility ID F			7.0. #			100							Acctnum: T	MENBIX
Collected by (signature): Immediately Packed on Ice N Y	Next Day	Five 0 5 Day 10 Da	Day	Quote # Date Res	sults Needed	No.	CER						-	Prelogin:	olivia Studebake
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	F							Remarks	Sample # (lab only)
MWI	1150	GW	NA	7-2020	0	3	1								-61
Mwz	900	1	1	7-2-20		2	1								02
Mw 3	950			7-2-20		2	1								03
MWY	1105			7-2-2		2	V /								
MW 5	1344			7-2-20		2	V/								05
MW 6	1253	1	1	7-2-20	2	2	V								00
			1												· 有日,
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay	Remarks:									Temp		COC Si Bottle	gned/A	Accurate: ive intact:	hecklist Y N
WW - WasteWater DW - Drinking Water OT - Other	Samples returnUPSFed				Tracking# 17	50	00	02	568	Other	a	Suffic VOA Ze	ro Hea	tles used: volume sent: If Applicated adspace: n Correct/Ch	ole Y N
Relinquished by : (Signature) Relinquished by : (Signature)		Date: 7-Z-Date:	20	1630	Received by: (Signa Received by: (Signa				Trip Blank Re	1	HCL / MeoH BR es Received:		AD 9	CREEN:	
						1			7-1=		12				
Relinquished by: (Signature) Released to Imaging: 10/21/2	2022 2:09:24	Date: PM		Time:	Received for lab by	(Signa	iture)		Date:	Time	EUK	Hold:			NCF / OK



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

November 16, 2020

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX:

RE: Kaufman OrderNo.: 2011429

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/6/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW1

 Project:
 Kaufman
 Collection Date: 11/5/2020 2:40:00 PM

 Lab ID:
 2011429-001
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	ССМ
Benzene	ND	1.0	μg/L	1	11/15/2020 3:26:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 3:26:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 3:26:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 3:26:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	11/15/2020 3:26:00 AM	SL73360
Surr: Dibromofluoromethane	102	70-130	%Rec	1	11/15/2020 3:26:00 AM	SL73360
Surr: Toluene-d8	97.3	70-130	%Rec	1	11/15/2020 3:26:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 10

Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW2

 Project:
 Kaufman
 Collection Date: 11/5/2020 10:48:00 AM

 Lab ID:
 2011429-002
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	ССМ
Benzene	ND	1.0	μg/L	1	11/15/2020 3:50:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 3:50:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 3:50:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 3:50:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	11/15/2020 3:50:00 AM	SL73360
Surr: Dibromofluoromethane	100	70-130	%Rec	1	11/15/2020 3:50:00 AM	SL73360
Surr: Toluene-d8	96.8	70-130	%Rec	1	11/15/2020 3:50:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 10

Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW3

 Project:
 Kaufman
 Collection Date: 11/5/2020 11:40:00 AM

 Lab ID:
 2011429-003
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	ССМ
Benzene	ND	1.0	μg/L	1	11/15/2020 4:13:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 4:13:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 4:13:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 4:13:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	11/15/2020 4:13:00 AM	SL73360
Surr: Dibromofluoromethane	100	70-130	%Rec	1	11/15/2020 4:13:00 AM	SL73360
Surr: Toluene-d8	97.8	70-130	%Rec	1	11/15/2020 4:13:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 10

Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW4

 Project:
 Kaufman
 Collection Date: 11/5/2020 12:15:00 PM

 Lab ID:
 2011429-004
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	CCM
Benzene	ND	1.0	μg/L	1	11/15/2020 4:36:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 4:36:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 4:36:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 4:36:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	11/15/2020 4:36:00 AM	SL73360
Surr: Dibromofluoromethane	101	70-130	%Rec	1	11/15/2020 4:36:00 AM	SL73360
Surr: Toluene-d8	97.6	70-130	%Rec	1	11/15/2020 4:36:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW5

 Project:
 Kaufman
 Collection Date: 11/5/2020 1:36:00 PM

 Lab ID:
 2011429-005
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	ССМ
Benzene	ND	1.0	μg/L	1	11/15/2020 4:59:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 4:59:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 4:59:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 4:59:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	11/15/2020 4:59:00 AM	SL73360
Surr: Dibromofluoromethane	97.4	70-130	%Rec	1	11/15/2020 4:59:00 AM	SL73360
Surr: Toluene-d8	96.9	70-130	%Rec	1	11/15/2020 4:59:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: MW6

 Project:
 Kaufman
 Collection Date: 11/5/2020 12:48:00 PM

 Lab ID:
 2011429-006
 Matrix: GROUNDWA
 Received Date: 11/6/2020 7:58:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	11/15/2020 5:23:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 5:23:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 5:23:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 5:23:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	11/15/2020 5:23:00 AM	SL73360
Surr: Dibromofluoromethane	100	70-130	%Rec	1	11/15/2020 5:23:00 AM	SL73360
Surr: Toluene-d8	94.8	70-130	%Rec	1	11/15/2020 5:23:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental

Client Sample ID: DUP

Project: Kaufman

Collection Date: 11/5/2020

Lab ID: 2011429-007 **Matrix:** GROUNDWA **Received Date:** 11/6/2020 7:58:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	CCM
Benzene	ND	1.0	μg/L	1	11/15/2020 5:46:00 AM	SL73360
Toluene	ND	1.0	μg/L	1	11/15/2020 5:46:00 AM	SL73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 5:46:00 AM	SL73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 5:46:00 AM	SL73360
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	11/15/2020 5:46:00 AM	SL73360
Surr: Dibromofluoromethane	99.6	70-130	%Rec	1	11/15/2020 5:46:00 AM	SL73360
Surr: Toluene-d8	97.1	70-130	%Rec	1	11/15/2020 5:46:00 AM	SL73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 11/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Client Sample ID: Trip Blank

Project: Kaufman Collection Date:

Lab ID: 2011429-008 **Matrix:** GROUNDWA **Received Date:** 11/6/2020 7:58:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	11/15/2020 7:42:00 AM	S73360
Toluene	ND	1.0	μg/L	1	11/15/2020 7:42:00 AM	S73360
Ethylbenzene	ND	1.0	μg/L	1	11/15/2020 7:42:00 AM	S73360
Xylenes, Total	ND	1.5	μg/L	1	11/15/2020 7:42:00 AM	S73360
Surr: 1,2-Dichloroethane-d4	99.0	70-130	%Rec	1	11/15/2020 7:42:00 AM	S73360
Surr: Dibromofluoromethane	99.3	70-130	%Rec	1	11/15/2020 7:42:00 AM	S73360
Surr: Toluene-d8	97.2	70-130	%Rec	1	11/15/2020 7:42:00 AM	S73360

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011429**

16-Nov-20

Client: Timberwolf Environmental

Project: Kaufman

Sample ID: 100ng lcs	SampT	SampType: LCS TestCode: EPA Method 8260: Volatiles Short List								
Client ID: LCSW	Batch	Batch ID: SL73360 RunNo: 73360								
Prep Date:	Analysis D	ate: 11	/14/2020	8	SeqNo: 2	582625	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.8	70	130			
Toluene	19	1.0	20.00	0	96.1	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		99.5	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			
Sample ID: mb	SampT	SampType: MBLK TestCode: EPA Method 8260: Volatiles Short List								

Campio ib. iiib	Ourip.	ypo. III			Todosco. El Ametroa ozor. Volatico oriori ziot						
Client ID: PBW	Batc	h ID: SL	73360	F	RunNo: 7	3360					
Prep Date:	Analysis D	Date: 11	1/14/2020	\$	SeqNo: 2	582626	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	1.5									
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130				
Surr: Dibromofluoromethane	10		10.00		100	70	130				
Surr: Toluene-d8	9.7		10.00		97.4	70	130				

Sample ID: 100ng lcs2	SampType: LCS			Tes	8260: Volatile	s Short L	.ist			
Client ID: LCSW	Batch	Batch ID: \$73360 RunNo: 73360								
Prep Date:	Analysis D	Date: 11/15/2020 SeqNo: 2582673					Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.8		10.00		98.1	70	130			

Sample ID: mb2	SampTy	SampType: MBLK				TestCode: EPA Method 8260: Volatiles Short List							
Client ID: PBW	Batch	ID: S7	3360	R	RunNo: 7 3	3360							
Prep Date:	Analysis Da	ate: 11	/15/2020	S	SeqNo: 2	582674	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	ND	1.0											
Toluene	ND	1.0											

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011429**

16-Nov-20

Client: Timberwolf Environmental

Project: Kaufman

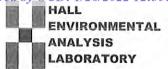
Sample ID: mb2 Client ID: PBW	SampType: MBLK Batch ID: S73360			TestCode: EPA Method 8260: Volatiles Short List RunNo: 73360						
Prep Date:	Analysis D	ate: 11	1/15/2020	5	SeqNo: 2	582674	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.7		10.00		97.1	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 10



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX; 505-345-4107

Sample Log-In Check List

Website: clients.hallenvironmental.com Client Name: Timberwolf Environmental Work Order Number: 2011429 RcptNo: 1 Received By: Cheyenne Cason 11/6/2020 7:58:00 AM Completed By: **Emily Mocho** 11/6/2020 12:02:22 PM Reviewed By: 2M116/20 Chain of Custody 1. Is Chain of Custody complete? No 🗌 Not Present Yes 🗸 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? No 🗌 Yes 🗸 NA 🗌 No 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 Yes 🗸 Sample(s) in proper container(s)? Yes V No 🗌 6. Sufficient sample volume for indicated test(s)? Yes V No 🗌 Yes V No 🗌 7. Are samples (except VOA and ONG) properly preserved? No V NA 🗌 8. Was preservative added to bottles? Yes Yes V No 🗌 NA 🗌 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes No V 10. Were any sample containers received broken? # of preserved bottles checked 11. Does paperwork match bottle labels? Yes V No 🗌 for pH: (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 12. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗌 V No 🗌 13. Is it clear what analyses were requested? Yes Checked by: 116/20 No 🗌 14. Were all holding times able to be met? Yes 🗸 (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No 🗌 NA V Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information

