

NEW MEXICO ENVIRONMENT DEPARTMENT VOLUNTARY REMEDIATION AGREEMENT

I. Introduction

This Voluntary Remediation Agreement (“Agreement”) is entered into voluntarily by **Taos Ski Valley, Inc.** represented by **John Kelly, Director of Operations**, who is duly authorized and appointed (“Participant”) and the secretary of the New Mexico Environment Department (“Department”), or his or her designee, pursuant to the Voluntary Remediation Act, Sections 74-4G-1 et seq. NMSA 1978, and the New Mexico Voluntary Remediation Regulations (20.6.3 NMAC). The purpose of this Agreement is to detail the obligations and functions of each party relevant to the remediation to be conducted at the **Kachina Maintenance Facility (KMF)** (“Site”), located at 36°34'37.9"N and 105°26'21.9"W, the end of Kachina Road at the Kachina Base, Taos Ski Valley in Taos County, under the Voluntary Remediation Program (**VRP Site No. 53201003**).

The activities conducted by the Participant under this Agreement are subject to approval by the Department. The activities conducted by the Participant shall be consistent with this Agreement, all applicable laws and regulations, and any pertinent guidance documents. The Participant shall employ sound scientific, engineering, and construction practices in the voluntary remediation activities at this Site.

II. Statement of Eligibility

The secretary or his designee has determined that the application, submitted by the Participant to the Department on December 4, 2020, is complete, and that the Participant is eligible to enter into this Agreement in accordance with Section 74-4G-5 NMSA 1978 and 20.6.3.200.A NMAC.

III. Parties Bound

This Agreement shall apply to and be binding upon the Participant, its officers, managing agents, directors, principals, partners, employees, receivers, trustees, agents, parents, subsidiaries and affiliates, and upon the Department, its employees, and agents. The Participant has submitted with the application a signed Declaration of Ability and Intent as set forth in 20.6.3.200.B(2) NMAC. No change in ownership, corporate, or partnership status shall in any way alter the Participant’s status or responsibilities under this Agreement unless the Participant or Department terminates this Agreement in accordance with 20.6.3.300.H NMAC.

The Participant shall provide a copy of this Agreement to any subsequent owners or successors before ownership rights are transferred. The Participant shall provide a copy of this Agreement to all contractors, subcontractors, laboratories, and consultants or other parties, which are retained by the Participant, to conduct any work under this Agreement, within 14 days after the effective date of this Agreement or within 14 days of the date of retaining their services.

IV. Designated Project Manager

On or before the effective date of this Agreement, the Department shall designate a project manager. The Primary Applicant specified on the Voluntary Remediation Program Application will function as the project manager for the Participant. Each project manager shall be responsible for overseeing the implementation of this Agreement. The Department project manager will be the Department-

designated representative at the site. To the maximum extent possible, communications between the Participant and Department and all documents (including reports, approvals, and other correspondence) concerning the activities performed pursuant to the terms and conditions of this Agreement shall be directed through the project managers. During implementation of this Agreement, the project managers shall, whenever possible, operate by consensus and shall attempt in good faith to resolve disputes informally through discussion of the issues. Each party has the right to change its respective project manager by notifying the other party in writing at least five days prior to the change.

V. Definitions

“Site” means the area described in the Voluntary Remediation Application. This description is attached and incorporated herein as Exhibit 1. All other terms used are defined in Section 74-4G-3 NMSA 1978 and 20.6.3.7 NMAC.

VI. Addresses for All Correspondence

Documents, including reports, approvals, notifications, disapprovals, and other correspondence to be submitted under this Agreement, may be sent by certified mail, first class mail, hand delivery, overnight mail, or by courier service to the following addresses or to such addresses as the Participant or Department designates in writing.

Documents to be submitted to the Department should be sent to:

Mailing Address:

Rebecca Cook
Ground Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502
E-mail: rebecca.cook@state.nm.us
Phone number: (505) 670-2135
Fax number: (505) 827-2965

Physical Address:

Rebecca Cook
Ground Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, NM 87505

Documents to be submitted to the Participant should be sent to:

Mailing Address:

Taos Ski Valley, Inc.
Attn. John Kelly
P.O. Box 90
Taos Ski Valley, NM 87525
jcanepa@newmexico.com
505-982-9229

Physical Address:

Taos Ski Valley, Inc.
Taos Ski Valley, NM 87525

VII. Compliance with Applicable Laws

All work undertaken by the Participant pursuant to this Agreement shall be performed in compliance with all applicable federal, state and local laws, ordinances and regulations, including, but not limited

to all Occupational Safety and Health Administration, Department of Transportation, Resource Conservation and Recovery Act, New Mexico Water Quality Control Commission, and New Mexico Environmental Improvement Board Petroleum Storage Tank regulations. In the event of a conflict between federal, state, or local laws, ordinances, or regulations, the Participant shall comply with the most stringent of such laws, ordinances, or regulations, unless provided otherwise in writing by the Department or other appropriate regulatory personnel with jurisdiction over such laws, ordinances, and regulations. Where it is determined that a permit is required under federal, state or local laws, ordinances, or regulations, the Participant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. The Participant shall be responsible for obtaining all permits that are necessary for the performance of the work hereunder, and for all ongoing or proposed Site activities, and for all ongoing or proposed facility operations.

VIII. Performance Standards and Associated Requirements

The Participant has submitted with their application to the Department a preliminary work plan describing the proposed voluntary remediation activities as they are currently envisioned as being submitted in a final voluntary remediation work plan, which includes a description of the known and suspected contaminants to be addressed by the proposed voluntary remediation activities. This preliminary work plan was prepared pursuant to 20.6.3.200.B NMAC. A copy of the preliminary work plan is attached and incorporated herein as Exhibit 2.

The contaminants covered by this Agreement are described as follows:

Petroleum hydrocarbons, especially diesel range organics, in groundwater and in soil beneath the area of the above ground storage tank (AST).

Voluntary remediation activities undertaken pursuant to this Agreement shall achieve the following standards or risk-based levels:

Standards for Ground Water as set forth in Section 20.6.2.3103 NMAC of the Ground and Surface Water Regulations (20.6.2 NMAC);

New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation, February 2019.

It is understood that the parties may wish to modify the list of contaminants and the media in which the contaminants are located, as covered by this Agreement, as additional information about the Site is developed. The Department may approve such changes through approval of work plans and other submittals provided by the Participant during the course of undertaking voluntary remediation activities.

IX. Access

To the extent that the Site or other areas where work is to be performed hereunder are presently owned or controlled by parties other than those bound by this Agreement, the Participant shall obtain or shall use its best efforts to obtain access agreements from the present owners. Best efforts shall include, at a minimum, certified letters from Participant to the present owners of such properties

requesting access agreements to permit the Participant, Department, and their authorized representatives' access to such property. Such agreements shall provide access for the Department and authorized representatives of the Department, as specified below. In the event that such access agreements are not obtained, the Participant shall so notify the Department, which may then, at its discretion, assist the Participant in gaining access.

The Participant shall provide authorized representatives of the Department access to the Site and other areas where work is to be performed at all reasonable times. Such access shall be related solely to the work being performed on the Site pursuant to this Agreement and may include, but is not limited to: inspecting and copying of Site and facility records; reviewing the progress of the Participant in carrying out the terms of this Agreement; conducting such tests, inspections, and sampling as the Department may deem necessary; using a camera, sound recording, or other documentary type equipment for field activities; and verifying the data submitted to the Department by the Participant hereunder. Prior to conducting remediation activities, the Participant shall provide a minimum of 72 hours' notice to the Department to allow observation of Site activities and to allow the Department's authorized representatives to collect split samples, at the Department's discretion. The Participant shall permit the Department's authorized representatives to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data, which pertain to this Agreement and over which the Participant exercises authority.

X. Deliverables and Submittal Schedule

A. Final Voluntary Remediation Work Plan

In accordance with 20.6.3.400 NMAC, the Participant shall submit to the Department a proposed final voluntary remediation work plan, detailing investigation and remediation activities to be undertaken to achieve the performance standards described in Section VIII of this Agreement. At a minimum, the final work plan must include the elements listed in 20.6.3.400.B NMAC.

Submittal Schedule:

The proposed final work plan shall be submitted by the Participant no later than 60 days after this Agreement has been signed.

If the work plan is to be prepared in phases, the work plan for the first phase shall be submitted no later than 60 days after this Agreement has been signed. Following completion, to the Department's satisfaction, of the work which is the subject of the final work plan for the first phase, the Department may require submission of one or more proposed final work plans for subsequent phases.

Department Review:

The secretary or his designee shall review and approve, approve with conditions, or disapprove a proposed final work plan within 45 days of receipt. Written notice shall be made of any conditions or deficiencies. If the secretary or his designee disapproves a final work plan, the Participant may be granted an opportunity to submit a revised version, as determined by the secretary or his designee.

Modification of Voluntary Remediation Work Plan:

The approved final voluntary remediation work plan may be modified at the request of the Participant and/or the Department, with both parties' approval, in accordance with 20.6.3.400.D NMAC.

B. Periodic Status Reports

The Participant shall submit periodic status reports, which detail activities completed for the reporting period and those planned for the upcoming reporting period, to the Department for the duration of this Agreement. The status report shall identify any proposed variances to the approved work plan and describe interim progress on implementation of the work plan, including analytical results of any sampling, water level measurements, Site maps or photos, as appropriate.

Submittal Schedule:

Periodic status reports are not required.

C. Voluntary Remediation Completion Report

In accordance with 20.6.3.500.B NMAC, following the completion of Site voluntary remediation activities, the Participant shall demonstrate to the Department that Site conditions meet the applicable standards specified in Section VIII of this Agreement by submitting to the Department a voluntary remediation completion report. The content of the completion report is detailed in 20.6.3.500.B NMAC. The report shall be submitted to the Department with the legal description of the affected property, and with an Affidavit of Completion of Voluntary Remediation signed by the Participant that indicates that remediation is complete, in accordance with this Agreement and applicable regulations and guidance.

Submittal Schedule:

The voluntary remediation completion report shall be submitted to the Department within 90 days following completion of voluntary remediation activities.

Department Review:

The Department shall review and determine the sufficiency of a completion report within 45 days of receipt. If the secretary or his designee does not approve the completion report, the secretary or his designee shall either issue a finding that the Participant is not in compliance with the Agreement and terminate the Agreement, or advise the Participant in writing of data gaps in the report. The Participant shall correct any identified data gaps and resubmit the completion report within 30 days of receipt of notice of data gaps.

XI. Certificate of Completion

If the secretary or his designee approves the voluntary remediation completion report, the secretary or his designee will issue either a Certificate of Completion or a Conditional Certificate of Completion, as appropriate, pursuant to Section 74-4G-7 NMSA 1978 and 20.6.3.500.B NMAC. If a Conditional Certificate of Completion is issued, the Department shall conduct audits to ensure that

all engineering controls, remediation systems, post-closure care, and affirmations of future non-residential land use are being maintained appropriately. These audits shall be performed at least every other year for the first 10 years following the issuance of the Conditional Certificate of Completion, and every five years thereafter. If, during the course of such an audit, the Department finds that any of the monitoring requirements, engineering controls, remediation systems, post-closure care, or affirmations of future non-residential land use are not being properly maintained such that the performance standards described in Section VIII of this Agreement are no longer being met, the Department may revoke the Conditional Certificate of Completion and initiate an enforcement action.

No Certificate of Completion or Conditional Certificate of Completion shall be issued to a Participant who has not paid invoiced oversight costs in full to the Department.

XII. Covenant Not to Sue

Pursuant to Section 74-4G-8 NMSA 1978 and 20.6.3.600 NMAC, after the secretary or his designee issues the Certificate of Completion or Conditional Certificate of Completion, the secretary or his designee shall provide a covenant not to sue to a purchaser or prospective purchaser of the Site that did not contribute to the Site contamination, for any direct liability, including future liability, for claims based upon the contamination covered by the Agreement and over which the Department has authority. Except as may be provided under federal law or as may be agreed to by a federal government entity, the covenant not to sue shall not release or otherwise apply to claims by the federal government for claims based on federal law. Except as may be agreed to by another department or agency of the state, the covenant not to sue shall not release or otherwise apply to claims of any other office, department, or agency of the state. Except as may be agreed to by a third party, the covenant not to sue shall not release or otherwise affect a person's liability to third parties.

XIII. Dispute Resolution

This section shall apply to any dispute arising under any section of this Agreement, unless specifically excepted. Dispute resolution shall be conducted in accordance with 20.6.3.300.1 NMAC).

XIV. Reservation of Rights

The Department and Participant reserve all rights and defenses they may have pursuant to any available legal authority unless expressly waived herein. The Department expressly reserves the right to take any action, including any enforcement action, to address any release not covered by this Agreement, including any release that occurs after issuance of the Certificate of Completion or any release of a contaminant not covered by the voluntary remediation agreement. The secretary's covenant not to sue shall not apply to any such release.

Nothing herein is intended to release, discharge, or in any way affect any claims, causes of action or demands in law or equity which the parties may have against any person, firm, partnership or corporation not a party to this Agreement for any liability it may have arising out of, or relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any materials, hazardous substances, hazardous waste, contaminants or pollutants at, to, or from the Site. The parties to this Agreement expressly reserve all rights, claims, demands, and causes of action

they have against any and all other persons and entities who are not parties to this Agreement, and as to each other for matters not covered hereby.

The Participant reserves the right to seek contribution, indemnity, or any other available remedy against any person other than the Department found to be responsible or liable for contribution, indemnity or otherwise for any amounts which have been or will be expended by the Participant in connection with the Site.

XV. Enforcement Shield

Pursuant to the provisions of 20.6.3.300.A NMAC, the secretary will not initiate any enforcement action, including an administrative or judicial action, against a Participant for the contamination or release thereof, or for the activity that results in the contamination or release thereof, if the contamination is the subject of an Agreement pursuant to 20.6.3 NMAC. However, this Section shall not be a bar to any enforcement action if the Agreement is not finalized, if the Agreement is terminated or rescinded, or if the Participant does not successfully initiate or implement the Agreement within a reasonable time under the schedules set forth in this Agreement and approved work plans.

XVI. Oversight Costs

The Participant agrees to reimburse the Department for all of its costs associated with oversight and implementation of this Agreement in accordance with 20.6.3.300.J NMAC. These costs shall include those described in 20.6.3.300.J NMAC, as well as long-term oversight performed by the Department, as described in 20.6.3.500.B(5) NMAC, if a Conditional Certificate of Completion is issued.

Oversight will be invoiced based on actual hours of staff oversight, at a variable rate beginning at \$90.00 per hour. The hourly rate is calculated and updated on November 1 of each year, following a 30 calendar day public comment period. Travel and per diem costs will be invoiced at state-designated rates. Sampling and analysis costs will be invoiced at actual cost plus indirect overhead rate.

The Department will track all costs to the Department for review and oversight activities related to the Site and provide quarterly (or more often at the discretion of the Department) invoices per this Agreement for said costs. The Participant shall pay these invoiced costs to the Department within 30 calendar days after the date that the Participant receives notice that these costs are due and owed. If payment is not made within 30 days, the Department may terminate this Agreement and bring an action to collect the amount owed and the costs of bringing the collection action. If the Department prevails in such collection action, the Participant shall pay the Department's reasonable attorneys' fees and costs incurred in the collection action.

In the event that this Agreement is terminated for any reason, the Participant agrees to reimburse the Department for all costs incurred or obligated by the Department before the date of notice of termination of the Agreement.

XVII. Notice of Bankruptcy

As soon as Participant has knowledge of its intention to file bankruptcy, or no later than seven days prior to the actual filing of a voluntary bankruptcy petition, Participant shall notify the Department of its intention to file a bankruptcy petition. In the case of an involuntary bankruptcy petition, Participant shall give notice to the Department as soon as it acquires knowledge of such petition.

XVIII. Indemnification

The Participant shall defend, indemnify, and hold harmless the Department and the State of New Mexico from all actions, proceedings, claims, demands, costs, damages, attorneys' fees, and all other liabilities and expenses of any kind from any source which may arise out of the performance of this Agreement, caused by the negligent act or failure to act of the Participant, its officers, employees, servants, subcontractors or agents, or if caused by the actions of any client of the Participant resulting in injury or damage to persons or property during the time when the Participant or any officer, agent, employee, servant or subcontractor thereof has or is performing services pursuant to this Agreement.

XIX. Effective Date and Subsequent Modification

The Agreement shall become final and effective upon being signed by both the secretary or his designee and the Participant. The effective date of the Agreement shall be the later date of signature by either the secretary or his designee or the Participant. This Agreement may be amended only by mutual agreement of the Department and the Participant. Amendments shall be in writing and shall be effective upon being signed by both the secretary or his designee and the Participant.

XX. Termination

As provided for in 20.6.3.300.H NMAC, if an Agreement is not reached between an applicant and the secretary or his designee on or before the 30th calendar day after the secretary or his designee determines an applicant to be eligible pursuant 20.6.3.200 and 20.6.3.300 NMAC, the applicant or the secretary or his designee may withdraw from the negotiations. The Participant may terminate the voluntary remediation Agreement upon 60 calendar days' written notice via certified mail, return receipt requested to the Department. The secretary or his designee may terminate this Agreement upon finding that the Participant is not in compliance with this Agreement. Notice of termination will be made to the Participant via certified mail, return receipt requested, and facts supporting the rationale for termination shall be set forth in the notification. The Department's costs incurred or obligated before the date the notice of termination is received are recoverable by the Department under the Agreement if the Agreement is terminated.

XXI. Complete Agreement

This Agreement contains the entire Agreement of the parties.

XXII. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New Mexico.

The provisions of this Agreement shall be satisfied when the Department gives the Participant written notice in the form of a Certificate of Completion that the Participant has demonstrated to the secretary's satisfaction that the terms of this Agreement have been completed, including the selection and implementation of a remedial action, when appropriate.

Nothing in this Agreement shall restrict the State of New Mexico from seeking other appropriate relief to protect human health or the environment from contamination at or from this Site if not remediated in accordance with this Agreement.

DRAFT

Signatures

Participant(s):

By: _____
(Signature of authorized representative)

Name: _____
(Print or type)

Date: _____

New Mexico Environment Department:

By: _____
(Secretary or designee)

Name: _____
(Print or type)

Date: _____

Enclosures: Exhibit 1: Legal Description of Property
 Exhibit 2: Preliminary Work Plan

NEW MEXICO ENVIRONMENT DEPARTMENT
VOLUNTARY REMEDIATION AGREEMENT

EXHIBIT 1

Legal Description of Property

Kachina Maintenance Facility
VRP Site No. 53201003

The site is a 20.48-acre parcel located at 36°34'37.9"N and 105°26'21.9"W, Kachina Base, Taos Ski Valley. The full legal description is included on the following survey.

Within the Antoine Leroux Grant in the Village of Taos Ski Valley, Taos County, New Mexico

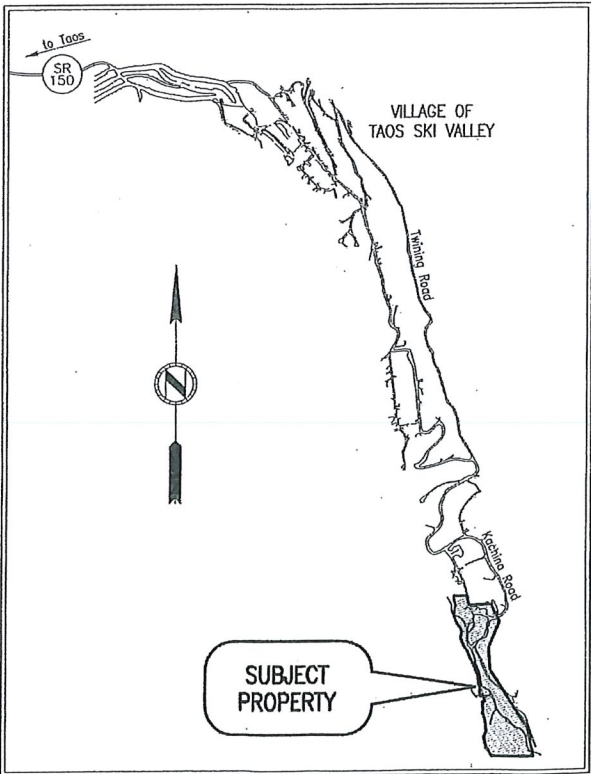
PROPERTY DESCRIPTION

A tract of land within the Antoine Leroux Grant in the Village of Taos Ski Valley, Taos County, New Mexico, shown on the Taos County Property ID Maps within Section 15, Township 27 North, Range 14 East, NMPM, and more particularly described as follows:

BEGINNING at the SE corner of this tract, a 1/2" rebar found with a cap stamped LS 11183, from whence a 2.5" aluminum cap monument with a cap stamped LS 11183 found at the base of Kachina Lift Tower No. 4 bears N 52° 43' 45" W, 1,806.11 ft. distant, thence:

S 89° 28' 48" W, 576.11 ft. to the SW corner of this tract, a point on the centerline of Lake Fork Stream from whence a 1/2" rebar with a cap stamped NMP5 11770 set as a witness corner bears N 89° 28' 48" E, 15.00 ft. distant, thence along said stream centerline the following meander courses:
N 35° 17' 35" W, 144.38 ft. to a point, thence:
N 11° 40' 57" W, 139.26 ft. to a point, thence:
N 20° 14' 20" E, 84.39 ft. to a point, thence:
N 08° 48' 05" W, 62.78 ft. to a point, thence:
N 05° 48' 03" E, 26.57 ft. to a point, thence:
N 17° 22' 36" W, 20.87 ft. to a point, thence:
N 07° 50' 48" W, 50.90 ft. to a point, thence:
N 15° 07' 25" W, 64.94 ft. to a point, thence:
N 30° 20' 36" W, 30.53 ft. to a point, thence:
N 12° 57' 08" E, 53.38 ft. to a point, thence:
N 13° 01' 31" W, 30.35 ft. to a point, thence:
N 00° 17' 31" E, 29.03 ft. to a point, thence:
N 05° 03' 26" W, 29.04 ft. to a point, thence:
N 43° 17' 37" W, 5.95 ft. to a point, thence leaving said stream centerline:
N 76° 38' 56" E, 37.09 ft. to a 1/2" rebar set, thence:
N 13° 21' 04" W, 81.07 ft. to a 1/2" rebar set, thence:
S 76° 48' 12" W, 44.41 ft. to a point on the centerline of Lake Fork Stream, thence along said stream centerline the following meander courses:
N 12° 23' 07" W, 54.27 ft. to a point, thence:
N 06° 13' 47" E, 58.16 ft. to a point, thence:
N 18° 26' 18" W, 48.16 ft. to a point, thence:
N 04° 12' 44" W, 115.54 ft. to a point, thence:
N 22° 03' 23" W, 210.42 ft. to a point, thence:
N 31° 37' 27" W, 66.88 ft. to a point, thence:
N 20° 12' 07" W, 91.99 ft. to a point, thence:
N 38° 48' 07" W, 59.03 ft. to a point, thence:
N 25° 34' 37" W, 136.77 ft. to a point, thence:
N 09° 21' 13" E, 106.42 ft. to a point, thence:
N 32° 48' 56" W, 147.93 ft. to a point, thence:
N 20° 58' 36" W, 83.45 ft. to a point, thence:
N 02° 01' 21" E, 30.74 ft. to a point, thence:
N 10° 39' 15" E, 118.63 ft. to a point, thence:
N 18° 47' 19" W, 74.75 ft. to a point, thence:
N 01° 35' 33" W, 49.09 ft. to the NW corner of this tract, a point from whence a 1/2" rebar with a cap stamped S 11183 found as a witness corner bears N 88° 07' 33" E, 13.24 ft. distant, thence:
N 88° 07' 33" E, 176.11 ft. to the northerlymost corner of this tract, a 1/2" rebar set, thence:
S 15° 56' 37" E, 132.62 ft. to a 1/2" rebar found, thence:
N 87° 56' 41" E, 302.05 ft. to a 1/2" rebar found, thence:
S 25° 45' 11" E, 260.32 ft. to a 1/2" rebar found, thence:
S 23° 10' 44" W, 300.82 ft. to a 1/2" rebar found with a cap stamped LS 5213, thence:
S 23° 05' 07" W, 78.89 ft. to a 5/8" rebar found, thence:
S 03° 18' 05" E, 299.80 ft. to a 5/8" rebar found, thence:
S 34° 21' 06" E, 586.94 ft. to a 1/2" rebar set, thence:
S 34° 16' 12" E, 353.84 ft. to a 1/2" rebar set, thence:
S 11° 40' 14" E, 388.24 ft. to the POINT OF BEGINNING.

This tract contains 20.999 acres more or less, as shown on Red Tail Surveying, Inc. plat no. 1817, entitled Taos Ski Valley, Inc. Phoenix Tract, dated 2 January 2015, prepared by Robert A. Watt, NMP5 #11770.



VICINITY MAP
1"=1,500'

DOCUMENT REFERENCE

No.	Document Type	Grantor/Grantee	Date Signed	Taos County Filing Info.	
				Book	Page(s)
D1	Warranty Deed	Pattison Family Trust et al. to Taos Ski Valley, Inc.	21 Apr 1997	A-240	556-559
D2	Warranty Deed	Pattison Family Trust et al. to Taos Ski Valley, Inc.	21 Apr 1997	A-240	552-555
D3	Warranty Deed	Pattison Family Trust to Taos Holdings, LLC	18 Feb 2010	M-709	738-754
D4	Warranty Deed	O.E. and Lucilester Pattison and The Pattison Family Trust to Taos Ski Valley, Inc.	14 Sep 1971	A-124	7-11
D5	Warranty Deed	Pattison Family Trust et al. to Taos Holdings, LLC	25 Jul 1998	A-249	165-167
D6	Warranty Deed	Pattison Family Trust et al. to Lee Vosburgh	02 Jan 1997	A-238	266-288
D7	Warranty Deed	Pattison Family Trust et al. to Bruce W. and Alexandra L. Schnitzer	02 Jan 1997	A-238	380-383
D8	Warranty Deed	Belle Haven Investments, L.P. to Dean R. Gestal	17 May 1999	A-253	583-585
D9	Correction Warranty Deed	The Pattison Trust and Lucilester Pattison to Taos Ski Valley, Inc.	21 Apr 1997	A-240	560-563
D10	Warranty Deed	The Pattison Family Trust and Lucilester Pattison Trust to Belvedere Holdings III, LLC	02 Apr 1997	A-240	564-568
D11	Certificate of Change of Name	Belvedere Holdings III, LLC to Taos Holdings, LLC	30 Apr 1998	M-206	710-711
D12	Easement Grant and Agreement	Taos Holdings, LLC to Pattison Family Trust and Lucilester Pattison Trust	20 Apr 2001	M-277	853-857
D13	Warranty Deed	Taos Holdings, LLC to Lake Fork Creek Holdings, LLC	17 Aug 2011	M-757	789-798
D14	Easement Grant and Agreement	Taos Ski Valley, Inc. to Lake Fork Creek Holdings, LLC	08 Jun 2012	M-779	178-186
D15	Termination and Quitclaim	Taos Holdings, LLC and Pattison Family Trust	12 Feb 2010	M-709	679-690
D16	Warranty Deed	The Bavarian, Inc. to Twining Development, LLC	20 Oct 2014	M-859	746-748
D17	Special Warranty Deed	Pattison Family Trust to Kachina Property Owners Association	27 Feb 2008	M-645	253-255
D18	Warranty Deed	Pattison Family Trust and Lucilester Pattison Trust to Lee Vosburgh	27 Jul 1998	A-248	602-603
D19	Quitclaim Deed	Taos Ski Valley, Inc. to Taos Ski Valley, Inc.	04 Sep 2009	M-696	42-44
D20	Warranty Deed	Pattison Family Trust and Lucilester Pattison Trust to Bruce W. Schnitzer and Alexandra L. Schnitzer	27 Jul 1998	A-248	600-601
D21	Special Warranty Deed	Taos Ski Valley, Inc. to Village of Taos Ski Valley	12 Jul 2012	M-785	776-779
D22	Grant of Utility Easement	Taos Ski Valley, Inc. to Twining Water & Sanitation District	02 Jul 1997	M-196	819-820
D23	Underground Utilities Easement	Taos Ski Valley, Inc. to Village of Taos Ski Valley	29 Jun 1998	M-206	319-320
D24	Driveway Easement	Taos Ski Valley, Inc. to Pattison Family Trust	10 Jul 1998	M-206	899-900
D25	Grant of Easement	Taos Ski Valley, Inc. to Village of Taos Ski Valley	16 Jul 2013	M-823	715-718
D26	Grant of Utility Easement	Taos Ski Valley, Inc. to Twining Water & Sanitation District	17 Apr 1997	M-195	807-810
D27	Road, Utility, Access Easement	Taos Ski Valley, Inc. to Pattison Family Trust and Lucilester Pattison Trust	17 Apr 1997	M-195	801-806
D28	Special Warranty Deed	Pattison Family Trust to Pattison Trust, LLC	03 Oct 2013	M-837	145-160
D29	Warranty Deed	The Bavarian, Inc. to Taos Ski Valley, Inc.	20 Oct 2014	M-859	740
D30	Transfer of Special and Reserved Rights	The Bavarian, Inc. to Twining Development, LLC	20 Oct 2014	M-859	741-745
D31	Roadway, Utility, Easement Agreement	Pattison Family Trust, Lucilester Pattison Trust, Belvedere Holdings, et al.	19 Mar 1997	M-195	821-831
D32	Right-of-Way Easement	Taos Ski Valley, Inc. to Kit Carson Electric Cooperative	26 Aug 2013	M-835	340-341
D33	Special Warranty Deed	Taos Holdings, LLC to Village of Taos Ski Valley	29 Jun 2011	M-765	629-635
D34	Assignment of Easement	Lucilester Pattison and Pattison Family Trust to Twining Water and Sanitation District	03 Jul 1986	M-113	334-336
D35	Grant of Utility Easement	Pattison Family Trusts and Lucilester Pattison Trust to Twining Water and Sanitation District	21 Apr 1997	M-195	794-797
D36	Memorandum of Agreement	Taos Ski Valley, Inc., Pattison Family Trust, and Lucilester Pattison	03 Apr 1997	M-195	811-815
D37	Line Extension Agreement	Twining Water & Sanitation District and Pattison Family Trusts	11 Jul 1997	M-197	189-207
D38	Amendment to Line Extension Agreement	Twining Water and Sanitation District, Pattison Family Trust and Lucilester Pattison Trust	21 Sep 1998	M-208	331-332
D39	Memorandum of Lease	Taos Ski Valley, Inc. and T-Mobile West, LLC	13 Sep 2012	M-827	380-384