Seal Date

Signed By

Cooler No

1

Temp °C

4.9

Condition

Yes

Good

Seal Intact Seal No

Circle Custody Record					_	HAII			FNVTRONMENTAL	LAI
Client: (The beruso 1 E Environmental	☐ Standard	Rush 🗆				NA	YS	S	ANALYSTS LABORATOR	A NO
	Project Name:		per Jim Foster			www.hallenvironmental.com	llenviro	nments	al.com	
Mailing Address:	Kaufin	an	Em 11/0/20	490	4901 Hawkins NE	ns NE	- Albuc	nerque	Albuquerque, NM 87109	
	Project #:	Ċ		Tel	Tel. 505-345-3975	5-3975	Fa	209-3	Fax 505-345-4107	
Phone #: 975-304-2139	2/	000					Analysis Request	s Requ	lest	
email or Fax#:	Project Manager	iger:					ÞΟ		(10	
QA/QC Package:	Jim	Foster	em ulbro	S08) e	ЬCB,₽	SWIS	PO4, S		iəsdA\t	
Accreditation: Az Compliance	Sampler:			AO		3270	' ⁷ O		uəs	
	On Ice:	☑ Yes	□ No	/ 07			N '	(A	Pre	
ype)_	# of Coolers:	-		A5)	_) w.	
	Cooler Temp(including cF): [-]	(including CF): 4. 0	1000年1	12D					ıOjilo	
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1048 GW MWZ			002	>						
1140 GW MW3			603	>						
1215 GW MWY			P00	1						
1336 GW MWS			006	/						
1248 5W MW6			000	/						
V 6W DUD			200	/						
W Trip Blank		\	300	>						
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	000		16/20 0138				9	4		



ANALYTICAL REPORT

November 16, 2020

Timberwolf Environmental, LLC

Sample Delivery Group: L1282855 Samples Received: 11/06/2020

Project Number: 180061

Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

¹Cp

²Tc















Entire Report Reviewed By:

Olivia Studebaker
Project Manager

Results relate only to the items tested or calibrated and are reported size used to see the step of the laboratory white approach while the septoduced, except in full, without written approach of the laboratory white approach with results of the laboratory standard operating procedures ENV-SOP-MTLI-0068 (More aspining conducted by Price Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTLI-0068 (More aspining conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
MW1 L1282855-01	5
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Al: Accreditations & Locations	13
Sc: Sample Chain of Custody	14

















SAMPLE SUMMARY



			Collected by	Collected date/time	Received dat	te/time
MW1 L1282855-01 GW			J. Foster	11/05/20 14:40	11/06/20 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1575440	1.01	11/12/20 12:30	11/14/20 14:54	CAG	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	te/time
MW2 L1282855-02 GW			J. Foster	11/05/20 10:48	11/06/20 09:0	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1575440	1	11/12/20 12:30	11/14/20 15:09	CAG	Mt. Juliet, TN
NW 1400055 00 0W			Collected by J. Foster	Collected date/time 11/05/20 11:40	Received data	
MW3 L1282855-03 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1575440	1.01	11/12/20 12:30	11/14/20 15:24	CAG	Mt. Juliet, TN
			Collected by	Collected date/time	Received dat	te/time
MW4 L1282855-04 GW			J. Foster	11/05/20 12:15	11/06/20 09:0	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1575440	1	11/12/20 12:30	11/14/20 15:39	CAG	Mt. Juliet, TN
MW5 L1282855-05 GW			Collected by J. Foster	Collected date/time 11/05/20 13:36	Received date/time 11/06/20 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1575440	1.01	11/12/20 12:30	11/14/20 15:54	CAG	Mt. Juliet, TN
MW6 L1282855-06 GW			Collected by J. Foster	Collected date/time 11/05/20 12:48	Received dat 11/06/20 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

WG1575440



















TPH by TCEQ Method 1005

11/12/20 12:30

11/14/20 16:09

CAG

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Cp

















Olivia Studebaker Project Manager

ONE LAB. NAPagev146 of 226

Collected date/time: 11/05/20 14:40

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	11/14/2020 14:54	WG1575440
TPH C12 - C28	U		0.606	0.900	0.909	1.01	11/14/2020 14:54	WG1575440
TPH C28 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 14:54	WG1575440
TPH C6 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 14:54	WG1575440
(S) o-Terphenyl	98.6				70.0-130		11/14/2020 14:54	WG1575440



















ONE LAB. NAPagev147 of 226

Collected date/time: 11/05/20 10:48

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/14/2020 15:09	WG1575440
TPH C12 - C28	U		0.600	0.900	0.900	1	11/14/2020 15:09	WG1575440
TPH C28 - C35	U		0.600	0.900	0.900	1	11/14/2020 15:09	WG1575440
TPH C6 - C35	U		0.600	0.900	0.900	1	11/14/2020 15:09	WG1575440
(S) o-Terphenyl	98.1				70.0-130		11/14/2020 15:09	WG1575440



















ONE LAB. NAPage 148 of 226

Collected date/time: 11/05/20 11:40

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	11/14/2020 15:24	WG1575440
TPH C12 - C28	U		0.606	0.900	0.909	1.01	11/14/2020 15:24	WG1575440
TPH C28 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 15:24	WG1575440
TPH C6 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 15:24	WG1575440
(S) o-Terphenyl	98.0				70.0-130		11/14/2020 15:24	WG1575440



















ONE LAB. NAPagev149 of 226

Collected date/time: 11/05/20 12:15

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	11/14/2020 15:39	WG1575440
TPH C12 - C28	U		0.600	0.900	0.900	1	11/14/2020 15:39	WG1575440
TPH C28 - C35	U		0.600	0.900	0.900	1	11/14/2020 15:39	WG1575440
TPH C6 - C35	U		0.600	0.900	0.900	1	11/14/2020 15:39	WG1575440
(S) o-Terphenyl	98.7				70.0-130		11/14/2020 15:39	WG1575440



















ONE LAB. NAPage 150 of 226

Collected date/time: 11/05/20 13:36

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	11/14/2020 15:54	WG1575440
TPH C12 - C28	U		0.606	0.900	0.909	1.01	11/14/2020 15:54	WG1575440
TPH C28 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 15:54	WG1575440
TPH C6 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 15:54	WG1575440
(S) o-Terphenyl	97.6				70.0-130		11/14/2020 15:54	WG1575440



















ONE LAB. NAPagev151 of 226

Collected date/time: 11/05/20 12:48

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	11/14/2020 16:09	WG1575440
TPH C12 - C28	U		0.606	0.900	0.909	1.01	11/14/2020 16:09	WG1575440
TPH C28 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 16:09	WG1575440
TPH C6 - C35	U		0.606	0.900	0.909	1.01	11/14/2020 16:09	WG1575440
(S) o-Terphenyl	98.9				70.0-130		11/14/2020 16:09	WG1575440



















QUALITY CONTROL SUMMARY

ONE LAB. NA Page 152 of 226

TPH by TCEQ Method 1005

L1282855-01,02,03,04,05,06

Method Blank (MB)

(MB) R3592816-1 11/13	3/20 00:27			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	95.2			70.0-130











(LCS) R3592816-2 11/13	3/20 00:42 • (LCSE	D) R3592816-3	3 11/13/20 00:58	3							
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	40.9	38.3	98.1	91.8	75.0-125			6.57	20	
TPH C12 - C28	41.7	41.6	38.6	99.8	92.6	75.0-125			7.48	20	
TPH C6 - C35	83.4	82.5	76.9	98.9	92.2	75.0-125			7.03	20	
(S) o-Terphenyl				101	95.2	70.0-130					







Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resure ported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.





















Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky 16	90010
Kentucky ²	16
Louisiana	Al30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA
· ·	

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



















		94 34 1	Billing Info	rmation:				,	Analysis /	Container /	Preservative		Chain of Custody	Page of
Timbersolf	Env					Pres Chk							Pace / National Ce	Analytica!*
Timberus IF Bayan A- Report to:	77807		Email To:										12065 Lebanon Rd Mount Juliet, TN 37	
Project Description:				City/State Collected: Lab Project #	~ Jugar	6,							Phone: 615-758-585 Phone: 800-767-585 Fax: 615-758-5859	
Phone: Fax:	Client Project			Lab Project #	/	- 1							1081	192899
Collected by (print):	Site/Facility ID	1061		P.O. #			5						Acctnum:	E TORRESTO
Collected by (signature):		ab MUST Be I		Quote #			100						Template: Prelogin:	
Immediately Packed on Ice N Y		y 5 Day / 10 Day ay		Date Resul	ts Needed	No. of	14						TSR:	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs							Shipped Via:	Sample # (lab only)
MWI	9	GW		11/5/20	1440	2	1							-51
MWZ	1			1	1048	1	1							02
Mw3					1140	-	1							03
MWY					1215		1					2.15		04
MWS					1336		V	1000						05
MW6					1248	1	1		,			是怎么		06
MWZ	V	V			1440				-					
								10 m						
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:								pH		emp	COC Sea COC Sig Bottles	Sample Receipt Ch il Present/Intact gned/Accurate: s arrive intact: bottles used:	necklist : LNP Y N
OT - Other	Samples returUPSFe	ned via: edExCour	rier	Tra	cking#	ar	2 1	0418	0	315		Suffici	ent volume sent: If Applicab To Headspace:	
Relinquished by : (Signature)		Date: /	20	Time: Rec	eived by: (Signa	ture)			Trip Bla	nk Received	Yes /No HCL / MeoH TBR	Preserv	vation Correct/Che	ecked: M_N
Relinquished by : (Signature)		Date:			eived by: (Signa				Femp! 1.5%	1=1,6	Bottles Received:		vation required by Log	gin: Date/Time
Relinquished by : (Signature) Released to Imaging: 10/21/	2022 2.09.2	Date:	1	Time: Rec	eived for lab by:	(Signat	ture)		Date:	/20	Time: Q'.00	Hold:		Condition: NCF OK



ANALYTICAL REPORT

180061

January 15, 2021

















Timberwolf Environmental, LLC

L1305406 Sample Delivery Group: Samples Received: 01/12/2021

Project Number:

Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

Entire Report Reviewed By:

Olivia Studebaker

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858

800-767-5859

www.pacenational.com

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180061

L1305406

01/15/21 16:47

SAMPLE SUMMARY



MW1 L1305406-01 GW			Collected by Jim Foster	Collected date/time 01/11/21 14:20	Received date 01/12/21 08:45	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
TPH by TCEQ Method 1005	WG1605410	1	date/time 01/14/21 08:38	01/14/21 14:43	TMM	Mt. Juliet, TN
MW2 L1305406-02 GW			Collected by Jim Foster	Collected date/time 01/11/21 10:20	Received dat 01/12/21 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1605410	1.01	01/14/21 08:38	01/14/21 14:56	TMM	Mt. Juliet, TN
MW3 L1305406-03 GW			Collected by Jim Foster	Collected date/time 01/11/21 10:55	Received data 01/12/21 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1605410	1.01	01/14/21 08:38	01/14/21 15:10	TMM	Mt. Juliet, TN
MW4 L1305406-04 GW			Collected by Jim Foster	Collected date/time 01/11/21 11:42	Received data 01/12/21 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1605410	1.01	01/14/21 08:38	01/14/21 15:23	TMM	Mt. Juliet, TN
MW5 L1305406-05 GW			Collected by Jim Foster	Collected date/time 01/11/21 12:24	Received data 01/12/21 08:4	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1605410	1.01	01/14/21 08:38	01/14/21 15:37	TMM	Mt. Juliet, TN
MW6 L1305406-06 GW			Collected by Jim Foster	Collected date/time 01/11/21 13:25	Received data 01/12/21 08:45	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location

WG1605410



















TPH by TCEQ Method 1005

date/time

01/14/21 08:38

1.07

date/time

01/14/21 15:51

TMM

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

















ONE LAB. NAPagev160 of 226

Collected date/time: 01/11/21 14:20

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	01/14/2021 14:43	WG1605410
TPH C12 - C28	U		0.600	0.900	0.900	1	01/14/2021 14:43	WG1605410
TPH C28 - C35	U		0.600	0.900	0.900	1	01/14/2021 14:43	WG1605410
TPH C6 - C35	U		0.600	0.900	0.900	1	01/14/2021 14:43	WG1605410
(S) o-Terphenyl	116				70.0-130		01/14/2021 14:43	WG1605410



















ONE LAB. NAPagev161 of 226

Collected date/time: 01/11/21 10:20

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	01/14/2021 14:56	WG1605410
TPH C12 - C28	U		0.606	0.900	0.909	1.01	01/14/2021 14:56	WG1605410
TPH C28 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 14:56	WG1605410
TPH C6 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 14:56	WG1605410
(S) o-Terphenyl	116				70.0-130		01/14/2021 14:56	WG1605410



















ONE LAB. NAPagev162 of 226

Collected date/time: 01/11/21 10:55

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	01/14/2021 15:10	WG1605410
TPH C12 - C28	U		0.606	0.900	0.909	1.01	01/14/2021 15:10	WG1605410
TPH C28 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:10	WG1605410
TPH C6 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:10	WG1605410
(S) o-Terphenyl	118				70.0-130		01/14/2021 15:10	WG1605410



















ONE LAB. NAPagev163 of 226

Collected date/time: 01/11/21 11:42

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	01/14/2021 15:23	WG1605410
TPH C12 - C28	U		0.606	0.900	0.909	1.01	01/14/2021 15:23	WG1605410
TPH C28 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:23	WG1605410
TPH C6 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:23	WG1605410
(S) o-Terphenyl	119				70.0-130		01/14/2021 15:23	WG1605410



















ONE LAB. NAPagev164 of 226

Collected date/time: 01/11/21 12:24

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.606	0.900	0.909	1.01	01/14/2021 15:37	WG1605410
TPH C12 - C28	U		0.606	0.900	0.909	1.01	01/14/2021 15:37	WG1605410
TPH C28 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:37	WG1605410
TPH C6 - C35	U		0.606	0.900	0.909	1.01	01/14/2021 15:37	WG1605410
(S) o-Terphenyl	117				70.0-130		01/14/2021 15:37	WG1605410



















ONE LAB. NAPagev165 of 226

Collected date/time: 01/11/21 13:25

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.642	0.900	0.963	1.07	01/14/2021 15:51	WG1605410
TPH C12 - C28	U		0.642	0.900	0.963	1.07	01/14/2021 15:51	WG1605410
TPH C28 - C35	U		0.642	0.900	0.963	1.07	01/14/2021 15:51	WG1605410
TPH C6 - C35	U		0.642	0.900	0.963	1.07	01/14/2021 15:51	WG1605410
(S) o-Terphenyl	123				70.0-130		01/14/2021 15:51	WG1605410



















QUALITY CONTROL SUMMARY

ONE LAB. NA Page 166 of 226

TPH by TCEQ Method 1005

L1305406-01,02,03,04,05,06

Method Blank (MB)

(MB) R3612566-1 01/	14/21 10:45			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	119			70.0-130











(LCS) R3612566-2 01/14	1/21 10:59 • (LCSD) R3612566-3	01/14/21 11:13							LCS) R3612566-2 01/14/21 10:59 • (LCSD) R3612566-3 01/14/21 11:13											
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits											
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%											
TPH C6 - C12	41.7	44.5	44.7	107	107	75.0-125			0.448	20											
TPH C12 - C28	41.7	40.3	40.1	96.6	96.2	75.0-125			0.498	20											
TPH C6 - C35	83.4	84.8	84.8	102	102	75.0-125			0.000	20											
(S) o-Terphenyl				119	119	70.0-130															









Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resu reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section fo each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.























Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

State Accreditations	
Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky 16	KY90010
Kentucky ²	16
Louisiana	Al30792
Louisiana ¹	LA180010
Maine	TN00003
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN000032021-1
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	TN00003
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee 1 4	2006
Texas	T104704245-20-18
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	998093910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA - ISO 17025 5	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

















		0	Billing Info	rmation:			TI		Analysis / Co	ntainer / Prese	rvative		16	Chain of Custody	Page of
Timberwolf Environmental Byan N 27807					Pres Chk							Pace / National Ce	Analytical * nter for Testing & Innovation		
Report to:	1001		Email To:	01-		, ,								12065 Lebanon Rd Mount Juliet, TN 37	
		2.02	jim			Habras	01.0							Phone: 615-758-585 Phone: 800-767-585	33511
Project Description:			1 -	City/State Collected:				E						Fax: 615-758-5859	■5 %3 ±3
Phone:	Client Project	#	et is	Lab Projec	t#			94						7	5406
Fax:	1800	100						6			34			Table E	084
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MWS	9	GW			-	1224									-05
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Done.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

January 14, 2021

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX:

RE: Kaufman 1 OrderNo.: 2101390

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/12/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: 2101390

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/14/2021

CLIENT: Timberwolf Environmental Lab Order: 2101390

Project: Kaufman 1

Lab ID: 2101390-001 **Collection Date:** 1/11/2021 2:20:00 PM

Client Sample ID: MW1 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 1.0 1/13/2021 5:43:31 AM B74592 μg/L 1 Toluene ND 1.0 μg/L 1/13/2021 5:43:31 AM B74592 ND Ethylbenzene 1.0 μg/L 1 1/13/2021 5:43:31 AM B74592 Xylenes, Total ND 1.5 μg/L 1 1/13/2021 5:43:31 AM B74592 70-130 B74592 Surr: 1,2-Dichloroethane-d4 105 %Rec 1 1/13/2021 5:43:31 AM Surr: 4-Bromofluorobenzene 98.5 70-130 %Rec 1/13/2021 5:43:31 AM B74592 Surr: Dibromofluoromethane 104 70-130 %Rec 1/13/2021 5:43:31 AM B74592 Surr: Toluene-d8 70-130 1/13/2021 5:43:31 AM 100 %Rec B74592

Lab ID: 2101390-002 **Collection Date:** 1/11/2021 10:20:00 AM

Client Sample ID: MW2 Matrix: AQUEOUS

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Anal	yst: JMR
Benzene	ND	1.0	μg/L	1	1/13/2021 6:11:59 A	M B74592
Toluene	ND	1.0	μg/L	1	1/13/2021 6:11:59 A	M B74592
Ethylbenzene	ND	1.0	μg/L	1	1/13/2021 6:11:59 A	M B74592
Xylenes, Total	ND	1.5	μg/L	1	1/13/2021 6:11:59 A	M B74592
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	1/13/2021 6:11:59 A	M B74592
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	1/13/2021 6:11:59 A	M B74592
Surr: Dibromofluoromethane	103	70-130	%Rec	1	1/13/2021 6:11:59 A	M B74592
Surr: Toluene-d8	99.3	70-130	%Rec	1	1/13/2021 6:11:59 A	M B74592

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 5

Lab Order: **2101390**Date Reported: **1/14/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2101390

Project: Kaufman 1

Lab ID: 2101390-003 **Collection Date:** 1/11/2021 10:55:00 AM

Client Sample ID: MW3 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 1.0 1/13/2021 6:40:37 AM B74592 μg/L 1 Toluene ND 1.0 μg/L 1/13/2021 6:40:37 AM B74592 ND Ethylbenzene 1.0 μg/L 1 1/13/2021 6:40:37 AM B74592 Xylenes, Total ND 1.5 μg/L 1/13/2021 6:40:37 AM B74592 1 70-130 B74592 Surr: 1,2-Dichloroethane-d4 107 %Rec 1 1/13/2021 6:40:37 AM Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1/13/2021 6:40:37 AM B74592 Surr: Dibromofluoromethane 106 70-130 %Rec 1/13/2021 6:40:37 AM B74592 Surr: Toluene-d8 70-130 B74592 98.8 %Rec 1/13/2021 6:40:37 AM

Lab ID: 2101390-004 **Collection Date:** 1/11/2021 11:42:00 AM

Client Sample ID: MW4 Matrix: AQUEOUS

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Anal	yst: JMR
Benzene	ND	1.0	μg/L	1	1/13/2021 7:09:15 A	M B74592
Toluene	ND	1.0	μg/L	1	1/13/2021 7:09:15 A	M B74592
Ethylbenzene	ND	1.0	μg/L	1	1/13/2021 7:09:15 A	M B74592
Xylenes, Total	ND	1.5	μg/L	1	1/13/2021 7:09:15 A	M B74592
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	1/13/2021 7:09:15 A	M B74592
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	1/13/2021 7:09:15 A	M B74592
Surr: Dibromofluoromethane	102	70-130	%Rec	1	1/13/2021 7:09:15 A	M B74592
Surr: Toluene-d8	97.3	70-130	%Rec	1	1/13/2021 7:09:15 A	M B74592