PLAT REFERENCE

No.	Title	Surveyor	NMP5 #	Job No.	Date	Amd. Date	Cabinet	Page
P1	The Pattison Trust	Gil Stewart	11183	290	07 Oct 1994	—	C	172-A
P2	Taos Ski Valley, Inc.	Gil Stewart	11183	460	17 Aug 2001	—	D	155-B
P3	Taos Ski Valley, Inc.	Gil Stewart	11183	456	Oct 1996	—	D	28-A
P4	Pattison Family Trust and Taos Holdings, LLC	Mark W. Shadburn	17532	1291.04x	15 Jan 2010	—	E	177-B
P5	Pattison Trust	A.G. Stewart	11183	416	08 Oct 1996	15 Apr 1998	E	177-B
P6	Preliminary Plat Lake Fork Creek Holdings, LLC Lake Fork Creek Subdivision	Robert A. Watt	11770	1501.PS	11 Oct 2012	—	—	—
P7	Replat of Lot 1, Block 3, Kachina Village Subdivision	A.G. Stewart	11183	555	March 2002	—	D	182-A
P8	Village of Taos Ski Valley Spring Box Tract & Easement	Robert A. Watt	11770	1425.02	20 Oct 2011	—	F	7-B
P9	Taos Ski Valley/Kachina Village	Georg Vedeler	3707	—	07 Nov 1972	—	B	94-A
P10	The Bavarian Inn & Chalets Condominium	Robert A. Watt	11770	1259.COND.amd2	04 May 2010	—	E	183-A
P11	Village of Taos Ski Valley Kachina Water Tank Site	Robert A. Watt	11770	1425	07 Mar 2011	—	E	196-B
P12	Taos Holdings, LLC's Lot 7 Wetland Mitigation Site Lot Split and Transfer to VTSV	Robert A. Watt	11770	1562.LS	05 Feb 2013	—	F	13-B
P13	Taos Ski Valley, Inc.	Robert A. Watt	11770	1434	12 Aug 2009	—	E	170-B

SURVEYOR'S NOTES

- This survey is a compilation of information provided or found in a public record. There may be other documents specifying easements, restrictions, covenants or codes that were not provided or are not known at the time of the preparation of this plat.
- For current zoning information, contact the Village of Taos Ski Valley Planning and Zoning Department.
- Part of the boundaries of this survey are meander courses along the Lake Fork Stream, are subject to change due to natural causes, and may or may not represent the actual limit of title.
- Information shown in parentheses is record information from references as shown.
- The route of the Williams Lake Trail is shown hereon as it existed at the time of this survey. This route is subject to change in future.

Sheet 1 of 4

BOUNDARY SURVEY

Current owner: Taos Ski Valley, Inc.

Projected Section 15, T 27N, R 14E, NMPM

Survey plat prepared for:

Taos Ski Valley, Inc.
Phoenix Tract



Red Tail Surveying, Inc.
Complete Land Surveying and
Earth Information Services

301-A Hinde Street
Taos, New Mexico 87571-6654
575.758.7441
www.redtailsurvey.com

Draftsman: JCMcL

Proof: Robert A. Watt

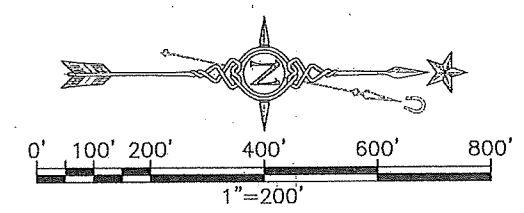
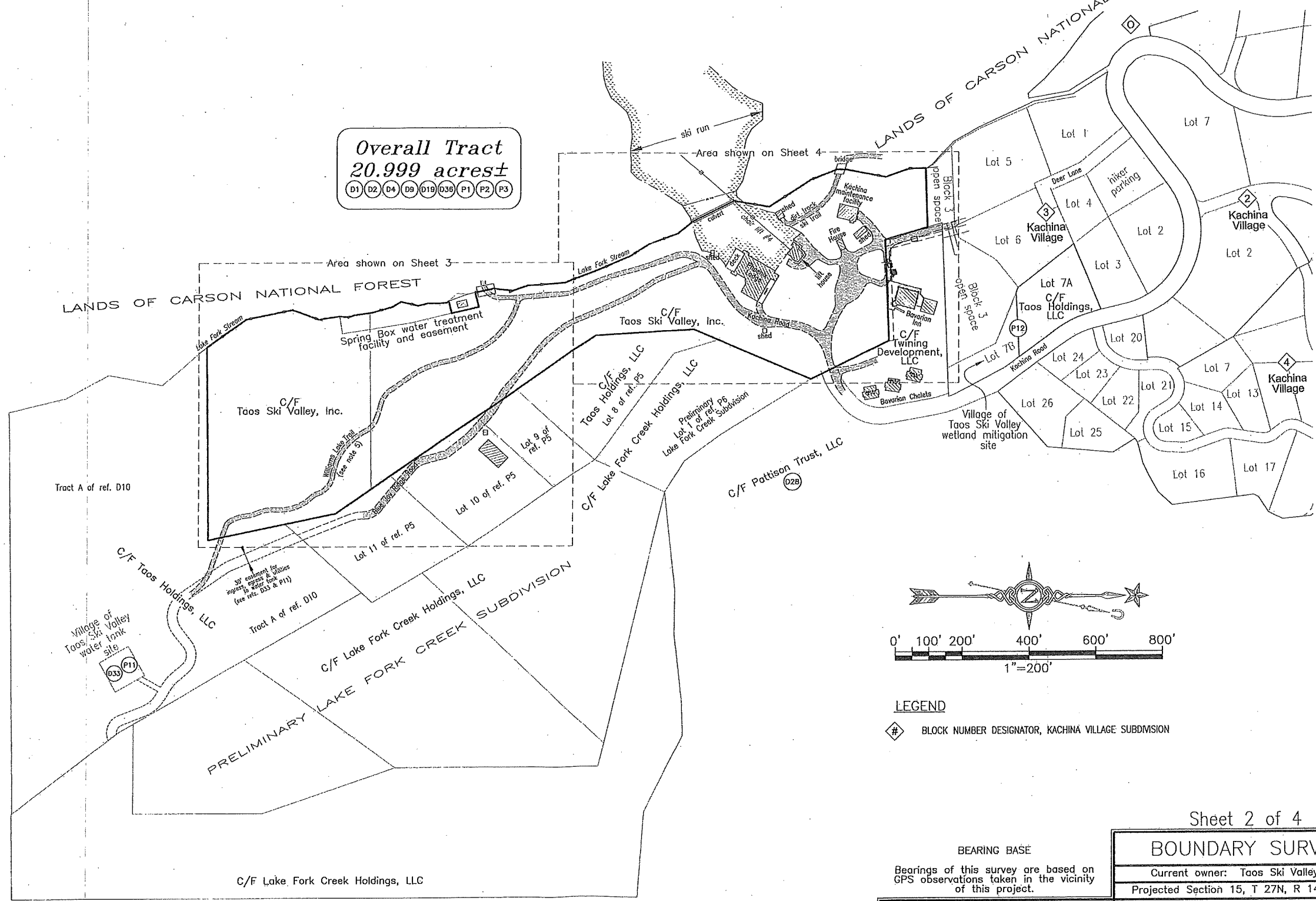
Date: 02 Jan 2015

Job no. 1817

Within the Antoine Leroux Grant in the Village of Taos Ski Valley, Taos County, New Mexico


LANDS OF CARSON NATIONAL FOREST

Overall Tract
20.999 acres±
D1 D2 D4 D9 D19 D36 P1 P2 P3

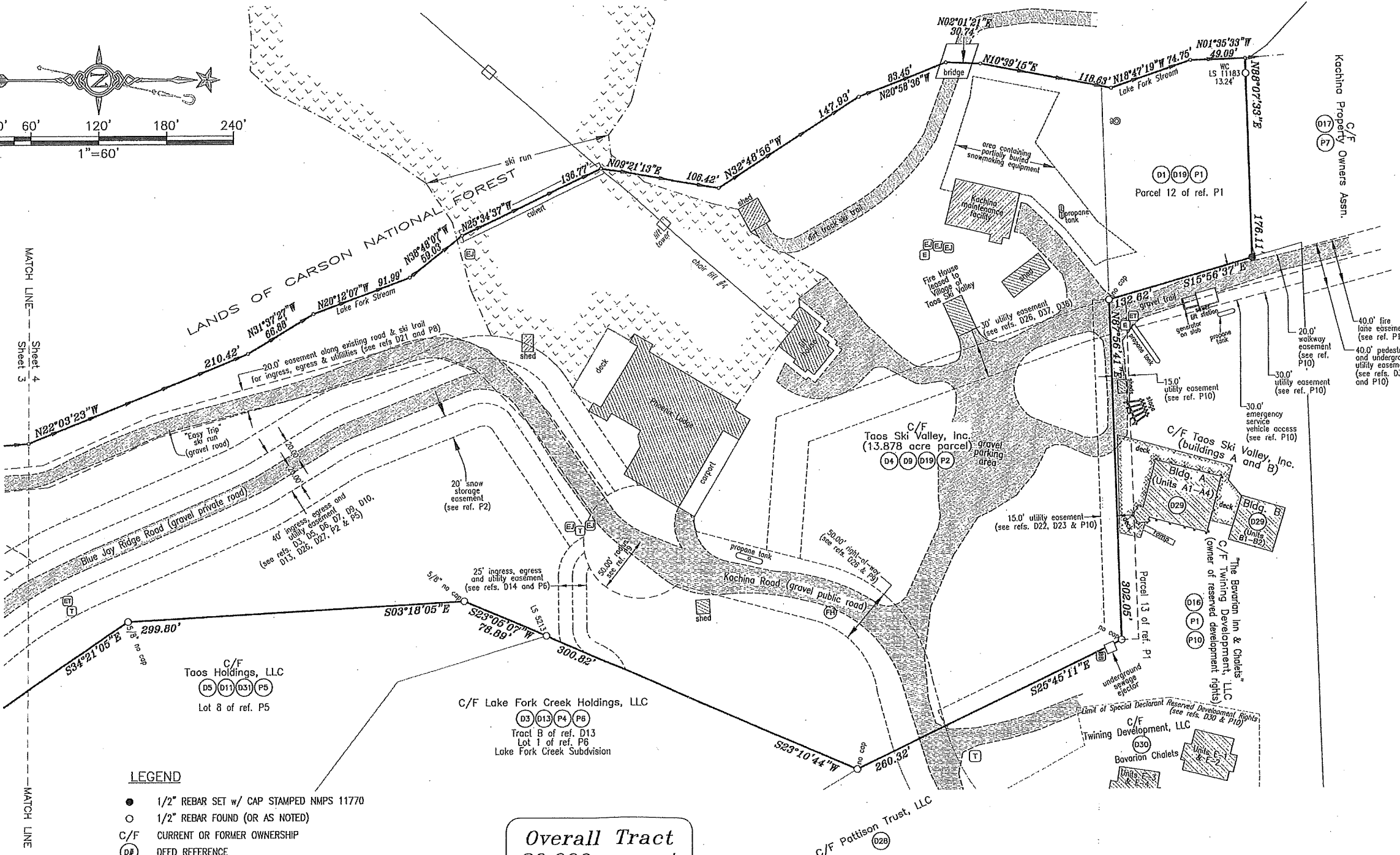
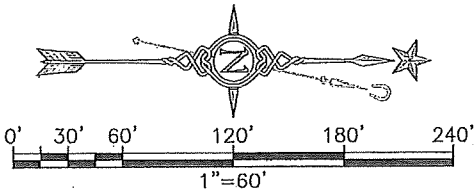


LEGEND
BLOCK NUMBER DESIGNATOR, KACHINA VILLAGE SUBDIVISION

Sheet 2 of 4

BEARING BASE		BOUNDARY SURVEY	
Bearings of this survey are based on GPS observations taken in the vicinity of this project.		Current owner: Taos Ski Valley, Inc.	
		Projected Section 15, T 27N, R 14E, NMPM	
		Survey plat prepared for:	
 Red Tail Surveying, Inc. Complete Land Surveying and Earth Information Services 301-A Hinde Street Taos, New Mexico 87571-6654 575.758.7441 www.redtailsurveying.com		Taos Ski Valley, Inc. Phoenix Tract	
Draftsman: JCMcl	Proof: Robert A. Watt	Date: 02 Jan 2015	Scale: 1"=200' Job no. 1817

Within the Antoine Leroux Grant in the Village of Taos Ski Valley, Taos County, New Mexico



LEGEND

- 1/2" REBAR SET w/ CAP STAMPED NMPS 11770
- 1/2" REBAR FOUND (OR AS NOTED)
- C/F CURRENT OR FORMER OWNERSHIP
- (D#) DEED REFERENCE
- (P#) PLAT REFERENCE
- WC WITNESS CORNER
- POINT NOT SET
- (E) ELECTRIC METER
- (ET) ELECTRIC TRANSFORMER
- (EJ) ELECTRICAL JUNCTION BOX
- (FH) FIRE HYDRANT
- (T) TELEPHONE PEDESTAL
- (S) SEWER CLEANOUT
- (BB) BREAKER BOX

Overall Tract
20.999 acres±
(D1 D2 D4 D9 D19 P1 P2 P3)

Sheet 4 of 4

BOUNDARY SURVEY

Current owner: Taos Ski Valley, Inc.
Projected Section 15, T 27N, R 14E, NMPM

Survey plat prepared for:

Taos Ski Valley, Inc.
Phoenix Tract

BEARING BASE

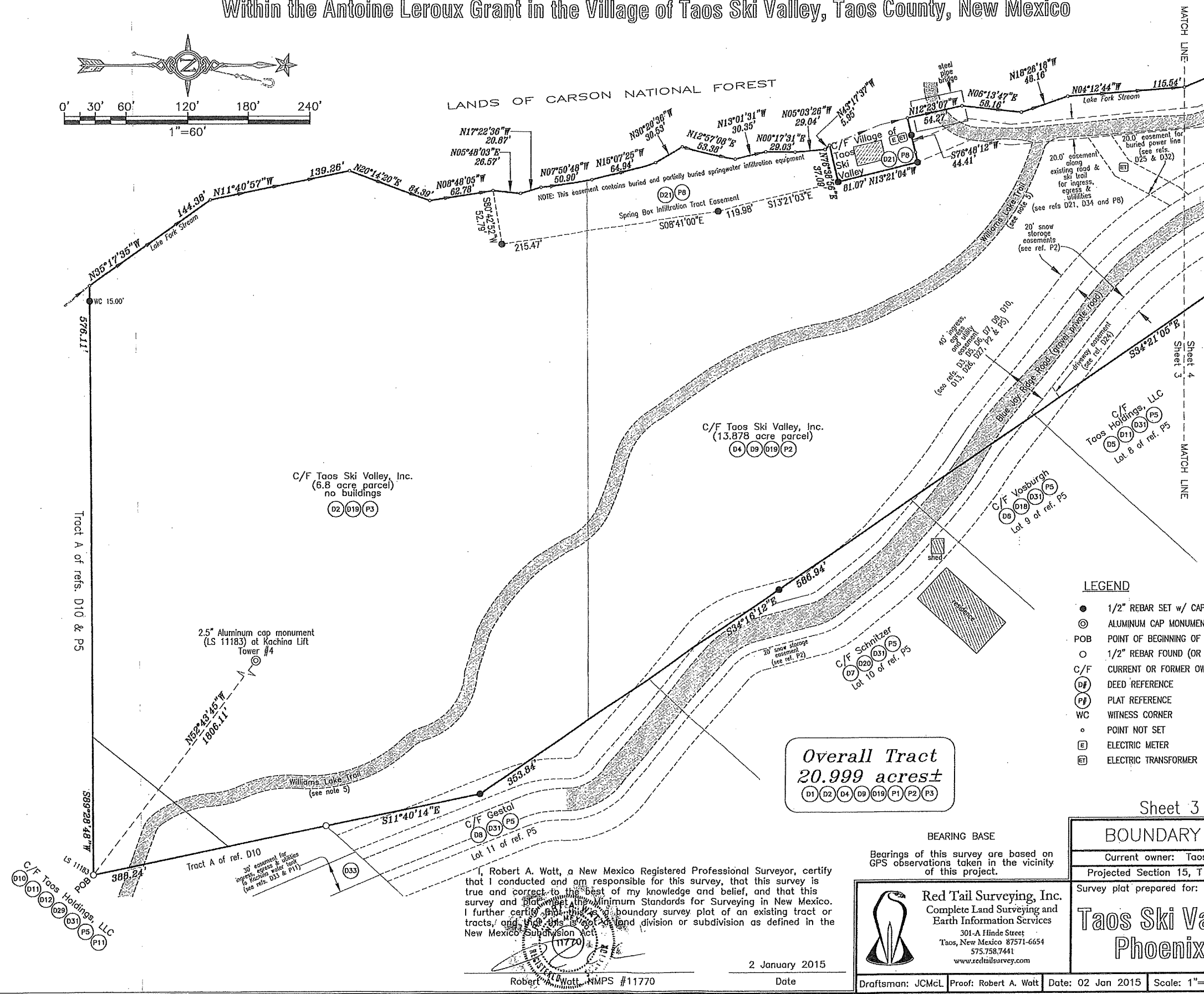
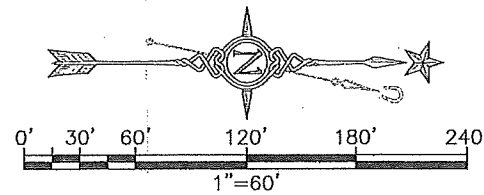
Bearings of this survey are based on GPS observations taken in the vicinity of this project.



Red Tail Surveying, Inc.
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www.redtailsurveying.com

Draftsman: JCMcL Proof: Robert A. Watt Date: 02 Jan 2015 Scale: 1"=60' Job no. 1817

Within the Antoine Leroux Grant in the Village of Taos Ski Valley, Taos County, New Mexico



LEGEND

- 1/2" REBAR SET w/ CAP STAMPED NMPS 11770
- ⊙ ALUMINUM CAP MONUMENT FOUND
- POB POINT OF BEGINNING OF DESCRIPTION
- 1/2" REBAR FOUND (OR AS NOTED)
- C/F CURRENT OR FORMER OWNERSHIP
- D# DEED REFERENCE
- P# PLAT REFERENCE
- WC WITNESS CORNER
- POINT NOT SET
- E ELECTRIC METER
- ET ELECTRIC TRANSFORMER

Sheet 3 of 4

BOUNDARY SURVEY

Current owner: Taos Ski Valley, Inc.
Projected Section 15, T 27N, R 14E, NMPM
Survey plot prepared for:

Taos Ski Valley, Inc.
Phoenix Tract



Red Tail Surveying, Inc.
Complete Land Surveying and
Earth Information Services
301-A Hinde Street
Taos, New Mexico 87571-6654
575.758.7441
www.redtailsurvey.com

Draftsman: JCMcL Proof: Robert A. Watt Date: 02 Jan 2015 Scale: 1"=60' Job no. 1817

I, Robert A. Watt, a New Mexico Registered Professional Surveyor, certify that I conducted and am responsible for this survey, that this survey is true and correct to the best of my knowledge and belief, and that this survey and plat meet the Minimum Standards for Surveying in New Mexico. I further certify that this is a boundary survey plot of an existing tract or tracts, and that this is not a land division or subdivision as defined in the New Mexico Subdivision Act.

Robert A. Watt, NMPS #11770

2 January 2015

Date

NEW MEXICO ENVIRONMENT DEPARTMENT
VOLUNTARY REMEDIATION AGREEMENT

EXHIBIT 2
Preliminary Voluntary Remediation Work Plan

Kachina Maintenance Facility
VRP Site No. 53201003

DRAFT



GLORIETA GEOSCIENCE, INC.

P.O. Box 5727
(505) 983-5446
E-mail:
Web Address:

Santa Fe, NM 87502
Fax (505) 983-6482
ggi@glorietageo.com
www.glorietageo.com

**Preliminary Work Plan
Kachina Maintenance Facility Diesel Release
Taos Ski Valley
Prepared for NMED Voluntary Remediation Program
Application for Determination of Eligibility (Section IV)**

December 4, 2020

1.0 Introduction

This Preliminary Work Plan ("PWP") is submitted to satisfy the requirements of 20.6.3.200.B(4) NMAC, and supplement the Application for Determination of Eligibility for the Taos Ski Valley, Inc. ("TSVI") Kachina Maintenance Facility ("KMF") site ("the Site").

2.0 Background

2.1 Site Description and Physical Setting

The KMF Site is located on property owned by TSVI within the Village of Taos Ski Valley. The Site is in a relatively broad valley floor in an area of the Taos Ski Area known as the "Kachina Base Area" that includes the base of Lift 4, the Bavarian Restaurant, and the Phoenix Lodge (Figures 1 and 2). The Site consists of a building that houses snowmaking equipment and machinery, a small maintenance shop, and two power generators. One generator is for back-up electricity at Kachina Base facilities, and one generator is for snowmaking. Two 1,000 gallon diesel above-ground storage tanks ("ASTs") exist at the Site to provide fuel for the generators. The Phase 1 Environmental Site Assessment ("Phase 1 ESA"; GGI, 2020) that accompanies this PWP details past and present environmental management practices at the KMF.

The Site is located within Taos County, New Mexico, 15 miles northwest of the Town of Taos, and is in a semi-rural area at approximately 10,500 feet above mean sea level.

According to the NCRS Web Soil Survey, the surface soil unit within the Site is predominantly Presa, a well-drained cobbly loam with moderate and high infiltration rates. Nambe (cobbly loam; moderately well-drained) and Paleboralfs are also present. The bedrock underlying the Site consists of Proterozoic-age gneiss and amphibolite. Lower slopes are covered with colluvium and alluvium consisting of boulders, gravel, and sand eroded from the bedrock or reworked from glacial till. There are no mapped active faults based on a literature review, and no recognizable surface indicators to suggest there are active faults within the Site or adjacent properties.

Based on the general topography around the Site, the groundwater gradient is likely towards Lake Fork Creek (GGI 2020, Figure 6). The primary aquifer is the alluvium and till in the valley bottom and fractured bedrock on the upper slopes. Groundwater reaches the surface at the Phoenix Spring south of the Site, and at various wetlands primarily to the north and northeast of the Site. The closest waterway is the Lake Fork of the Rio Hondo (also known as Lake Fork Creek), a perennial stream in the reach adjacent to the Site. Wetland conditions are present immediately north of the KMF where standing water in a marshy area is frequently observed.

2.2 Site History and Land Use

Prior to development as a ski area in the 1950s, the Kachina Base Area was mostly undeveloped, except for possible minor disturbances due to historic mining activity associated with the Twining Mining District. Detailed descriptions of Site history and past and present land use are contained in the Phase 1 ESA.

2.3 Summary of Previous Assessments and Remediation

A previous release at the KMF occurred from an AST located at the No. 4 Generator Site near the Kachina Maintenance Facility and was reported to the New Mexico Environment Department (“NMED”) Surface Water Quality Bureau in 1993 after reports of hydrocarbon odor in the area. An investigation was conducted by CDM Inc. (1993) by digging four trenches and advancing six soil borings. Five of these borings were converted to 4 inch PVC monitoring wells. Temporary Monitoring Well B-3 had the highest constituent concentrations and phase separated hydrocarbons. Most temporary monitoring wells and trenches

exhibited measurable BTEX (benzene, toluene, ethylbenzene, and total xylenes) and/or PNA (polynuclear aromatics) concentrations in soil and water. Free phase hydrocarbon was removed from the wetland area by the use of absorbent materials and a vacuum truck, and additional soil was removed from the wetland marsh area. Approximately 200 yards of contaminated soils were excavated from the AST area, remediated, and disposed of at the TSV property on Highway 64 after approval from the NMED indicating that the soils had been remediated to acceptable levels (letter from NMED dated November 13, 1995 approving moving the soil to the Gorge site). NMED was unable to provide documentation indicating a status of no further action. CDM Inc. concluded that there were no adverse conditions at the former underground storage tank (“UST”) site remaining after excavation and soil remediation. This is considered a Historical Recognized Environmental Condition (“HREC”) in association with the Subject Property of the Phase 1 ESA. Supporting documentation, including the 1993 CDM report, is included in Appendix D of the Phase 1 ESA.

Current Investigation Summary

On July 10, 2019, TSVI notified NMED of a release from the 1,000 gallon backup generator diesel fuel tank at the KMF. The discharge began sometime after October 2018, and emanated from a lower drain bung on the newly-installed double-walled 1,000 gallon tank. The temporary plug used in storing, transporting, and installing new tanks was not replaced in the installation, and sometime after installation (likely over the winter season) degraded or lost integrity with the tank and began to leak. An area of approximately 6 ft. by 6 ft. on the ground surface showed visual and olfactory evidence of contamination. TSVI emptied the tank at that time.

On July 16, 2019, TSVI personnel over-excavated the aforementioned area (Figure 3). Prior to excavation, a single sample was collected from the center of the stained area at approximately two feet depth to confirm the presence of diesel fuel constituents, rule out other contaminants, and identify the primary constituents of concern (“CoCs”) for this project. After collection of this sample, excavation commenced. Approximately 35 cubic yards of contaminated soil was removed from a 15 ft. by 11 ft. area to a depth of approximately 5.5 feet. Excavation was limited by the presence of the concrete footer that supported the north end of the tank. Groundwater was encountered at the bottom of the excavation.

In addition to the single sample mentioned above, discrete (i.e., non-composited) soil samples were collected with a stainless steel trowel that was decontaminated before each sampling event with an Alconox rinse. Hall Environmental Analysis Laboratory ("HEAL") provided 4-ounce jars for the samples, and GGI used HEAL-provided chain-of-custody forms to document sample handling. Samples were placed in the jars, placed on ice in a cooler, and sent to HEAL for analysis by courier. The excavation was roped off and secured from the public, pending analytical results. The excavated soil was temporarily staged at a level parking lot on plastic, and bermed to prevent runoff and runoff.

The samples were analyzed by the following methods:

- EPA Method 8015M/D: Diesel Range Organics (DRO)
- EPA Method 8015D: Gasoline Range Organics (GRO)
- EPA Method 8021B: Volatiles
- EPA Method 8270C: Polyaromatic Hydrocarbons (PAHs)

Seven soil samples were collected from the sidewalls and bottom of the excavation to establish the lateral and vertical extent of contamination and the approximate area for a second excavation event to remove all remaining contaminated soil, if needed. The bottom sample (KMF-FT-7) was obtained from saturated material at or near the water table, removed with an excavator bucket. Figure 4 is a cross-section of the south wall of the excavation, showing the vertical position of the concrete footer. Figure 3 shows the locations of the samples. The analytical results are summarized in Table 1. Laboratory reports are attached to this PWP.

Based on the results, the lateral extent of contamination was defined on the east, north, and west sides of the excavation. Soil samples adjacent to the concrete footer (KMF-FT-5, -6, and -7) show that contamination in that area was not completely removed, thus requiring further excavation in that area.

On August 27, 2019, TSVI removed the concrete footer from the edge of the roped-off excavation, and excavated an additional 25 cubic yards of soil adjacent to and underneath it in the area of sampling where hydrocarbons were detected the previous month. Two additional soil samples (KMF-FT-8 and -9) were collected at five feet depth below ground surface at the lateral extent of the excavation to confirm removal of all diesel-contaminated soils. The lateral extent of excavation was limited by trees near the KMF building, the second tank footer, and the KMF building. The excavated material was added to the staged

soil from the July 16, 2019 excavation. All material was then transported to the Envirotech facility at Hilltop, New Mexico, on November 4, 2019 (manifests attached). Figure 3 shows the final extent of the excavation and the location of all samples. Table 2 shows the detections present in the samples.

Table 1. Analytical results from first excavation and sampling event on July 16, 2019. Depths are below surface grade. Only detected compounds are listed. ND = not detected. Bold values exceed human health screening levels or risk-based SSL, DAF 20.

PAH Above Detection Limit	Analyte Concentration (mg/kg)								Screening Levels (mg/kg)		
	KMF Center	KMF-FT-1	KMF-FT-2	KMF-FT-3	KMF-FT-4	KMF-FT-5	KMF-FT-6	KMF-FT-7	Residential	Industrial	SSL, DAF 20
DRO/MRO/GRO	11000/ND/94	ND	ND	ND	26/88/ND	19000/ND/470	22000/ND/860	70000/ND/1300	1000	3000	5720
TPH (DRO+MRO+GRO)	11094	ND	ND	ND	114	19470	22860	71300			
Total Xylenes	1.1	ND	ND	0.20	26	26	42	99	871	4280	154
Naphthalene	0.55	ND	ND	ND	ND	2.7	2.5	23	49.7	241	.0823
1-Methylnaphthalene	1.6	ND	ND	ND	ND	4.3	3.9	34	172	813	0.893
2- Methylnaphthalene	1.6	ND	ND	ND	ND	1.6	6.2	40	232	3370	2.76
Toluene	ND	ND	ND	ND	ND	5.0	10	31	5230	61300	12.1
Ethylbenzene	ND	ND	ND	ND	ND	5.8	11	26	75.1	368	12.3
Benzene	ND	ND	ND	ND	ND	ND	0.68	2.7	17.8	87.2	.042
Pyrene	ND	ND	ND	ND	ND	ND	ND	9.3	1740	25300	192
Sample Depth	2	3.5	3.0	2.0	2.0	3.0	5.5	5.5			

Table 2. Analytical results from second excavation and sampling event on August 27, 2019. Both soil samples were taken at a depth of 5 feet below surface grade. Only detected compounds are listed. ND= not detected. Bold values exceed human health screening levels or risk-based SSL, DAF 20.