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 5

Lab Order: 2101390

Date Reported: 1/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2101390

Project: Kaufman 1

Lab ID: 2101390-005 **Collection Date:** 1/11/2021 12:24:00 PM

Matrix: AQUEOUS Client Sample ID:

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 1.0 1/13/2021 7:37:46 AM B74592 μg/L 1 Toluene ND 1.0 μg/L 1/13/2021 7:37:46 AM B74592 ND Ethylbenzene 1.0 μg/L 1 1/13/2021 7:37:46 AM B74592 Xylenes, Total ND 1.5 μg/L 1/13/2021 7:37:46 AM B74592 1 70-130 Surr: 1,2-Dichloroethane-d4 104 %Rec 1 1/13/2021 7:37:46 AM B74592 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1/13/2021 7:37:46 AM B74592 Surr: Dibromofluoromethane 104 70-130 %Rec 1/13/2021 7:37:46 AM B74592 Surr: Toluene-d8 98.2 70-130 1/13/2021 7:37:46 AM %Rec B74592

Lab ID: 2101390-006 **Collection Date:** 1/11/2021 1:25:00 PM

Client Sample ID: MW6 Matrix: AQUEOUS

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Ana	lyst: JMR
Benzene	ND	1.0	μg/L	1	1/13/2021 8:06:16 A	AM B74592
Toluene	ND	1.0	μg/L	1	1/13/2021 8:06:16 A	AM B74592
Ethylbenzene	ND	1.0	μg/L	1	1/13/2021 8:06:16 A	AM B74592
Xylenes, Total	ND	1.5	μg/L	1	1/13/2021 8:06:16 A	AM B74592
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	1/13/2021 8:06:16 A	AM B74592
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	1/13/2021 8:06:16 A	AM B74592
Surr: Dibromofluoromethane	106	70-130	%Rec	1	1/13/2021 8:06:16 A	AM B74592
Surr: Toluene-d8	101	70-130	%Rec	1	1/13/2021 8:06:16 A	AM B74592

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- \mathbf{E} Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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Lab Order: 2101390

Date Reported: 1/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2101390

Project: Kaufman 1

Lab ID: 2101390-007 **Collection Date:** 1/11/2021 12:28:00 PM

Client Sample ID: Dup Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 1.0 1/13/2021 8:34:47 AM B74592 μg/L 1 Toluene ND 1.0 μg/L 1/13/2021 8:34:47 AM B74592 ND Ethylbenzene 1.0 μg/L 1 1/13/2021 8:34:47 AM B74592 Xylenes, Total ND 1.5 μg/L 1/13/2021 8:34:47 AM B74592 1 70-130 Surr: 1,2-Dichloroethane-d4 106 %Rec 1 1/13/2021 8:34:47 AM B74592 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1/13/2021 8:34:47 AM B74592 Surr: Dibromofluoromethane 107 70-130 %Rec 1/13/2021 8:34:47 AM B74592 Surr: Toluene-d8 70-130 96.9 %Rec 1/13/2021 8:34:47 AM B74592

Lab ID: 2101390-008 Collection Date:

Client Sample ID: Trip Blank Matrix: TRIP BLANK

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST					Anal	yst: JMR
Benzene	ND	1.0	μg/L	1	1/13/2021 9:03:19 A	M B74592
Toluene	ND	1.0	μg/L	1	1/13/2021 9:03:19 A	M B74592
Ethylbenzene	ND	1.0	μg/L	1	1/13/2021 9:03:19 A	M B74592
Xylenes, Total	ND	1.5	μg/L	1	1/13/2021 9:03:19 A	M B74592
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	1/13/2021 9:03:19 A	M B74592
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	1/13/2021 9:03:19 A	M B74592
Surr: Dibromofluoromethane	107	70-130	%Rec	1	1/13/2021 9:03:19 A	M B74592
Surr: Toluene-d8	99.7	70-130	%Rec	1	1/13/2021 9:03:19 A	M B74592

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101390**

14-Jan-21

Client: Timberwolf Environmental

Project: Kaufman 1

Sample ID: 100ng lcs	SampT	SampType: LCS TestCode: EPA Method 8260: V						s Short L	ist	
Client ID: LCSW	Batch	ID: B7	4592	F	RunNo: 74	4592				
Prep Date:	Analysis D	ate: 1/	12/2021	S	SeqNo: 2633057					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.0	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

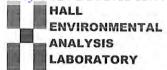
Sample ID: VSB Fridge	SampT	ype: ME	BLK	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batch	n ID: B7	4592	F	RunNo: 7	4592				
Prep Date:	Analysis D	ate: 1/	12/2021	9	SeqNo: 2	633058	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.9		10.00		99.5	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

Website: clients.hallenvironmental.com Client Name: Timberwolf Environmental Work Order Number: 2101390 RcptNo: 1 Received By: Isaiah Ortiz 1/12/2021 7:50:00 AM Completed By: Isaiah Ortiz 1/12/2021 8:39:11 AM Reviewed By: Je 1/12/21 Chain of Custody 1. Is Chain of Custody complete? Yes 🗸 No 🗌 Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? NA 🗌 Yes 🗸 No 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes V NA 🗌 Sample(s) in proper container(s)? Yes V No 🗌 Yes V 6. Sufficient sample volume for indicated test(s)? No 🗌 7. Are samples (except VOA and ONG) properly preserved? Yes V No 🗍 8. Was preservative added to bottles? Yes 🗌 No V NA 🗌 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes V No NA 🔲 10. Were any sample containers received broken? Yes -No V # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 12, Are matrices correctly identified on Chain of Custody? No 🗌 Yes 🗸 13. Is it clear what analyses were requested? No Checked by: 5(=(1/12/21 14. Were all holding times able to be met? Yes V No (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? NA V Yes No 🗍 Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By
1 0.8 Good Yes

Chain-ot-Custody Record	Turn-Around Tim	ıme:				•			-	1	1	-
Clien	Standard	□ Rush				E ≪	HALL	IJ > □ >			ROP/	HALL ENVIRONMENTAL ANALYSTS LABODATODV
	Project Name:	2	THE STATE OF THE S				, www		viron:	www hallenvironmental com		
Mailing Address:		Lastman			4901	4901 Hawkins NE	IS NE	1	nonc	rolle.	Albuquerane: NM 87109	
	Project #:			r	Tel 5	Tel 505-345-3975	5-397		Fax	505-34	Eax 505-345-4107	
Phone #: 979-334-2139	8/	19008					000	Anal	ysis	Analysis Request	st	1000
gima team tim	www. Project Manager:	er:		100				†OS		(440	/aug	
QA/QC Package: QA/QC Package: QStandard □ Level 4 (Full Validation)	2 m 2	25			-1-5-2		SMIS	PO₄,		759 (7)	2001.40	
1:	Sampler:				1000		072	O _S ,		uos		
		▼ Yes	□ No		100						01.1	
pe)	olers:	- 0						_			V	
	Cooler Temp(including CF):	cluding CF): Q 8.	(0 _e) ,. ○ ∓ ,.5	ΤM				_	(AO			
Date Time Matrix Sample Name	Container F	Preservative Type	HEAL NO.	/ X3T8	08:H9T 9 1808	EDB (N	PAHs b	CI, F, E	v) 0928	S) 07S8	O lstoT	
1/1/201420 Hot 19th 19th			100					-				
4/1/21 1020 1 MWZ			200	2								
1/11/21/1055 MW3			500	7								
1/16/21/142 MW 4			200	7								
1/4/21 1226 MWS			500	1								
14 2 1335 MUG			900	/								
1/4/21/1228 Dags			200	7	14							
I Trip Blench			800	7								
					-		+			+		
j												
Date: Time: Relinquished by: Neceived by: Viz. Date: Time: Relinquished by: Viz. Date: Time: Relinquished by: Viz. Date: Time: Received by: Viz. Date: Viz	Received by: Received by:	Via: Via: Courie	Joulge $\frac{1}{ 1 } 1 $ 1530 at Time Date Time	Remarks: * Trip	rks:	blank provided 1 at Hall *-Ex	HOH	3=	de k-f	9	Client	to the



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

June 14, 2021

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX

RE: Kaufman OrderNo.: 2105B57

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/27/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: 2105B57

Date Reported: 6/14/2021

2105B57

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order:

Project: Kaufman

Lab ID: 2105B57-001 **Collection Date:** 5/26/2021 4:25:00 PM

Client Sample ID: MW 1 Matrix: GROUNDWATER

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: CCM Methyl tert-butyl ether (MTBE) ND 2.5 μg/L 6/2/2021 1:24:00 PM R78810 1 Benzene ND 1.0 μg/L 6/2/2021 1:24:00 PM R78810 Toluene ND 1.0 μg/L 1 6/2/2021 1:24:00 PM R78810 Ethylbenzene ND 1.0 μg/L 1 6/2/2021 1:24:00 PM R78810 Xylenes, Total ND 2.0 6/2/2021 1:24:00 PM μg/L 1 R78810 1,2,4-Trimethylbenzene ND 6/2/2021 1:24:00 PM R78810 1.0 μg/L 1,3,5-Trimethylbenzene ND 1.0 μg/L 6/2/2021 1:24:00 PM R78810 Surr: 4-Bromofluorobenzene 70-130 %Rec 6/2/2021 1:24:00 PM R78810 86.0

Lab ID: 2105B57-002 **Collection Date:** 5/26/2021 12:53:00 PM

Client Sample ID: MW 2 Matrix: GROUNDWATER

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES					Ana	lyst: CCM
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	6/2/2021 2:24:00 PI	M R78810
Benzene	ND	1.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 2:24:00 PI	M R78810
Surr: 4-Bromofluorobenzene	88.5	70-130	%Rec	1	6/2/2021 2:24:00 PI	M R78810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 6

Analytical Report

Lab Order: **2105B57**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/14/2021

2105B57

Lab Order:

CLIENT: Timberwolf Environmental

Project: Kaufman

Lab ID: 2105B57-003 **Collection Date:** 5/26/2021 1:45:00 PM

Client Sample ID: MW 3 Matrix: GROUNDWATER

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: CCM Methyl tert-butyl ether (MTBE) ND 2.5 μg/L 6/2/2021 2:43:00 PM R78810 1 Benzene ND 1.0 μg/L 6/2/2021 2:43:00 PM R78810 Toluene ND 1.0 μg/L 1 6/2/2021 2:43:00 PM R78810 Ethylbenzene ND 1.0 μg/L 1 6/2/2021 2:43:00 PM R78810 Xylenes, Total ND 2.0 6/2/2021 2:43:00 PM μg/L 1 R78810 1,2,4-Trimethylbenzene ND 6/2/2021 2:43:00 PM R78810 1.0 μg/L 1,3,5-Trimethylbenzene ND 1.0 μg/L 6/2/2021 2:43:00 PM R78810 Surr: 4-Bromofluorobenzene 70-130 %Rec 6/2/2021 2:43:00 PM R78810 83.8

Lab ID: 2105B57-004 **Collection Date:** 5/26/2021 2:20:00 PM

Client Sample ID: MW 4 Matrix: GROUNDWATER

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES					Ana	lyst: CCM
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	6/2/2021 3:03:00 PM	M R78810
Benzene	ND	1.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:03:00 PM	M R78810
Surr: 4-Bromofluorobenzene	83.4	70-130	%Rec	1	6/2/2021 3:03:00 PM	M R78810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 6

Project:

Analytical Report

Lab Order: 2105B57

Date Reported: 6/14/2021

2105B57

Hall Environmental Analysis Laboratory, Inc.