PAH above Detection Limit	Analyte Concentration (mg/kg)		Screening Levels (mg/kg)		Risk-based SSL, DAF 20 (mg/kg)
	KMF-FT-8	KMF-FT-9	Residential	Industrial	
DRO/MRO/GRO	3300/ND/54	4800/ND/110	1000	3000	5720
DRO+MRO+GRO	3354	4910			
1-Methylnaphthalene	0.28	0.51	172	813	0.893
2-Methylnaphthalene	0.41	0.92	232	3370	2.76
Fluorene	0.055	0.072	2320	33700	80
Phenanthrene	0.068	0.079	1740	25300	85.9
Pyrene	0.018	ND	1740	25300	192
Chrysene	0.30	0.30	153	3230	186
Total Xylenes	ND	2.5	871	4280	154
Naphthalene	ND	0.24	49.7	241	.0823

On August 28, 2019, TSVI installed a temporary corrugated metal pipe ("CMP") in a vertical configuration in the open pit to facilitate groundwater sampling, depth-to-water measurement, and identification of non-aqueous phase liquids. The 24-inch CMP was perforated with torch slots approximately ¼ inches wide and 40 inches long spaced approximately 4-6 inches, and no less than six inches from the bottom of the CMP. The bottom of the CMP was open, and emplaced approximately two feet below the water table as observed in the open pit. The pit was then backfilled with two-inch crushed rock. At the end of the operation, the depth-to-water was approximately 7.5 feet below surface grade (bsg) and there was a slight discontinuous sheen on the water table.

Because of detections of diesel range organic compounds, and of naphthalene above the soil-to-groundwater SSL, groundwater has the potential to be affected by the KMF release. GGI therefore collected three groundwater samples: one from the culvert well, one from a nearby downgradient monitoring well, and a rinsate sample from the pump used to sample the culvert well. Purging of the culvert well was conducted with a submersible pump placed in the lower third of the screened interval. The existing 4" PVC monitoring well was purged by hand-bailing using a disposable bailer. A minimum of three well-bore volumes was removed from both monitoring wells prior to sampling. The well-bore volumes were calculated in the field using the water level elevation and total depth information obtained prior to purging. The two monitoring wells demonstrated sufficient recharge during purging so as not to require a pause in purging to allow either well to recharge prior to sampling. Average purging rate was approximately 18 gallons per minute (gpm) for the culvert well and was less than 1 gpm for the 4" monitoring well. Due to the historical lack of significant concentrations of hazardous constituents, the purge water was discharged onto the ground surface.

The water samples, including the rinsate sample, were collected in pre-preserved jars provided by HEAL. Sample handling was documented on HEAL-provided chain-of-custody forms. All samples were immediately labeled and placed on ice in a cooler. Samples were shipped to HEAL by courier and received by the laboratory within holding time specifications. The samples were analyzed by the following methods:

- EPA Method 8015M/D: Diesel Range Organics (DRO)

- EPA Method 8015D: Gasoline Range Organics (GRO)
- EPA Method 8021B: Volatiles
- EPA Method 8270C: Semivolatiles

With the exception of a detection of chloroform in the rinsate sample (1.6 µg/L), there were no detections of any target analyte in any of the groundwater samples.

2.4 Suspected/Known Contaminants of Concern

As discussed in Section 2.3, the suspected contaminants of concern (COCs) are organic compounds typical of diesel fuel.

3.0 Proposed Performance Standards

The risk of harm posed by the Site to human health, safety, or the environment will be evaluated pursuant to Method 2 (20.6.3.10.B(2) NMAC). As discussed above in Section 2.3, with the exception of naphthalene in KMF-FT-9, the Site excavation was successful at removing all of the soil, fill, and sediment with concentrations above detection limits or SSLs for all CoCs to the water table.

A small area of diesel contaminated soil remains in the area of KMF-FT-9, with concentrations of Total Petroleum Hydrocarbons ("TPH") greater than residential screening levels of 1,000 mg/kg and industrial/occupational screening levels of 3,000 mg/kg for TPH (Table 2). However, based on the methodology presented in the NMED's 2019 *Risk Assessment Guidance for Site Investigations and Remediation, Volume I* ("Guidance"), all individual contaminants (*i.e.*, not aggregated as with a TPH analysis) are well below specific NMED soil screening levels and therefore do not pose an unacceptable risk given residential or non-residential land uses. Soil-to-groundwater screening levels are exceeded for naphthalene. The site layout limits the extent of any remaining observed contamination to the south and north. The vertical extent of remaining contamination could extend to the water table. Depth to water at the site was measured at 7.5 ft. bsg in August, 2019, but probably fluctuates between 5 and 15 ft. bsg depending on the season, winter snowpack, and spring melt characteristics.

Human Health Assessment

NMED assesses human health risk from epidemiological factors for selected indicator contaminants. Risk calculations aggregate individual constituents at observed

concentrations by first comparing them to cancer and non-cancer soil screening levels. Expected health risks from each constituent are summed, yielding a collective site risk. Carcinogenic compounds are measured against an increased risk factor of 1 in 100,000, or 1×10^{-5} . Non-cancer risk for indicator compounds is assessed in aggregate against a Site Hazard Index of 1. Because no constituents exceed residential or industrial soil screening levels (Table 2), the KMF site does not pose an unacceptable risk to human health. Based on the methodology presented in the *Guidance*, the calculated site risk at the KMF site is well below recommended action levels.

Groundwater

Groundwater infiltration risk is based on the highest concentration of each detected analyte and a highly conservative default dilution attenuation factor (DAF=20) recommended in the *Guidance*. Table 2 presents soil-to-groundwater screening levels and analytical results from the KMF site. Soil screening levels are exceeded at the default DAF for naphthalene at KMF-FT-9.

Within the excavation, the area of remaining contamination is along the south wall. While the total volume of soils likely to exceed groundwater SSLs cannot be precisely estimated, the risk to groundwater at the KMF site is substantially reduced by the limited volume of remaining contamination. GGI confirmed this by sampling groundwater from the temporary culvert well in the centroid of the contaminated area and from a nearby downgradient monitoring well. No target analytes were detected, further affirming that groundwater is not and likely will not be affected by the remaining contamination.

The performance standard at 20.6.3.10.B(2)(a) NMAC has therefore already been met for the vertical and horizontal extent of contamination, and for groundwater.

4.0 Summary of Proposed Sampling and Analysis

No future sampling and analysis is proposed because performance standards for both groundwater and soil have been met. Because the temporary CMP was emplaced in the excavation which was backfilled with two-inch crushed rock, we recommend the pipe's removal and further backfilling with additional two-inch crushed rock to grade.

5.0 Summary of Proposed Remediation

As discussed in Sections 2.3 and 3.0 of this PWP, remediation of vadose zone contamination is already complete. Groundwater was shown to be uncontaminated as evidenced by the results of samples collected in 2020.

6.0 How Proposed Activities Will Meet the VRP Performance Standards

As previously discussed, the performance standards at 20.6.2.10.B(2)(a) and (b) NMAC have already been met.

7.0 References

CDM, 1993. *Preliminary Site Assessment, Taos Ski Valley, No. 4 Generator Site, Kachina Base, Taos Ski Valley, New Mexico.*

GGI, 2020, *Phase 1 Environmental Site Assessment, Taos Ski Valley – Phoenix Tract, Taos Ski Valley, NM.*

Attachments: Figures
Manifests
Laboratory Reports

FIGURES

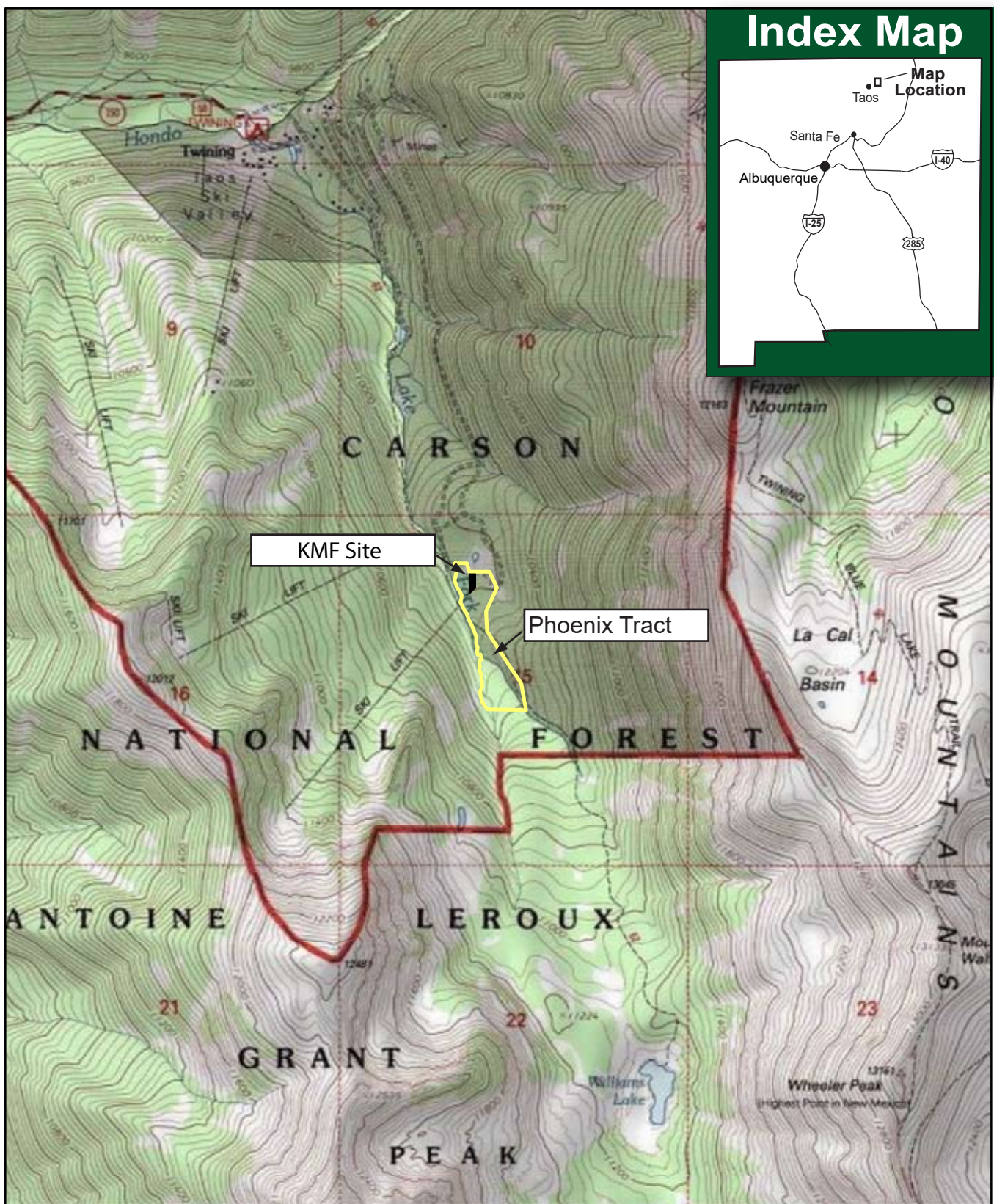


FIGURE 1. Map Showing the Location of the KMF Site withing the Phoenix Tract, Taos Ski Valley
Base Map: U.S. Geological Survey, National Geographic, i-cubed



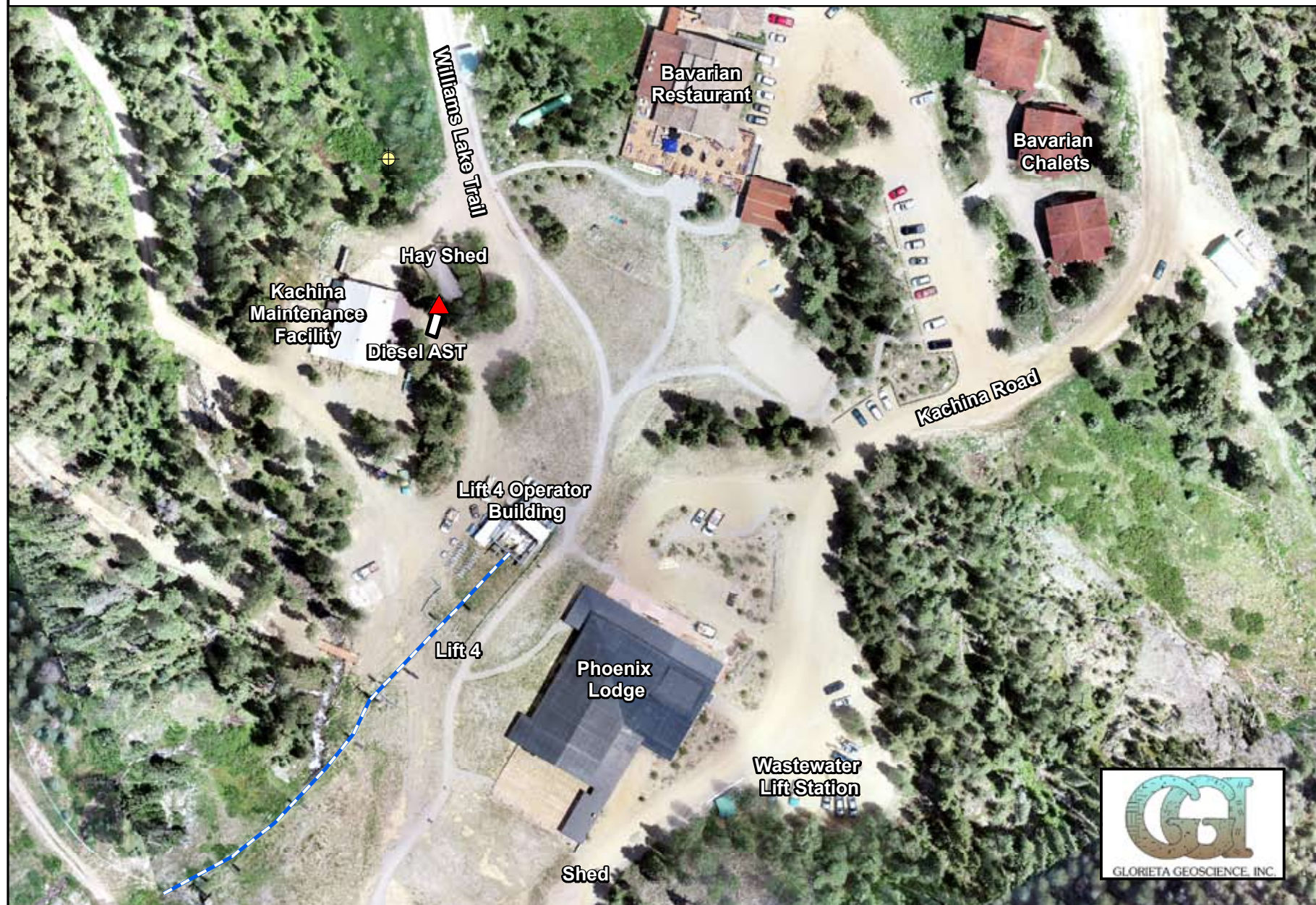
0 0.25 0.5 0.75 1
Miles



Figure 2. Location of KMF Diesel Spill

□ Diesel AST —●— Chair Lift ▲ Location of Diesel Release ⊕ Monitoring Well

0 75 150
Feet



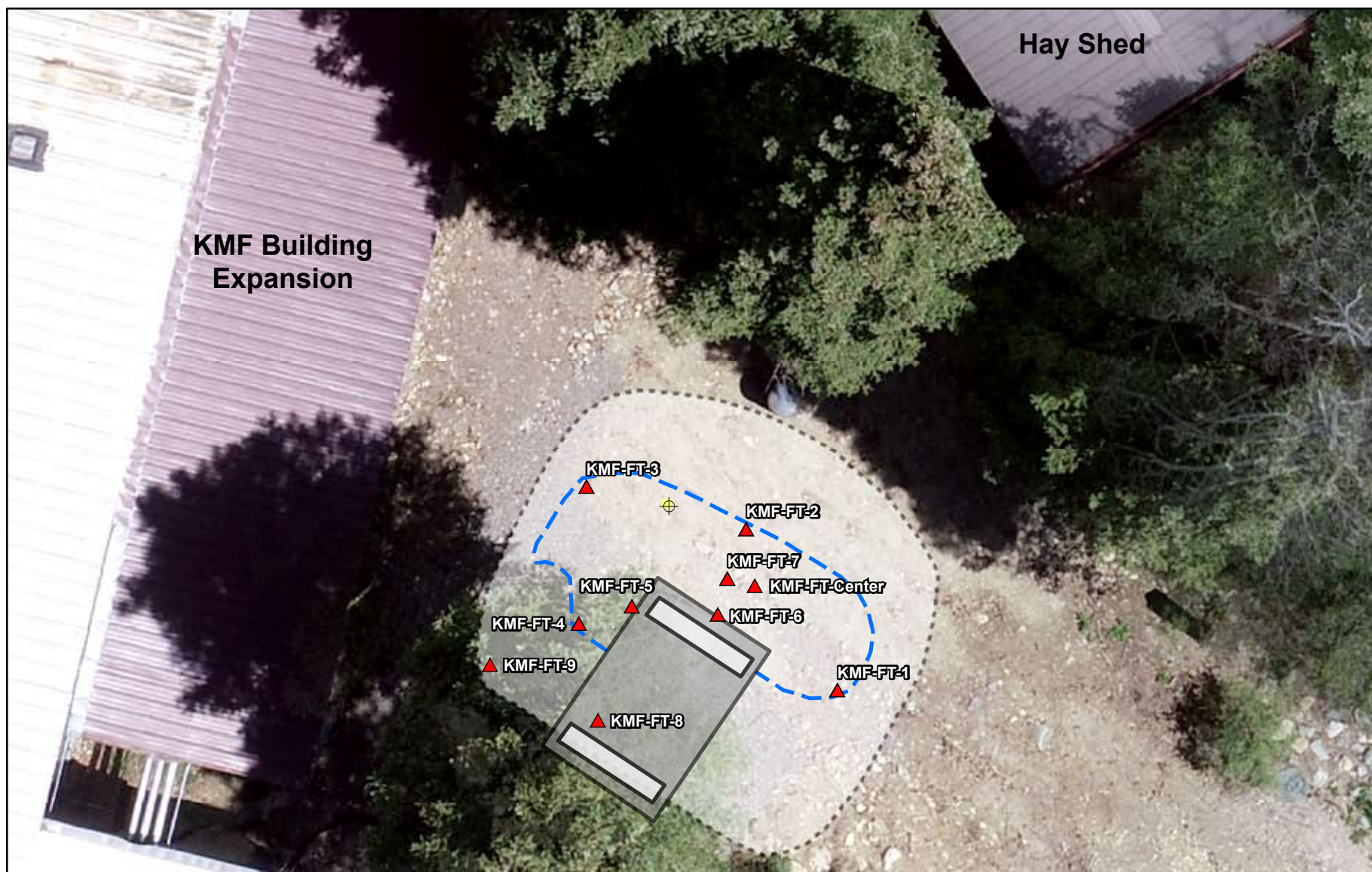


Figure 3. KMF Diesel AST and Excavation Site

Phoenix Tract, Kachina Road, Taos Ski Valley
Imagery Acquired: June 25, 2020

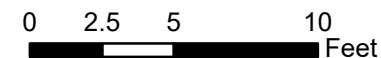
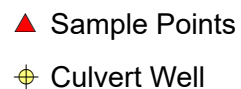
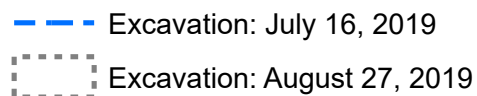
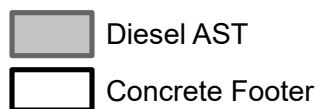
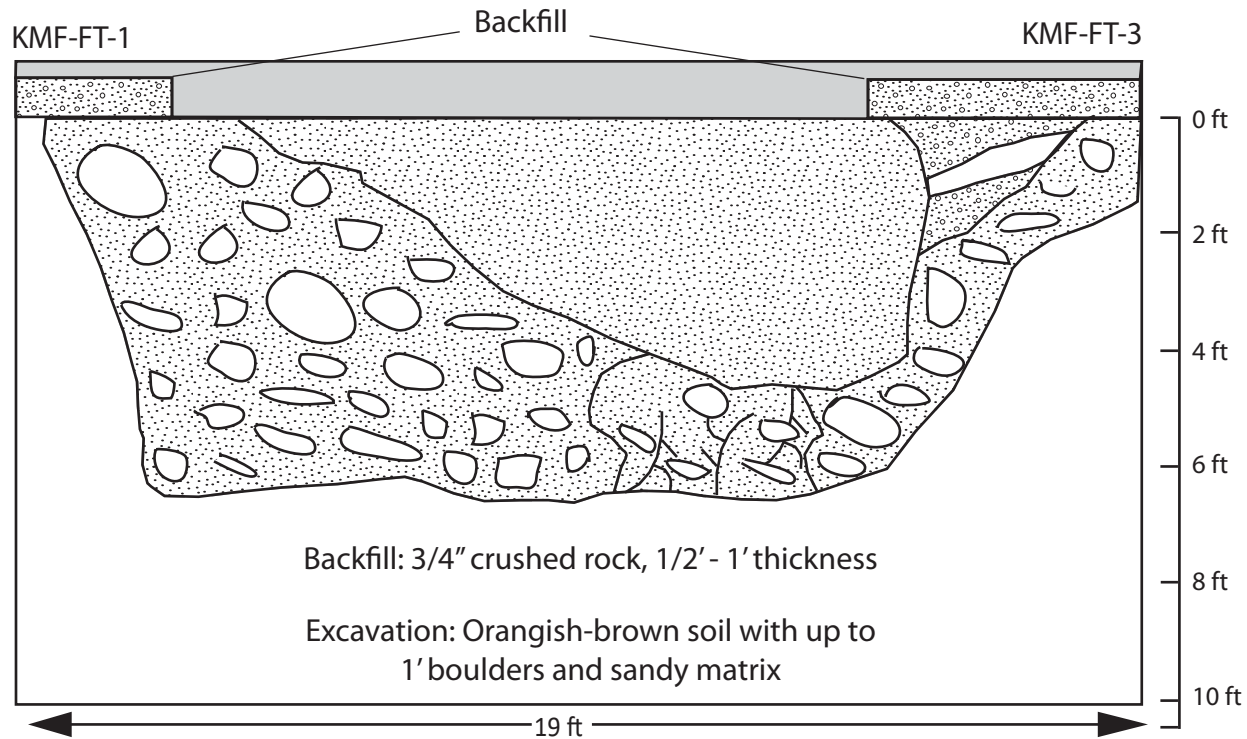


Figure 4. Cross-section through trench along KMF Diesel AST Excavation Site.
Field sketch and samples taken July 16, 2019.



Concrete



Sandy matrix



Plant roots



Cobbles
in sandy matrix



Gravel in
sandy matrix



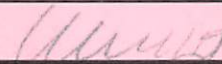

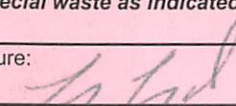
Distinct
contact



GLORIETA GEOSCIENCE, INC.

No vertical exaggeration

MANIFESTS

SPECIAL WASTE MANIFEST		Manifest Document No. SW - 1574		Page 1 of	
Generator's Name Taos Ski Valley		Generator's Address 116 Sullivan Pl. Taos Ski Valley, NM 87525		Generator's Telephone No. 575-776-2291	
Origin of Special Waste (Project or Spill Location): KMF CLEANUP TSV INC. 87525					
Transporter #1 Company Name Envirotech Inc.		Address 5796 US Hwy 64 Farmington NM 87401		Telephone No. 505-632-0615	
Transporter #2 Company Name		Address		Telephone No.	
Destination Facility Name/Site Address Envirotech LF #3 43 Road 7175 Bloomfield NM 87413		Facility ID (Permit) Number DP-955		Telephone No. 505-632-0615	
<div style="writing-mode: vertical-rl; transform: rotate(180deg); position: absolute; left: -40px; top: 50%; font-weight: bold;">GENERATOR</div>		Type and Proper Name of Special Waste		Container(s) No.	Total Quantity
		petroleum contaminated soil		1	cm 20
		Unit Wt/Vol			
Additional Descriptions for Special Waste Listed Above:					
Special Handling Instructions: Tarp load					
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.					
Printed/Typed Name: MICHAEL W MITCHELL		Signature: 		Date: 31 OCT 19	
Transporter 1 Acknowledgement of Receipt of Special Waste					
Printed/Typed Name: Envirotech 5796 US Hwy 64 Farmington NM 87401		Signature: 		Date:	
Transporter 2 Acknowledgement of Receipt of Special Waste					
Printed/Typed Name:		Signature:		Date:	
Discrepancy Indication Space:					
Facility Owner or Operator: I hereby acknowledge receipt of the special waste as indicated upon this manifest, except as noted above in the Discrepancy Indication Space.					
Printed/Typed Name: Larry Lord		Signature: 		Date: 10/31/19	

SPECIAL WASTE MANIFEST		Manifest Document No. SW - 1575	Page 1 of	
Generator's Name TAOS Ski Valley		Generator's Address 116 Sullivan Place TAOS Ski Valley 87525	Generator's Telephone No. 575-776-2291	
Origin of Special Waste (Project or Spill Location): KMT CLEANUP TSV NM 87525				
Transporter #1 Company Name Envirotech Inc.	Address 5796 US Hwy 64 Farmington, NM 87401	Telephone No. 505-632-0615		
Transporter #2 Company Name	Address	Telephone No.		
Destination Facility Name/Site Address Envirotech LPA 3 43 Road 7175 Bloomfield NM 87413	Facility ID (Permit) Number DP-955	Telephone No. 505-632-0615		
Type and Proper Name of Special Waste		Container(s) No.	Total Quantity	Unit Wt/Vol
		Type		
Petroleum Contaminated Soil		1	cm	20
Additional Descriptions for Special Waste Listed Above:				
Special Handling Instructions: TARP LOAD				
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.				
Printed/Typed Name: MICHAEL MITCHELL		Signature: <i>[Signature]</i>		Date: 31 OCT 19
TRANSPORTER 1 Acknowledgement of Receipt of Special Waste Printed/Typed Name: Brian Detrick Signature: <i>[Signature]</i> Date: 10/31/19				
TRANSPORTER 2 Acknowledgement of Receipt of Special Waste Printed/Typed Name: Signature: Date:				
Discrepancy Indication Space:				
FACILITY Facility Owner or Operator: I hereby acknowledge receipt of the special waste as indicated upon this manifest, except as noted above in the Discrepancy Indication Space.				
Printed/Typed Name: CARAY LOYD		Signature: <i>[Signature]</i>		Date: 10/31/19

SPECIAL WASTE MANIFEST		Manifest Document No. SW - 1577		Page 1 of	
Generator's Name TAOS SKI VALLEY		Generator's Address 116 Sutton Pl. TAOS Ski Valley, NM 87525		Generator's Telephone No. 575-776-2291	
Origin of Special Waste (Project or Spill Location): KMP CLEANUP TSV 87525					
Transporter #1 Company Name Envirotech Inc		Address 5796 US 64 Farmington NM		Telephone No. 505-632-0615	
Transporter #2 Company Name		Address		Telephone No.	
Destination Facility Name/Site Address 43 Road 205 Bloomfield NM 87413		Facility ID (Permit) Number DP-955		Telephone No. 505-632-0615	
Type and Proper Name of Special Waste		Container(s) No. Type		Total Quantity	Unit Wt/Vol
Petroleum Contaminated soil		1 cm		20	Yd³
Additional Descriptions for Special Waste Listed Above:					
Special Handling Instructions: Tarp Load					
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.					
Printed/Typed Name: M MITCHELL		Signature: <i>[Signature]</i>		Date: 4 NOV 19	
Transporter 1 Acknowledgement of Receipt of Special Waste					
Printed/Typed Name: Envirotech 5796 US 64		Signature: <i>[Signature]</i>		Date: 11-4-19	
Transporter 2 Acknowledgement of Receipt of Special Waste					
Printed/Typed Name:		Signature:		Date:	
Discrepancy Indication Space:					
Facility Owner or Operator: I hereby acknowledge receipt of the special waste as indicated upon this manifest, except as noted above in the Discrepancy Indication Space.					
Printed/Typed Name: Gary Robinson		Signature: <i>[Signature]</i>		Date: 11-4-19	

GENERATOR

TRANSPORTER

FACILITY

LABORATORY REPORTS



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

September 18, 2019

James Bearzi
Glorieta GeoScience
P.O. Box 5727
Santa Fe, NM 87502
TEL:
FAX

RE: TSV KMF Fuel Tank

OrderNo.: 1908I72

Dear James Bearzi:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/30/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1908172**