Lab Order:

CLIENT: Timberwolf Environmental

Kaufman

Lab ID: 2105B57-005 **Collection Date:** 5/26/2021 3:00:00 PM

Client Sample ID: MW 5 Matrix: GROUNDWATER

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES					Ana	lyst: CCM
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	6/2/2021 3:23:00 PM	M R78810
Benzene	ND	1.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:23:00 PM	M R78810
Surr: 4-Bromofluorobenzene	84.5	70-130	%Rec	1	6/2/2021 3:23:00 PM	M R78810

Lab ID: 2105B57-006 Collection Date: 5/26/2021 3:44:00 PM Client Sample ID: MW 6 Matrix: GROUNDWATER

Analyses Result RL Qual Units DF Date Analyzed Batch ID

Anaryses	Kesuit	KL Q	uai Umis	DF	Date Allaryzeu	Datell ID
EPA METHOD 8021B: VOLATILES					Analy	/st: CCM
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	6/2/2021 3:43:00 PM	R78810
Benzene	ND	1.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
Xylenes, Total	3.8	2.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 3:43:00 PM	R78810
Surr: 4-Bromofluorobenzene	84.3	70-130	%Rec	1	6/2/2021 3:43:00 PM	R78810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Lab Order: **2105B57**Date Reported: **6/14/2021**

Hall Environmental Analysis Laboratory, Inc.

Timberwolf Environmental

Lab Order: 2105B57

Project: Kaufman

CLIENT:

Lab ID: 2105B57-007 **Collection Date:** 5/26/2021 3:00:00 PM

Client Sample ID: DUP Matrix: GROUNDWATER

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: CCM Methyl tert-butyl ether (MTBE) ND 2.5 μg/L 6/2/2021 4:03:00 PM R78810 1 Benzene ND 1.0 μg/L 6/2/2021 4:03:00 PM R78810 Toluene ND 1.0 μg/L 1 6/2/2021 4:03:00 PM R78810 Ethylbenzene ND 1.0 μg/L 1 6/2/2021 4:03:00 PM R78810 Xylenes, Total ND 2.0 6/2/2021 4:03:00 PM μg/L 1 R78810 1,2,4-Trimethylbenzene ND 1.0 6/2/2021 4:03:00 PM R78810 μg/L 1,3,5-Trimethylbenzene ND 1.0 μg/L 6/2/2021 4:03:00 PM R78810 Surr: 4-Bromofluorobenzene 85.1 70-130 %Rec 6/2/2021 4:03:00 PM R78810

Lab ID: 2105B57-008 Collection Date:

Client Sample ID: Trip Blank Matrix: TRIP BLANK

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES					Anal	yst: CCM
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	6/2/2021 4:23:00 PM	M R78810
Benzene	ND	1.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	6/2/2021 4:23:00 PM	И R78810
Surr: 4-Bromofluorobenzene	83.7	70-130	%Rec	1	6/2/2021 4:23:00 PM	И R78810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2105B57** *14-Jun-21*

Client: Timberwolf Environmental

Project: Kaufman

Sample ID: 100ng BTEX Ics	SampT	ype: LC	s	Tes	tCode: El	e: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch	n ID: R7	8810	F	RunNo: 7 8	3810							
Prep Date:	Analysis D	ate: 6/ 2	2/2021	8	SeqNo: 2	763901	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Methyl tert-butyl ether (MTBE)	17	2.5	20.00	0	85.7	59.5	133						
Benzene	18	1.0	20.00	0	89.4	80	120						
Toluene	18	1.0	20.00	0	90.6	80	120						
Ethylbenzene	19	1.0	20.00	0	93.8	80	120						
Xylenes, Total	55	2.0	60.00	0	92.1	80	120						
1,2,4-Trimethylbenzene	19	1.0	20.00	0	94.2	80	120						
1,3,5-Trimethylbenzene	19	1.0	20.00	0	94.5	80	120						
Surr: 4-Bromofluorobenzene	17		20.00		85.0	70	130						

Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch	n ID: R7	8810	F	RunNo: 7 8	8810				
Prep Date:	Analysis D	oate: 6/	2/2021	9	SeqNo: 2	763902	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	17		20.00		84.1	70	130			

Sample ID: 2105B57-001ams	SampT	уре: м S	3	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: MW 1	Batch	1D: R7	8810	F	RunNo: 7 8	8810				
Prep Date:	Analysis D	ate: 6/ 2	2/2021	5	SeqNo: 2	763904	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18	2.5	20.00	0	91.5	60.4	152			
Benzene	19	1.0	20.00	0	95.7	80	120			
Toluene	19	1.0	20.00	0	97.2	80	120			
Ethylbenzene	20	1.0	20.00	0	99.1	80	120			
Xylenes, Total	58	2.0	60.00	0	97.0	80	120			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	97.4	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.5	80	120			
Surr: 4-Bromofluorobenzene	17		20.00		84.6	70	130			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 6

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

2105B57 14-Jun-21

WO#:

Client: Timberwolf Environmental

Project: Kaufman

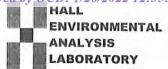
Sample ID: 2105B57-001ams	d SampT	уре: М \$	SD	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: MW 1	Batcl	h ID: R7	8810	F	RunNo: 7	8810					
Prep Date:	Analysis D	is Date: 6/2/2021 SeqNo: 2763905 Units: μg/L									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-butyl ether (MTBE)	18	2.5	20.00	0	89.4	60.4	152	2.29	20		
Benzene	17	1.0	20.00	0	85.9	80	120	10.7	20		
Toluene	17	1.0	20.00	0	87.1	80	120	11.0	20		
Ethylbenzene	18	1.0	20.00	0	90.1	80	120	9.55	20		
Xylenes, Total	53	2.0	60.00	0	88.9	80	120	8.68	20		
1,2,4-Trimethylbenzene	19	1.0	20.00	0	92.8	80	120	4.77	20		
1,3,5-Trimethylbenzene	19	1.0	20.00	0	93.7	80	120	5.02	20		
Surr: 4-Bromofluorobenzene	17		20.00		84.1	70	130	0	0		

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name:	Timberwolf Environmental	Work Order Number	er: 210	5B57		RcptNo:	P.
Received By:	Juan Rojas	5/27/2021 7:10:00 AI	М		Heaving		
Completed By:	Desiree Dominguez	5/27/2021 9:23:13 AI	M		100		
Reviewed By:	SPA 5.27.				173		
Chain of Cust	tody						
1. Is Chain of Cu	stody complete?		Yes	V	No 🗌	Not Present	
2. How was the s	sample delivered?		Cou	rier			
Log In							
	pt made to cool the samples?		Yes	~	No 🗌	NA 🗆	
4. Were all samp	les received at a temperature	of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5. Sample(s) in p	roper container(s)?		Yes	~	No 🗆		
6. Sufficient samp	ole volume for indicated test(s)	?	Yes	V	No 🗌		
	except VOA and ONG) properly		Yes	V	No 🗆		
8. Was preservati	ive added to bottles?		Yes		No 🗸	NA 🗆	
9. Received at lea	ast 1 vial with headspace <1/4	for AQ VOA?	Yes	V	No 🗆	NA 🗆	
10. Were any sam	ple containers received broker	1?	Yes		No 🗸	Hat was the state of	
	k match bottle labels?		Yes	V	No 🗆	# of preserved bottles checked for pH:	
	ncies on chain of custody) prrectly identified on Chain of C	Suptodu2		V	No 🗆	(<2 or >1 Adjusted?	2 unless noted)
	analyses were requested?	ouslody?	Yes	V	No 🗆		
	g times able to be met? stomer for authorization.)			V	No 🗆	Checked by: CC	-Sizda
	ng (if applicable)						
	ified of all discrepancies with the	nis order?	Yes		No 🗌	NA 🗸	
Person N	Notified:	Date:	_				
By Whon	n:	Via:	_ eMa	il 🔲 l	Phone Fax	In Person	
Regardin	g:						
Client Ins	structions:						
16. Additional rem	arks:						
17. <u>Cooler Inform</u> Cooler No		al Intact Seal No	Seal Da	ite	Signed By		