Date Reported: **9/18/2019**

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-8

Project: TSV KMF Fuel Tank

Collection Date: 8/27/2019 1:35:00 PM

Lab ID: 1908172-001

Matrix: SOIL

Received Date: 8/30/2019 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	3300	97		mg/Kg	10	9/9/2019 12:25:20 PM	47254
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	9/9/2019 12:25:20 PM	47254
Surr: DNOP	0	70-130	S	%Rec	10	9/9/2019 12:25:20 PM	47254
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	54	23		mg/Kg	5	9/5/2019 11:38:52 AM	47241
Surr: BFB	224	77.4-118	S	%Rec	5	9/5/2019 11:38:52 AM	47241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.47	D	mg/Kg	5	9/5/2019 11:38:52 AM	47241
Benzene	ND	0.12	D	mg/Kg	5	9/5/2019 11:38:52 AM	47241
Toluene	ND	0.23	D	mg/Kg	5	9/5/2019 11:38:52 AM	47241
Ethylbenzene	ND	0.23	D	mg/Kg	5	9/5/2019 11:38:52 AM	47241
Xylenes, Total	ND	0.47	D	mg/Kg	5	9/5/2019 11:38:52 AM	47241
Surr: 4-Bromofluorobenzene	99.2	80-120	D	%Rec	5	9/5/2019 11:38:52 AM	47241
EPA METHOD 8310: PAHS							Analyst: TOM
Naphthalene	ND	0.27		mg/Kg	1	9/10/2019 3:50:02 PM	47256
1-Methylnaphthalene	0.28	0.27		mg/Kg	1	9/10/2019 3:50:02 PM	47256
2-Methylnaphthalene	0.41	0.27		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Acenaphthylene	ND	0.27		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Acenaphthene	ND	0.27		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Fluorene	0.055	0.033		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Phenanthrene	0.068	0.016		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Anthracene	ND	0.016		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Fluoranthene	ND	0.022		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Pyrene	0.18	0.027		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Benz(a)anthracene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Chrysene	0.30	0.11		mg/Kg	10	9/17/2019 10:11:55 AM	47256
Benzo(b)fluoranthene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Benzo(k)fluoranthene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Benzo(a)pyrene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Dibenz(a,h)anthracene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Benzo(g,h,i)perylene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Indeno(1,2,3-cd)pyrene	ND	0.011		mg/Kg	1	9/10/2019 3:50:02 PM	47256
Surr: Benzo(e)pyrene	78.8	26.5-113		%Rec	1	9/10/2019 3:50:02 PM	47256

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1908172

Date Reported: 9/18/2019

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-9

Project: TSV KMF Fuel Tank

Collection Date: 8/27/2019 2:20:00 PM

Lab ID: 1908172-002

Matrix: SOIL

Received Date: 8/30/2019 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	4800	470		mg/Kg	50	9/9/2019 12:49:34 PM	47254
Motor Oil Range Organics (MRO)	ND	2400		mg/Kg	50	9/9/2019 12:49:34 PM	47254
Surr: DNOP	0	70-130	S	%Rec	50	9/9/2019 12:49:34 PM	47254
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	110	25		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Surr: BFB	276	77.4-118	S	%Rec	5	9/5/2019 3:07:30 AM	47241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Benzene	ND	0.12		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Toluene	ND	0.25		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Ethylbenzene	ND	0.25		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Xylenes, Total	2.5	0.50		mg/Kg	5	9/5/2019 3:07:30 AM	47241
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	5	9/5/2019 3:07:30 AM	47241
EPA METHOD 8310: PAHS							Analyst: TOM
Naphthalene	0.24	0.22		mg/Kg	1	9/10/2019 5:06:36 PM	47256
1-Methylnaphthalene	0.51	0.22		mg/Kg	1	9/10/2019 5:06:36 PM	47256
2-Methylnaphthalene	0.92	0.22		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Acenaphthylene	ND	0.22		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Acenaphthene	ND	0.22		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Fluorene	0.072	0.027		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Phenanthrene	0.079	0.013		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Anthracene	ND	0.013		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Fluoranthene	ND	0.018		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Pyrene	0.18	0.022		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Benz(a)anthracene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Chrysene	0.30	0.090		mg/Kg	10	9/17/2019 10:37:26 AM	47256
Benzo(b)fluoranthene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Benzo(k)fluoranthene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Benzo(a)pyrene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Dibenz(a,h)anthracene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Benzo(g,h,i)perylene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Indeno(1,2,3-cd)pyrene	ND	0.0090		mg/Kg	1	9/10/2019 5:06:36 PM	47256
Surr: Benzo(e)pyrene	68.8	26.5-113		%Rec	1	9/10/2019 5:06:36 PM	47256

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: LCS-47254	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 47254		RunNo: 62660							
Prep Date: 9/4/2019	Analysis Date: 9/5/2019		SeqNo: 2133502		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	63.9	124			
Surr: DNOP	4.3		5.000		86.6	70	130			

Sample ID: MB-47254	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 47254		RunNo: 62660							
Prep Date: 9/4/2019	Analysis Date: 9/5/2019		SeqNo: 2133503		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: MB-47241	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 47241	RunNo: 62633								
Prep Date: 9/3/2019	Analysis Date: 9/4/2019	SeqNo: 2132540		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.2	77.4	118			

Sample ID: LCS-47241	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 47241	RunNo: 62633								
Prep Date: 9/3/2019	Analysis Date: 9/4/2019	SeqNo: 2132541		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.7	80	120			
Surr: BFB	1200		1000		115	77.4	118			

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: MB-47241	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 47241	RunNo: 62633								
Prep Date: 9/3/2019	Analysis Date: 9/4/2019	SeqNo: 2132575	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.5	80	120			

Sample ID: LCS-47241	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 47241	RunNo: 62633								
Prep Date: 9/3/2019	Analysis Date: 9/4/2019	SeqNo: 2132576	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.89	0.10	1.000	0	89.2	80	120			
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.3	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: MB-47256	SampType: MBLK	TestCode: EPA Method 8310: PAHs								
Client ID: PBS	Batch ID: 47256	RunNo: 62790								
Prep Date: 9/4/2019	Analysis Date: 9/10/2019	SeqNo: 2140703	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	ND	0.015								
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.010								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.29		0.5000		59.0	26.5	113			

Sample ID: LCS-47256	SampType: LCS	TestCode: EPA Method 8310: PAHs								
Client ID: LCSS	Batch ID: 47256	RunNo: 62790								
Prep Date: 9/4/2019	Analysis Date: 9/10/2019	SeqNo: 2140704	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.3	0.25	2.000	0	65.1	27.2	80.9			
1-Methylnaphthalene	1.3	0.25	2.000	0	64.2	28.9	83.4			
2-Methylnaphthalene	1.3	0.25	2.000	0	64.3	28.7	83.5			
Acenaphthylene	1.3	0.25	2.000	0	62.7	32.3	90.7			
Acenaphthene	1.3	0.25	2.000	0	63.3	31.1	88.7			
Fluorene	0.12	0.030	0.2000	0	62.5	31.7	94.8			
Phenanthrene	0.065	0.015	0.1006	0	64.6	31.6	101			
Anthracene	0.066	0.015	0.1006	0	65.4	33.2	106			
Fluoranthene	0.13	0.020	0.2006	0	66.3	41	101			
Pyrene	0.13	0.025	0.2000	0	67.0	34.7	106			
Benz(a)anthracene	0.013	0.010	0.02000	0	66.2	42.3	106			
Chrysene	0.068	0.010	0.1006	0	68.1	42.8	108			
Benzo(b)fluoranthene	0.017	0.010	0.02500	0	67.0	35	107			
Benzo(k)fluoranthene	ND	0.010	0.01250	0	68.0	41.5	102			

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: LCS-47256	SampType: LCS	TestCode: EPA Method 8310: PAHs								
Client ID: LCSS	Batch ID: 47256	RunNo: 62790								
Prep Date: 9/4/2019	Analysis Date: 9/10/2019	SeqNo: 2140704			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	ND	0.010	0.01250	0	54.0	14.4	105			
Dibenz(a,h)anthracene	0.017	0.010	0.02500	0	67.0	42.9	105			
Benzo(g,h,i)perylene	0.016	0.010	0.02500	0	66.0	42.7	102			
Indeno(1,2,3-cd)pyrene	0.032	0.010	0.05002	0	64.5	42.3	103			
Surr: Benzo(e)pyrene	0.35		0.5000		69.3	26.5	113			

Sample ID: 1908172-001AMS	SampType: MS	TestCode: EPA Method 8310: PAHs								
Client ID: KMF-FT-8	Batch ID: 47256	RunNo: 62790								
Prep Date: 9/4/2019	Analysis Date: 9/10/2019	SeqNo: 2140706			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.5	0.26	2.041	0.09721	67.3	24.1	128			
1-Methylnaphthalene	1.7	0.26	2.041	0.2826	70.2	25.2	133			
2-Methylnaphthalene	1.8	0.26	2.041	0.4082	67.9	23.9	132			
Acenaphthylene	1.5	0.26	2.041	0	73.9	27.7	137			
Acenaphthene	1.4	0.26	2.041	0	69.5	24.6	131			
Fluorene	0.19	0.031	0.2041	0.05461	67.4	19.6	132			
Phenanthrene	0.13	0.015	0.1027	0.06772	57.0	23.6	148			
Anthracene	0.077	0.015	0.1027	0	75.3	25.6	134			
Fluoranthene	0.14	0.020	0.2047	0	69.2	26.8	148			
Pyrene	0.30	0.026	0.2041	0.1827	59.9	26.5	144			
Benz(a)anthracene	ND	0.010	0.02041	0	7.50	15.9	158			S
Chrysene	0.24	0.010	0.1027	0.2733	-34.7	22.5	150			ES
Benzo(b)fluoranthene	0.017	0.010	0.02551	0.003277	53.2	15	157			
Benzo(k)fluoranthene	ND	0.010	0.01276	0	66.0	15	173			
Benzo(a)pyrene	ND	0.010	0.01276	0	66.0	15	172			
Dibenz(a,h)anthracene	0.018	0.010	0.02551	0	70.0	21	160			
Benzo(g,h,i)perylene	0.017	0.010	0.02551	0	68.0	17.1	171			
Indeno(1,2,3-cd)pyrene	0.034	0.010	0.05104	0	66.5	15	178			
Surr: Benzo(e)pyrene	0.41		0.5102		79.9	26.5	113			

Sample ID: 1908172-001AMSD	SampType: MSD	TestCode: EPA Method 8310: PAHs								
Client ID: KMF-FT-8	Batch ID: 47256	RunNo: 62790								
Prep Date: 9/4/2019	Analysis Date: 9/10/2019	SeqNo: 2140707			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.6	0.27	2.194	0.09721	68.3	24.1	128	8.11	28.6	
1-Methylnaphthalene	1.9	0.27	2.194	0.2826	74.1	25.2	133	10.6	28.1	
2-Methylnaphthalene	2.0	0.27	2.194	0.4082	72.3	23.9	132	10.6	28.5	
Acenaphthylene	1.7	0.27	2.194	0	76.3	27.7	137	10.5	28.6	

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908172

18-Sep-19

Client: Glorieta GeoScience

Project: TSV KMF Fuel Tank

Sample ID: 1908172-001AMSD	SampType: MSD		TestCode: EPA Method 8310: PAHs							
Client ID: KMF-FT-8	Batch ID: 47256		RunNo: 62790							
Prep Date: 9/4/2019	Analysis Date: 9/10/2019		SeqNo: 2140707		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.6	0.27	2.194	0	71.7	24.6	131	10.4	30.4	
Fluorene	0.22	0.033	0.2194	0.05461	74.1	19.6	132	12.3	58.1	
Phenanthrene	0.15	0.016	0.1104	0.06772	70.3	23.6	148	14.1	27.7	
Anthracene	0.091	0.016	0.1104	0	82.8	25.6	134	16.6	29.1	
Fluoranthene	0.17	0.022	0.2201	0	75.4	26.8	148	15.8	26.3	
Pyrene	0.34	0.027	0.2194	0.1827	70.2	26.5	144	9.96	27	E
Benz(a)anthracene	ND	0.011	0.02194	0	7.50	15.9	158	0	29.4	S
Chrysene	0.28	0.011	0.1104	0.2733	4.57	22.5	150	15.7	27.9	ES
Benzo(b)fluoranthene	0.019	0.011	0.02743	0.003277	59.1	15	157	14.5	28.7	
Benzo(k)fluoranthene	ND	0.011	0.01371	0	68.0	15	173	0	28.3	
Benzo(a)pyrene	ND	0.011	0.01371	0	70.0	15	172	0	29.6	
Dibenz(a,h)anthracene	0.020	0.011	0.02743	0	72.0	21	160	10.1	29.5	
Benzo(g,h,i)perylene	0.019	0.011	0.02743	0	71.0	17.1	171	11.6	27.5	
Indeno(1,2,3-cd)pyrene	0.038	0.011	0.05488	0	69.5	15	178	11.6	28.5	
Surr: Benzo(e)pyrene	0.41		0.5485		75.2	26.5	113	0	20	

Sample ID: MB-47440		SampType: MBLK		TestCode: EPA Method 8310: PAHs						
Client ID: PBS		Batch ID: 47440		RunNo: 62973						
Prep Date: 9/12/2019		Analysis Date: 9/17/2019		SeqNo: 2147552			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Benzo(e)pyrene	0.28		0.5000		55.6	26.5	113			

Sample ID: LCS-47440		SampType: LCS		TestCode: EPA Method 8310: PAHs						
Client ID: LCSS		Batch ID: 47440		RunNo: 62973						
Prep Date: 9/12/2019		Analysis Date: 9/17/2019		SeqNo: 2147554		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Benzo(e)pyrene	0.42		0.5000		84.0	26.5	113			

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 Quantitative 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



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: GGI

Work Order Number: 1908172

RcptNo: 1

Received By: Desiree Dominguez 8/30/2019 10:15:00 AM

Completed By: Michelle Garcia 8/30/2019 2:17:54 PM

Reviewed By: JO

8/30/19

Michelle Garcia

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? 8

Checked by: 8.30.19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

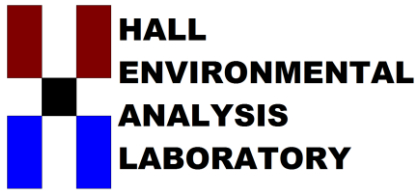
Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			



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

August 01, 2019

James Bearzi
Glorieta GeoScience
P.O. Box 5727
Santa Fe, NM 87502
TEL: (505) 983-5446
FAX: (505) 983-6482

RE: TSV KMF

OrderNo.: 1907902

Dear James Bearzi:

Hall Environmental Analysis Laboratory received 8 sample(s) on 7/17/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1907902**