Received by				022	12:3	35:39 P	<i>M</i> —													Pag	ge 187 of
HALL ENVIRONMENTAL	www. ballenvironmental com	4901 Hawkins NE - Albuqueraue. NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Anal		SMISC	(1.4) NO _{2,}	.00 or	bod: 158 Stel Stel DN (A	8081 Pes PAHs by 8 CI, F, Br, 8250 (VO 8270 (Ser											Time: Relinquished by: Received by: Via: Date Time
		49	Į.		_					√ \ X∃T8 8108:H9T	2,	1	2	>	>	1	7	>		Remarks:	
Time: □ Rush		autman		190	Jer:	Foster	PS. F.	□ Ves □ No	Conding CEV.	tive 2105857	HCI -001	-002	-003	1004	500-	900 -	£00-	-008	i	Ime In 1745	Via: Date Time
Turn-Around Time:	Project Name:	Kar	Project #:	1800	Project Manager:	Jan	Sampler:	On Ice:	Cooler Temporalistics	Container Type and #							>			Received by:	Received by:
Chain-of-Custody Record				-324-2139		□ Level 4 (Full Validation)	☐ Az Compliance	U Otner		Matrix Sample Name	GW MWI	GU MW2	6W MW3	GN MW4	GW MWS	GU MW6	5w De	Trip Blank	7.1	Kelinquished by:	Relinquished by:
Chain-o		Address:		#: 975	r Fax#:	CONTRACT CO	itation:	- 1	() ypc)	Time	1,1623	1253	1345	1420	(500)	1544	35			1745	Time: R
Released to	Ima	Mailing	10/	# auoud #:	semail or Fax#:	S D Stan	Accreditation:	□ NELAC		Date	5/210						D			10/2/	Date:



Pace Analytical® ANALYTICAL REPORT



















Timberwolf Environmental, LLC

Sample Delivery Group:

L1359425

Samples Received:

05/28/2021

Project Number:

180061

Description:

Kaufman No. 1

Report To:

Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

Entire Report Reviewed By:

Olivia Studebaker

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received. Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

MW1 L1359425-01 GW			Collected by J. Foster	Collected date/time 05/26/2116:25	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1680485	1	06/03/21 01:28	06/03/21 16:42	TJD	Mt. Juliet, TN
MW2 L1359425-02 GW			Collected by J. Foster	Collected date/time 05/26/2112:53	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1680485	1	06/03/21 01:28	06/03/21 16:58	TJD	Mt. Juliet, TN
MW3 L1359425-03 GW			Collected by J. Foster	Collected date/time 05/26/2113:45	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1680485	1	06/03/21 01:28	06/03/21 17:15	TJD	Mt. Juliet, TN
MW4 L1359425-04 GW			Collected by J. Foster	Collected date/time 05/26/2114:20	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1680485	1	06/03/21 01:28	06/03/21 17:31	TJD	Mt. Juliet, TN
MW5 L1359425-05 GW			Collected by J. Foster	Collected date/time 05/26/2115:00	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1680485	1	06/03/21 01:28	06/03/21 18:04	TJD	Mt. Juliet, TN
MW6 L1359425-06 GW			Collected by J. Foster	Collected date/time 05/26/2115:44	Received da 05/28/21 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location

WG1680485



















TPH by TCEQ Method 1005

date/time

06/03/21 01:28

date/time

06/03/21 18:20

TJD

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.





















Olivia Studebaker Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID

Project Sample ID

Method

L1359425-03

MW3

TCEQ Method 1005

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SAMPLE RESULTS - 01

L1359425

Collected date/time: 05/26/21 16:25 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	06/03/2021 16:42	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 16:42	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 16:42	WG1680485
TPH C6 - C35	U		0.600	0.900	0.900	1	06/03/2021 16:42	WG1680485
(S) o-Terphenyl	73.9				70.0-130		06/03/2021 16:42	WG1680485



















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SAMPLE RESULTS - 02

L1:

Collected date/time: 05/26/21 12:53 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	06/03/2021 16:58	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 16:58	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 16:58	WG1680485
TPH C6 - C35	U		0.600	0.900	0.900	1	06/03/2021 16:58	WG1680485
(S) o-Terphenyl	76.4				70.0-130		06/03/2021 16:58	WG1680485



















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SAMPLE RESULTS - 03

L1359425

Collected date/time: 05/26/21 13:45 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	06/03/2021 17:15	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 17:15	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 17:15	WG1680485
TPH C6 - C35	U		0.600	0.900	0.900	1	06/03/2021 17:15	WG1680485
(S) o-Terphenyl	76.1				70.0-130		06/03/2021 17:15	WG1680485



















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SAMPLE RESULTS - 04

L1359425

Collected date/time: 05/26/21 14:20 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	06/03/2021 17:31	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 17:31	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 17:31	WG1680485
TPH C6 - C35	U		0.600	0.900	0.900	1	06/03/2021 17:31	WG1680485
(S) o-Terphenyl	78.2				70.0-130		06/03/2021 17:31	WG1680485



















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SAMPLE RESULTS - 05

L1359425

Collected date/time: 05/26/21 15:00 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	06/03/2021 18:04	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 18:04	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 18:04	WG1680485
TPH C6 - C35	U		0.600	0.900	0.900	1	06/03/2021 18:04	WG1680485
(S) o-Terphenyl	74.9				70.0-130		06/03/2021 18:04	WG1680485



















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SAMPLE RESULTS - 06

L1359425

Collected date/time: 05/26/21 15:44 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	0.644	<u>J</u>	0.600	0.900	0.900	1	06/03/2021 18:20	WG1680485
TPH C12 - C28	U		0.600	0.900	0.900	1	06/03/2021 18:20	WG1680485
TPH C28 - C35	U		0.600	0.900	0.900	1	06/03/2021 18:20	WG1680485
TPH C6 - C35	0.644	<u>J</u>	0.600	0.900	0.900	1	06/03/2021 18:20	WG1680485
(S) o-Terphenyl	76.1				70.0-130		06/03/2021 18:20	WG1680485



















QUALITY CONTROL SUMMARY

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TPH by TCEQ Method 1005

L1359425-01,02,03,04,05,06

Method Blank (MB)

(MB) R3662807-1 06	6/03/21 11:28			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	<i>7</i> 5. <i>8</i>			70.0-130



²Tc





⁵Sr

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3662807-2 06	/03/21 11:44 • (LCS	D) R3662807-	-3 06/03/2112:	01							
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	38.9	39.4	93.3	94.5	75.0-125			1.28	20	
TPH C12 - C28	41.7	38.2	37.3	91.6	89.4	75.0-125			2.38	20	
TPH C6 - C35	83.4	77.1	76.7	92.4	92.0	75.0-125			0.520	20	
(S) o-Terphenyl				77.5	<i>75.2</i>	70.0-130					









⁹Sc

L1358840-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1358840-02	06/03/21 12:17	• (MS) R3662807-4	06/03/2112:33	· (MSD) R3662807-5	06/03/21 12:50

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
TPH C6 - C12	37.3	U	34.5	35.2	92.5	94.1	1	75.0-125			2.01	20
TPH C12 - C28	37.3	U	33.1	33.8	88.7	90.4	1	75.0-125			2.09	20
TPH C6 - C35	74.6	0.951	67.6	69.0	89.3	90.9	1	75.0-125			2.05	20
(S) o-Terphenyl					75.4	75.3		70.0-130				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resul reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The identification of the analyte is acceptable; the reported value is an estimate.





















Pace Analy	utical National	12065 Lebanon	Rd Mount Julie	t TN 37122
race Allai	yticai Nationai		i Ku Mourit Julie	I, IIN 3/122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 1	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234



^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.

TN00003

EPA-Crypto



















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

2			Billing Info	ormation:		1 1		Analysis / Co	ontainer / Prese	rvative		Chain of Custody	Page of
Timberwolf Env	iranment	/				Pres Chk						Pace A	Analytical *
Byan Do													
Report to:			Email To:					4				12065 Lebanon Rd Mount Juliet, TN 371 Phone: 615-758-585	
Project Description:		j.		City/State Collected:			PH					Phone: 800-767-585 Fax: 615-758-5859	
Phone: Fax:	Client Project		765,	Lab Project #			E					D1	35 9425
Collected by (print):	Site/Facility ID)#	30. 2	P.O.#			5					Acctnum:	
Collected by (signature):	Same Da	ab MUST Be	Day	Quote#	>48.5 1		001					Template:	
Packed on Ice NY	Next Da	10 Da	(Rad Only) ay (Rad Only)	Date Res	ults Needed	No. of	13					PB: Shipped Via:	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs						Remarks	Sample # (lab only)
MUL		GW	and the same	5/26/21	1625	2						12 13 14 - E 16 1 - 14	-01
MWZ	H.				1253	2					数量扩		- 02
MW3					1345	2						y 150	- 03
MW5			1	1	1420	2	1						Vo*
	4				1500	2	1					122	-05
466		J	la!	V	1544	2	V					14	106
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Matrix: S - Soil AIR - Air F - Filter W - Groundwater B - Bioassay W - WasteWater	Remarks:							pH _	Temp		COC Seal COC Signe Bottles a	mple Receipt C Present/Intact ed/Accurate: arrive intact: cottles used:	hecklist: _NP _Y _N _Y _N _N _N
W - Drinking Water T - Other	Samples return	ned via: dExCou	rier	Т	racking #	988	3 00	1884	4197	0	Sufficier	If Applicate Headspace:	
telinquished by : (Signature)		Date: /	/21	Time: R	eceived by: (Signa	ature)		Trip Blank	Received: Yes	CL/MeoH	Preservat	ion Correct/Ch	ecked: Y N
Relinquished by : (Signature)	28	Date:			eceived by: (Sign:	ature)	the second	Temp: A		Received:	If preservat	tion required by Lo	gin: Date/Time
Relinquished by : (Signature)	/2022 2.00.2	Date:	1	Time: R	eceived for lab by	y: (Signatur	e)	3/28	12 Time	cor	/ Hold:		Condition: NCF / OK



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

September 21, 2021

Jim Foster Timberwolf Environmental 1920 W Villa Maria Ste 205 Bryan, TX 77807

TEL: (979) 324-2139

FAX

RE: 180061 OrderNo.: 2109590

Dear Jim Foster:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/11/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

CLIENT:

Xylenes, Total

Surr: 4-Bromofluorobenzene

Analytical Report

Lab Order:

Lab Order: **2109590**Date Reported: **9/21/2021**

2109590

Hall Environmental Analysis Laboratory, Inc.

Timberwolf Environmental

Project: 180061 Lab ID: 2109590-001 Collection Date: 9/9/2021 2:30:00 PM Client Sample ID: Matrix: AQUEOUS **Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 9/14/2021 6:02:01 PM B81272 μg/L 1 Toluene ND 1.0 μg/L 9/14/2021 6:02:01 PM B81272 ND Ethylbenzene 1.0 μg/L 1 9/14/2021 6:02:01 PM B81272 Xylenes, Total ND 2.0 μg/L 9/14/2021 6:02:01 PM B81272 Surr: 4-Bromofluorobenzene 70-130 %Rec 9/14/2021 6:02:01 PM 91.7 B81272 Lab ID: 2109590-002 Collection Date: 9/9/2021 12:55:00 PM Client Sample ID: Matrix: AQUEOUS Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 9/14/2021 6:25:48 PM B81272 1 Toluene ND 1.0 μg/L 9/14/2021 6:25:48 PM B81272 ND Ethylbenzene 1.0 9/14/2021 6:25:48 PM B81272 μg/L 1

Lab ID: 2109590-003 **Collection Date:** 9/9/2021 1:45:00 PM

ND

91.3

2.0

70-130

μg/L

%Rec

1

9/14/2021 6:25:48 PM

9/14/2021 6:25:48 PM

B81272

B81272

Client Sample ID: MW 3 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 9/14/2021 6:49:33 PM B81272 1 Toluene ND 1.0 μg/L 9/14/2021 6:49:33 PM B81272 Ethylbenzene ND 1.0 B81272 μg/L 1 9/14/2021 6:49:33 PM Xylenes, Total ND 9/14/2021 6:49:33 PM B81272 2.0 μg/L Surr: 4-Bromofluorobenzene 88.5 70-130 %Rec 9/14/2021 6:49:33 PM B81272

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 4

Analytical Report

Lab Order: **2109590**Date Reported: **9/21/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Timberwolf Environmental Lab Order: 2109590

Project: 180061

Lab ID: 2109590-004 **Collection Date:** 9/9/2021 3:40:00 PM

Client Sample ID: MW 4 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 9/14/2021 7:13:21 PM B81272 μg/L 1 Toluene ND 1.0 μg/L 9/14/2021 7:13:21 PM B81272 ND Ethylbenzene 1.0 μg/L 1 9/14/2021 7:13:21 PM B81272 Xylenes, Total ND 2.0 μg/L 9/14/2021 7:13:21 PM B81272 Surr: 4-Bromofluorobenzene 88.8 70-130 %Rec 9/14/2021 7:13:21 PM B81272

Lab ID: 2109590-005 **Collection Date:** 9/9/2021 4:22:00 PM

Client Sample ID: MW 5 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 9/14/2021 7:37:06 PM B81272 1 Toluene ND 1.0 μg/L 9/14/2021 7:37:06 PM B81272 ND Ethylbenzene 1.0 9/14/2021 7:37:06 PM B81272 μg/L 1 Xylenes, Total ND 2.0 μg/L 1 9/14/2021 7:37:06 PM B81272 Surr: 4-Bromofluorobenzene 88.6 70-130 %Rec 9/14/2021 7:37:06 PM B81272

Lab ID: 2109590-006 **Collection Date:** 9/9/2021 5:30:00 PM

Client Sample ID: MW 6 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 9/14/2021 8:00:48 PM B81272 1 Toluene ND 1.0 μg/L 9/14/2021 8:00:48 PM B81272 Ethylbenzene ND 1.0 B81272 μg/L 1 9/14/2021 8:00:48 PM Xylenes, Total ND 9/14/2021 8:00:48 PM B81272 2.0 μg/L Surr: 4-Bromofluorobenzene 91.3 70-130 %Rec 9/14/2021 8:00:48 PM B81272

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Lab Order: 2109590

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/21/2021

CLIENT: Timberwolf Environmental Lab Order: 2109590

Project: 180061

Lab ID: 2109590-007 **Collection Date:** 9/9/2021 4:22:00 PM

Client Sample ID: DUP Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 9/14/2021 9:58:55 PM B81272 μg/L 1 Toluene ND 1.0 μg/L 9/14/2021 9:58:55 PM B81272 ND Ethylbenzene 1.0 μg/L 1 9/14/2021 9:58:55 PM B81272 Xylenes, Total ND 2.0 μg/L 9/14/2021 9:58:55 PM B81272 1 Surr: 4-Bromofluorobenzene 87.2 70-130 %Rec 9/14/2021 9:58:55 PM B81272

Lab ID: 2109590-008 Collection Date:

Client Sample ID: Trip Blank Matrix: TRIP BLANK

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 9/14/2021 10:22:24 PM B81272 1 Toluene ND 1.0 μg/L 9/14/2021 10:22:24 PM B81272 ND Ethylbenzene 1.0 9/14/2021 10:22:24 PM B81272 μg/L 1 Xylenes, Total ND 2.0 μg/L 1 9/14/2021 10:22:24 PM B81272 Surr: 4-Bromofluorobenzene 87 1 70-130 %Rec 9/14/2021 10:22:24 PM B81272

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

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WO#: **2109590**

21-Sep-21

Client: Timberwolf Environmental

Project: 180061

Surr: 4-Bromofluorobenzene

Sample ID: mb SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBW Batch ID: **B81272** RunNo: 81272 Prep Date: Analysis Date: 9/14/2021 SeqNo: 2870097 Units: µg/L Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Benzene ND 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 ND Xylenes, Total 2.0

90.3

70

130

20.00

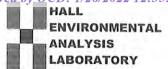
Sample ID: 100ng btex lcs	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	n ID: B8	1272	F	RunNo: 8	1272				
Prep Date:	Analysis D	ate: 9/	14/2021	S	SeqNo: 2	870098	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.8	80	120			
Toluene	19	1.0	20.00	0	94.4	80	120			
Ethylbenzene	19	1.0	20.00	0	94.6	80	120			
Xylenes, Total	57	2.0	60.00	0	94.3	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		91.0	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Timberwolf Environmental	Work Order Number: 2109590		RcptNo: 1	
Received By: Desiree Dominguez	0/11/2021 8:50:00 AM	Da		
Completed By: Desiree Dominguez 9	/11/2021 12:11:11 PM	TPS		
Reviewed By: J 19/13/21				
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?	Courier			
Log In				
3. Was an attempt made to cool the samples?	Yes 🗸	No 🗌	NA 🗌	
4. Were all samples received at a temperature of	>0° C to 6.0°C Yes ✓	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?	Yes 🗸	No 🗆		
6. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) properly p	reserved? Yes	No 🗌		
8. Was preservative added to bottles?	Yes 🗌	No 🔽	NA 🗆	
9. Received at least 1 vial with headspace <1/4" fo	r AQ VOA? Yes ✓	No 🗌	NA 🗆	
0. Were any sample containers received broken?	Yes 🗆	No 🔽	# of preserved	
Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗸	No 🗌	bottles checked for pH:	unless noted)
2. Are matrices correctly identified on Chain of Cus	stody? Yes	No 🗆	Adjusted?	
3. Is it clear what analyses were requested?	Yes 🗸	No 🗌	/	01
 Were all holding times able to be met? (If no, notify customer for authorization.) 	Yes 🗸	No 🗌	Checked by:	ru '
pecial Handling (if applicable)				
5. Was client notified of all discrepancies with this	order? Yes	No 🗌	NA 🗹	
Person Notified:	Date:	-		
By Whom:	Via: eMail	Phone Fax	In Person	
Regarding:				
Client Instructions:				
16. Additional remarks:				
17. Cooler Information Cooler No Temp °C Condition Seal 1 0.8 Good Yes	Intact Seal No Seal Date	Signed By		

Chain-of-C	Chain-of-Custody Record	Turn-Around T	Time:			1	HALL	ENIV	COL	CAIVIDONIMENTAL	eivea
Client: (m be/ ws)	(F Enviormental	☐ Standard	□ Rush				NAL	VSTS	I AR	ANALYSTS LABORATORY	l by (
		Project Name:	isi				lled www	environ	www hallenvironmental com		OCD
Mailing Address:		180061	le!		490	4901 Hawkins NE	IS NE -	Albuque	Albuquerane: NM 87109	187109	: 1/2
		Project #:			Tel.	Tel. 505-345-3975	5-3975	Fax	Fax 505-345-4107	1107	6/20.
Phone #:							Ā	nalysis	Analysis Request		22 1
email or Fax#: Jim &	+ teamtimberryolf, cor	Project Manager:	ger:					ÞΟ	(tr		2:35
QA/QC Package:		-	13		MR		SV	S '*	ıəsc		5:39
X Standard	☐ Level 4 (Full Validation)	J.M. Par	1250m		/ 0		VISO	ОЧ	lА\Jr	-111	PM
.:	☐ Az Compliance	Sampler:			AO,	(1.	728	10 ⁵ '	iəse		
	er	On Ice:	⊠ Yes	oN □	0	⊅ 09		N '			
□ EDD (Type)		# of Coolers:	1		4Đ)	g po					
		Cooler Temp(including CF).	0	(00) 8'0=0'0-8	12D	etpo	-				
Date Time Matrix	Sample Name	Container Type and #	Preservative Tvpe	HEAL No.	X3TEX /	M) 803	AHS b	SS (V	S) 0728 Cotal Co		
1430	MWI										
1/255	MW 2			-003	7						
1345	MW3			-003	/				F		
1840	MW4			400-	\						
1622	MWS			510-	>						
V 1730	MWG			900-	\						
1622	230			-007	/						
>	Top Slank			200	7						
1											
	/		7	7							
			/								
				/							
Date: Time: Relinquished by:	ihed by:	Received by:	Via: /	Date Time	Remarks:						Pag
Date: 6 Time: Relinquished by:	shed by:	Received by:	Via:	Daté Time							e 208 of
If necessary, samples su	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	Contracted to other a	scredited laboratorie	s. This serves as notice of this	possibility. An	y sub-contra	cted data w	ill be clearly	notated on the	ne analytical report.	226



Pace Analytical® ANALYTICAL REPORT

September 22, 2021



















Timberwolf Environmental, LLC

L1402334 Sample Delivery Group: Samples Received: 09/11/2021

Project Number: HEC - 180061 Description: Kaufman No. 1

Report To: Jim Foster

1920 W Villa Maria, Ste 205

Bryan, TX 77807

Entire Report Reviewed By:

Olivia Studebaker

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received. Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Ss













SAMPLE SUMMARY

MW1 L1402334-01 GW			Collected by	Collected date/time 09/09/2114:30	Received date 09/11/21 10:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1741449	1	09/20/21 17:28	09/21/21 14:21	JN	Mt. Juliet, TN
MW2 L1402334-02 GW			Collected by	Collected date/time 09/09/2112:55	Received data 09/11/21 10:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1742225	1	09/21/21 14:30	09/21/21 21:25	JN	Mt. Juliet, TN
MW3 L1402334-03 GW			Collected by	Collected date/time 09/09/2113:45	Received data 09/11/21 10:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1742225	1	09/21/21 14:30	09/21/21 21:39	JN	Mt. Juliet, TN
MW4 L1402334-04 GW			Collected by	Collected date/time 09/09/2115:40	Received dat 09/11/21 10:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1742227	1	09/19/21 14:20	09/20/21 04:14	JN	Mt. Juliet, TN
MW5 L1402334-05 GW			Collected by	Collected date/time 09/09/2116:22	Received data 09/11/21 10:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
TPH by TCEQ Method 1005	WG1742227	1	09/19/21 14:20	09/20/21 04:28	JN	Mt. Juliet, TN
MW6 L1402334-06 GW			Collected by	Collected date/time 09/09/2117:30	Received dat 09/11/21 10:0	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location

WG1742227



















TPH by TCEQ Method 1005

date/time

09/19/21 14:20

date/time

09/20/21 04:42

JN

Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



















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SAMPLE RESULTS - 01

L1402334

Collected date/time: 09/09/21 14:30 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/21/2021 14:21	WG1741449
TPH C12 - C28	U		0.600	0.900	0.900	1	09/21/2021 14:21	WG1741449
TPH C28 - C35	U		0.600	0.900	0.900	1	09/21/2021 14:21	WG1741449
TPH C6 - C35	U		0.600	0.900	0.900	1	09/21/2021 14:21	WG1741449
(S) o-Terphenyl	94.7				70.0-130		09/21/2021 14:21	WG1741449



















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SAMPLE RESULTS - 02

L1402334

Collected date/time: 09/09/21 12:55 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/21/2021 21:25	WG1742225
TPH C12 - C28	U		0.600	0.900	0.900	1	09/21/2021 21:25	WG1742225
TPH C28 - C35	U		0.600	0.900	0.900	1	09/21/2021 21:25	WG1742225
TPH C6 - C35	U		0.600	0.900	0.900	1	09/21/2021 21:25	WG1742225
(S) o-Terphenyl	104				70.0-130		09/21/2021 21:25	WG1742225



















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SAMPLE RESULTS - 03

L1402334

Collected date/time: 09/09/21 13:45 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/21/2021 21:39	WG1742225
TPH C12 - C28	U		0.600	0.900	0.900	1	09/21/2021 21:39	WG1742225
TPH C28 - C35	U		0.600	0.900	0.900	1	09/21/2021 21:39	WG1742225
TPH C6 - C35	U		0.600	0.900	0.900	1	09/21/2021 21:39	WG1742225
(S) o-Terphenyl	108				70.0-130		09/21/2021 21:39	WG1742225



















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SAMPLE RESULTS - 04

L1402334

Collected date/time: 09/09/21 15:40 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/20/2021 04:14	WG1742227
TPH C12 - C28	U		0.600	0.900	0.900	1	09/20/2021 04:14	WG1742227
TPH C28 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:14	WG1742227
TPH C6 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:14	WG1742227
(S) o-Terphenyl	95.2				70.0-130		09/20/2021 04:14	WG1742227



















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SAMPLE RESULTS - 05

L1402334

Collected date/time: 09/09/21 16:22 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/20/2021 04:28	WG1742227
TPH C12 - C28	U		0.600	0.900	0.900	1	09/20/2021 04:28	WG1742227
TPH C28 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:28	WG1742227
TPH C6 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:28	WG1742227
(S) o-Terphenyl	91.4				70.0-130		09/20/2021 04:28	WG1742227



















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SAMPLE RESULTS - 06

L1402334

Collected date/time: 09/09/21 17:30 TPH by TCEQ Method 1005

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
TPH C6 - C12	U		0.600	0.900	0.900	1	09/20/2021 04:42	WG1742227
TPH C12 - C28	U		0.600	0.900	0.900	1	09/20/2021 04:42	WG1742227
TPH C28 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:42	WG1742227
TPH C6 - C35	U		0.600	0.900	0.900	1	09/20/2021 04:42	WG1742227
(S) o-Terphenyl	96.7				70.0-130		09/20/2021 04:42	WG1742227



















QUALITY CONTROL SUMMARY

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TPH by TCEQ Method 1005

L1402334-01

Method Blank (MB)

(MB) R3706598-1 0	9/21/21 06:50			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	112			70.0-130

²Tc





⁵Sr

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3706598-2 09/21	/21 07:03 • (LCS	SD) R3706598	-3 09/21/21 07:	17							
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	41.0	45.8	98.3	110	75.0-125			11.1	20	
TPH C12 - C28	41.7	40.0	43.5	95.9	104	75.0-125			8.38	20	
TPH C6 - C35	83.4	81.0	89.3	97.1	107	75.0-125			9.75	20	
(S) o-Terphenyl				110	116	70.0-130					





QUALITY CONTROL SUMMARY

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TPH by TCEQ Method 1005

L1402334-02,03

Method Blank (MB)

(MB) R3707084-1 09	/21/21 19:19			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Ternhenvl	109			70 0-130









Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3707084-2 09/21/21 19:33 • (LCSD) R3707084-3 09/21/21 19:46											
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	41.7	40.0	40.9	95.9	98.1	75.0-125			2.22	20	
TPH C12 - C28	41.7	39.0	39.7	93.5	95.2	75.0-125			1.78	20	
TPH C6 - C35	83.4	79.0	80.6	94.7	96.6	75.0-125			2.01	20	
(S) o-Terphenyl				101	104	70.0-130					









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QUALITY CONTROL SUMMARY

L1402334-04,05,06

TPH by TCEQ Method 1005

Method Blank (MB)

(MB) R3706109-1 09/	/20/21 03:13			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH C6 - C12	U		0.600	0.900
TPH C12 - C28	U		0.600	0.900
TPH C28 - C35	U		0.600	0.900
TPH C6 - C35	U		0.600	0.900
(S) o-Terphenyl	98.2			70.0-130







⁵Sr

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3706109-2 09	/20/21 03:46 • (LCS	SD) R3706109	-3 09/20/21 04	1:00							
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%	
TPH C6 - C12	40.1	36.8	37.9	91.8	95.7	75.0-125			2.95	20	
TPH C12 - C28	40.1	37.9	35.7	94.5	90.2	75.0-125			5.98	20	
TPH C6 - C35	80.2	74.7	73.6	93.1	93.0	75.0-125			1.48	20	
(S) o-Terphenyl				101	96.5	70.0-130					





Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resu reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section fo each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

















Pace Analy	tical National	12065 Lebanon Rd	Mount Julia	+ TNI 37122
race Analy	yticai Nationai	12003 Leballoli Ku	i Mourit Julie	l, IIN 3/122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	



^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.

TN00003

EPA-Crypto

















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

	in Lews IF Envs mente Billing Information:					Analysis / Container / Preservative					Chain of Custody Page of		
Tim terwolf ?	Envsma	mentel				Pres Chk					Pace A Nutional Cen	nalytical* ter for Testing & Innovation	
Report to: Jim Foster Project Description: [8006]	-		Email To:	D feam	tinhew	o (F.C	~				12065 Lebanon Rd Mount Juliet, TN 371 Phone: 615-758-5856 Phone: 800-767-5859 Fax: 615-758-5859		
hone:	Client Project	#		Lab Project #			700				L# /90 H07	4	
follected by (print):	Site/Facility IC)#		P.O. #			14				Acctnum: Template:		
Collected by (signature): mmediately Packed on Ice N Y	Same D	y 5 Day (ay (Rad Only)	Quote #	sults Needed	No.	PH-1				Prelogin: TSR: PB:		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	1				Shipped Via:	Sample # (lab only)	
MWI	5	W	-	9/9/21	1430	2	1					-01	
MWZ MW3					1255	- 2	/					-03	
MWY					1540	1	1					-04	
MW5 MW6	4	1		1	1622	2	1					-06	
												/	
Matrix: 5 - Soil AIR - Air F - Filter W - Groundwater B - Bioassay	Remarks:								pH	Temp	Sample Receipt Ch COC Seal Present/Intact COC Signed/Accurate: Bottles arrive made	NP _Y_	
vW - WasteWater W - Drinking Water or - Other	Samples retu	rned via: edEx Cour	rier		Tracking # 51	63	7717	279	17	One:	Correct bottles used: Sufficient volume sent: If Applicab VOA Zero Headspace:	le Z	
telinquished by : (Signature)		Datey 9/10	121	Time: 1050	Received by: (Sign	nature)	1 -1 -		Trip Blank Red	eived: Yes/No HCL/MeoH	Preservation Correct/Ch	ecked:Y	
Relinquished by : (Signature)		Date:	21		Received by: (Signature)				Temp/ 6	TBR C Bottles Received:	If preservation required by Login: Date/Time		
Relinquished by : (Signature)	1	Date:		Time:	Received for lab b	oy: (Signa	ture)		Date:	Time:	Hold:	Condition: NCF / OK	
eleased to Imaging: 10/21/	/2022 2:09:2	4 PM			pas	(11111	1000			

State of New Mexico Energy, Minerals and Natural Resources Department

Michele Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary

Todd E. Leahy, JD, PhD Deputy Cabinet Secretary Adrienne Sandoval
Director, Oil Conservation Division



Mitch Killough Hilcorp Energy Company 1111 Travis Street Houston, TX 77002

RE: Abatement Completion Report Approval

Kaufman 001 (Incident #: NCS1833331001) AP-138

Mr. Killough,

Oil Conservation Division (OCD) has reviewed the file for the release referenced above. The available information indicates Hilcorp has met the requirements of 19.15.30 NMAC and no further corrective action is required. You are notified the referenced abatement/remediation is closed.

This finding by the OCD does not relieve Hilcorp of responsibility if future information shows a threat to ground water, surface water, human health, or the environment. Further, it does not relieve Hilcorp of responsibility for compliance with any federal, state, or local law.

Please properly plug remaining monitoring wells per requirements of the New Mexico Office of the State Engineer. Forward copies of plugging reports to OCD.Enviro@emnrd.nm.gov and to the groundwater abatement portal.

Respectfully,

Adrienne Sandoval Division Director AES/njv

Date: 10/20/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 75457

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	75457
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	10/21/2022