Date Reported: **8/1/2019**

CLIENT: Glorieta GeoScience

Client Sample ID: KMF Center

Project: TSV KMF

Collection Date: 7/16/2019 10:10:00 AM

Lab ID: 1907902-001

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	11000	950		mg/Kg	100	7/24/2019 9:13:39 AM	46265
Motor Oil Range Organics (MRO)	ND	4800		mg/Kg	100	7/24/2019 9:13:39 AM	46265
Surr: DNOP	0	70-130	S	%Rec	100	7/24/2019 9:13:39 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	94	24		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Surr: BFB	278	73.8-119	S	%Rec	5	7/23/2019 1:05:01 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.49		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Benzene	ND	0.12		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Toluene	ND	0.24		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Ethylbenzene	ND	0.24		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Xylenes, Total	1.1	0.49		mg/Kg	5	7/23/2019 1:05:01 PM	46308
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	5	7/23/2019 1:05:01 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	0.55	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
1-Methylnaphthalene	1.6	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
2-Methylnaphthalene	1.6	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Acenaphthylene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Acenaphthene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Fluorene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Phenanthrene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Anthracene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Fluoranthene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Pyrene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Benz(a)anthracene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Chrysene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Benzo(b)fluoranthene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Benzo(k)fluoranthene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Benzo(a)pyrene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Dibenz(a,h)anthracene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Benzo(g,h,i)perylene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Indeno(1,2,3-cd)pyrene	ND	0.41	D	mg/Kg	10	7/31/2019 1:55:07 PM	46392
Surr: N-hexadecane	0	38.8-100	SD	%Rec	10	7/31/2019 1:55:07 PM	46392
Surr: Benzo(e)pyrene	0	38.5-107	SD	%Rec	10	7/31/2019 1:55:07 PM	46392

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 Quantitative 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1907902**

Date Reported: **8/1/2019**

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-1

Project: TSV KMF

Collection Date: 7/16/2019 1:05:00 PM

Lab ID: 1907902-002

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/24/2019 9:37:44 AM	46265
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/24/2019 9:37:44 AM	46265
Surr: DNOP	102	70-130		%Rec	1	7/24/2019 9:37:44 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Surr: BFB	91.8	73.8-119		%Rec	1	7/23/2019 3:02:34 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Benzene	ND	0.024		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Toluene	ND	0.049		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Ethylbenzene	ND	0.049		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Xylenes, Total	ND	0.098		mg/Kg	1	7/23/2019 3:02:34 PM	46308
Surr: 4-Bromofluorobenzene	89.6	80-120		%Rec	1	7/23/2019 3:02:34 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
1-Methylnaphthalene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
2-Methylnaphthalene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Acenaphthylene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Acenaphthene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Fluorene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Phenanthrene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Anthracene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Fluoranthene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Pyrene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Benz(a)anthracene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Chrysene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Benzo(b)fluoranthene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Benzo(k)fluoranthene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Benzo(a)pyrene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Dibenz(a,h)anthracene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Benzo(g,h,i)perylene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Indeno(1,2,3-cd)pyrene	ND	0.021		mg/Kg	1	7/31/2019 2:19:21 PM	46392
Surr: N-hexadecane	65.2	38.8-100		%Rec	1	7/31/2019 2:19:21 PM	46392
Surr: Benzo(e)pyrene	71.8	38.5-107		%Rec	1	7/31/2019 2:19:21 PM	46392

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 Quantitative 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1907902**

Date Reported: **8/1/2019**

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-2

Project: TSV KMF

Collection Date: 7/16/2019 1:10:00 PM

Lab ID: 1907902-003

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	7/24/2019 10:01:44 AM	46265
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	7/24/2019 10:01:44 AM	46265
Surr: DNOP	107	70-130		%Rec	1	7/24/2019 10:01:44 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Surr: BFB	95.7	73.8-119		%Rec	1	7/23/2019 7:22:25 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Benzene	ND	0.025		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Toluene	ND	0.049		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Ethylbenzene	ND	0.049		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Xylenes, Total	ND	0.098		mg/Kg	1	7/23/2019 7:22:25 PM	46308
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	7/23/2019 7:22:25 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
1-Methylnaphthalene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
2-Methylnaphthalene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Acenaphthylene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Acenaphthene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Fluorene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Phenanthrene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Anthracene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Fluoranthene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Pyrene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Benz(a)anthracene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Chrysene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Benzo(b)fluoranthene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Benzo(k)fluoranthene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Benzo(a)pyrene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Dibenz(a,h)anthracene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Benzo(g,h,i)perylene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Indeno(1,2,3-cd)pyrene	ND	0.019		mg/Kg	1	7/31/2019 2:43:37 PM	46392
Surr: N-hexadecane	70.1	38.8-100		%Rec	1	7/31/2019 2:43:37 PM	46392
Surr: Benzo(e)pyrene	77.5	38.5-107		%Rec	1	7/31/2019 2:43:37 PM	46392

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 Quantitative 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907902

Date Reported: 8/1/2019

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-3

Project: TSV KMF

Collection Date: 7/16/2019 1:15:00 PM

Lab ID: 1907902-004

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/24/2019 10:25:53 AM	46265
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/24/2019 10:25:53 AM	46265
Surr: DNOP	108	70-130		%Rec	1	7/24/2019 10:25:53 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Surr: BFB	95.9	73.8-119		%Rec	1	7/23/2019 7:46:03 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Benzene	ND	0.025		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Toluene	ND	0.049		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Ethylbenzene	ND	0.049		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Xylenes, Total	0.20	0.099		mg/Kg	1	7/23/2019 7:46:03 PM	46308
Surr: 4-Bromofluorobenzene	94.0	80-120		%Rec	1	7/23/2019 7:46:03 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
1-Methylnaphthalene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
2-Methylnaphthalene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Acenaphthylene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Acenaphthene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Fluorene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Phenanthrene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Anthracene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Fluoranthene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Pyrene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Benz(a)anthracene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Chrysene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Benzo(b)fluoranthene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Benzo(k)fluoranthene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Benzo(a)pyrene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Dibenz(a,h)anthracene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Benzo(g,h,i)perylene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Indeno(1,2,3-cd)pyrene	ND	0.040	D	mg/Kg	1	7/31/2019 3:07:53 PM	46392
Surr: N-hexadecane	111	38.8-100	SD	%Rec	1	7/31/2019 3:07:53 PM	46392
Surr: Benzo(e)pyrene	108	38.5-107	SD	%Rec	1	7/31/2019 3:07:53 PM	46392

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 Quantitative 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1907902**

Date Reported: **8/1/2019**

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-4

Project: TSV KMF

Collection Date: 7/16/2019 1:20:00 PM

Lab ID: 1907902-005

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	26	10		mg/Kg	1	7/24/2019 10:49:56 AM	46265
Motor Oil Range Organics (MRO)	88	51		mg/Kg	1	7/24/2019 10:49:56 AM	46265
Surr: DNOP	129	70-130		%Rec	1	7/24/2019 10:49:56 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Surr: BFB	94.2	73.8-119		%Rec	1	7/23/2019 8:09:37 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Benzene	ND	0.025		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Toluene	ND	0.050		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Ethylbenzene	ND	0.050		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Xylenes, Total	ND	0.10		mg/Kg	1	7/23/2019 8:09:37 PM	46308
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	7/23/2019 8:09:37 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
1-Methylnaphthalene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
2-Methylnaphthalene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Acenaphthylene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Acenaphthene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Fluorene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Phenanthrene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Anthracene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Fluoranthene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Pyrene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Benz(a)anthracene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Chrysene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Benzo(b)fluoranthene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Benzo(k)fluoranthene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Benzo(a)pyrene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Dibenz(a,h)anthracene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Benzo(g,h,i)perylene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Indeno(1,2,3-cd)pyrene	ND	0.039	D	mg/Kg	1	7/30/2019 8:29:58 PM	46392
Surr: N-hexadecane	73.1	38.8-100	D	%Rec	1	7/30/2019 8:29:58 PM	46392
Surr: Benzo(e)pyrene	83.6	38.5-107	D	%Rec	1	7/30/2019 8:29:58 PM	46392

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907902

Date Reported: 8/1/2019

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-5

Project: TSV KMF

Collection Date: 7/16/2019 1:20:00 PM

Lab ID: 1907902-006

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	19000	940		mg/Kg	100	7/25/2019 11:03:53 AM	46265
Motor Oil Range Organics (MRO)	ND	4700		mg/Kg	100	7/25/2019 11:03:53 AM	46265
Surr: DNOP	0	70-130	S	%Rec	100	7/25/2019 11:03:53 AM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	470	24		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Surr: BFB	669	73.8-119	S	%Rec	5	7/23/2019 1:28:30 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.48		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Benzene	ND	0.12		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Toluene	5.0	0.24		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Ethylbenzene	5.8	0.24		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Xylenes, Total	26	0.48		mg/Kg	5	7/23/2019 1:28:30 PM	46308
Surr: 4-Bromofluorobenzene	139	80-120	S	%Rec	5	7/23/2019 1:28:30 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	2.7	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
1-Methylnaphthalene	4.3	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
2-Methylnaphthalene	5.8	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Acenaphthylene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Acenaphthene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Fluorene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Phenanthrene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Anthracene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Fluoranthene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Pyrene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Benz(a)anthracene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Chrysene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Benzo(b)fluoranthene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Benzo(k)fluoranthene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Benzo(a)pyrene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Dibenz(a,h)anthracene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Benzo(g,h,i)perylene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Indeno(1,2,3-cd)pyrene	ND	1.9	D	mg/Kg	10	7/31/2019 3:32:08 PM	46392
Surr: N-hexadecane	0	38.8-100	SD	%Rec	10	7/31/2019 3:32:08 PM	46392
Surr: Benzo(e)pyrene	0	38.5-107	SD	%Rec	10	7/31/2019 3:32:08 PM	46392

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907902

Date Reported: 8/1/2019

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-6

Project: TSV KMF

Collection Date: 7/16/2019 1:25:00 PM

Lab ID: 1907902-007

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	22000	880		mg/Kg	100	7/24/2019 2:44:06 PM	46265
Motor Oil Range Organics (MRO)	ND	4400		mg/Kg	100	7/24/2019 2:44:06 PM	46265
Surr: DNOP	0	70-130	S	%Rec	100	7/24/2019 2:44:06 PM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	860	94		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Surr: BFB	366	73.8-119	S	%Rec	20	7/23/2019 1:52:02 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.9		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Benzene	0.68	0.47		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Toluene	10	0.94		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Ethylbenzene	11	0.94		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Xylenes, Total	42	1.9		mg/Kg	20	7/23/2019 1:52:02 PM	46308
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	20	7/23/2019 1:52:02 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	2.5	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
1-Methylnaphthalene	3.9	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
2-Methylnaphthalene	6.2	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Acenaphthylene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Acenaphthene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Fluorene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Phenanthrene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Anthracene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Fluoranthene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Pyrene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Benz(a)anthracene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Chrysene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Benzo(b)fluoranthene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Benzo(k)fluoranthene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Benzo(a)pyrene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Dibenz(a,h)anthracene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Benzo(g,h,i)perylene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Indeno(1,2,3-cd)pyrene	ND	2.0	D	mg/Kg	10	7/31/2019 3:56:24 PM	46392
Surr: N-hexadecane	0	38.8-100	SD	%Rec	10	7/31/2019 3:56:24 PM	46392
Surr: Benzo(e)pyrene	0	38.5-107	SD	%Rec	10	7/31/2019 3:56:24 PM	46392

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 Quantitative 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907902

Date Reported: 8/1/2019

CLIENT: Glorieta GeoScience

Client Sample ID: KMF-FT-7

Project: TSV KMF

Collection Date: 7/16/2019 1:30:00 PM

Lab ID: 1907902-008

Matrix: SOIL

Received Date: 7/17/2019 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	70000	940		mg/Kg	100	7/24/2019 3:08:22 PM	46265
Motor Oil Range Organics (MRO)	ND	4700		mg/Kg	100	7/24/2019 3:08:22 PM	46265
Surr: DNOP	0	70-130	S	%Rec	100	7/24/2019 3:08:22 PM	46265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1300	47		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Surr: BFB	689	73.8-119	S	%Rec	10	7/23/2019 2:15:35 PM	46308
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.94		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Benzene	2.7	0.24		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Toluene	31	0.47		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Ethylbenzene	26	0.47		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Xylenes, Total	99	0.94		mg/Kg	10	7/23/2019 2:15:35 PM	46308
Surr: 4-Bromofluorobenzene	160	80-120	S	%Rec	10	7/23/2019 2:15:35 PM	46308
EPA METHOD 8270C: PAHS							Analyst: JDC
Naphthalene	23	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
1-Methylnaphthalene	34	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
2-Methylnaphthalene	40	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Acenaphthylene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Acenaphthene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Fluorene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Phenanthrene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Anthracene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Fluoranthene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Pyrene	9.3	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Benz(a)anthracene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Chrysene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Benzo(b)fluoranthene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Benzo(k)fluoranthene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Benzo(a)pyrene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Dibenz(a,h)anthracene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Benzo(g,h,i)perylene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Indeno(1,2,3-cd)pyrene	ND	3.9	D	mg/Kg	20	7/31/2019 4:20:40 PM	46392
Surr: N-hexadecane	0	38.8-100	SD	%Rec	20	7/31/2019 4:20:40 PM	46392
Surr: Benzo(e)pyrene	0	38.5-107	SD	%Rec	20	7/31/2019 4:20:40 PM	46392

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: LCS-46265	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 46265			RunNo: 61511						
Prep Date: 7/18/2019	Analysis Date: 7/19/2019			SeqNo: 2085370	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.6	63.9	124			
Surr: DNOP	4.0		5.000		80.9	70	130			

Sample ID: MB-46265	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 46265			RunNo: 61511						
Prep Date: 7/18/2019	Analysis Date: 7/19/2019			SeqNo: 2085380	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.0	70	130			

Sample ID: LCS-46344	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 46344			RunNo: 61604						
Prep Date: 7/23/2019	Analysis Date: 7/25/2019			SeqNo: 2089021	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.8	70	130			

Sample ID: MB-46344	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 46344			RunNo: 61604						
Prep Date: 7/23/2019	Analysis Date: 7/25/2019			SeqNo: 2089025	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: MB-46308	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087823			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.1	73.8	119			

Sample ID: LCS-46308	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087824			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.2	80.1	123			
Surr: BFB	1000		1000		104	73.8	119			

Sample ID: MB-46343	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 46343	RunNo: 61629								
Prep Date: 7/23/2019	Analysis Date: 7/24/2019	SeqNo: 2088935			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	73.8	119			

Sample ID: LCS-46343	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 46343	RunNo: 61629								
Prep Date: 7/23/2019	Analysis Date: 7/24/2019	SeqNo: 2088936			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		118	73.8	119			

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: MB-46308	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087848 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	80	120			

Sample ID: LCS-46308	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087849 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.91	0.10	1.000	0	90.8	80	120			
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.0	80	120			

Sample ID: 1907902-002AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: KMF-FT-1	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087852 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.82	0.099	0.9872	0	82.7	51.7	125			
Benzene	0.92	0.025	0.9872	0	93.1	63.9	127			
Toluene	0.99	0.049	0.9872	0	100	69.9	131			
Ethylbenzene	1.0	0.049	0.9872	0	102	71	132			
Xylenes, Total	3.0	0.099	2.962	0.01709	102	71.8	131			
Surr: 4-Bromofluorobenzene	0.94		0.9872		95.0	80	120			

Sample ID: 1907902-002AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: KMF-FT-1	Batch ID: 46308	RunNo: 61588								
Prep Date: 7/22/2019	Analysis Date: 7/23/2019	SeqNo: 2087853 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.84	0.099	0.9881	0	84.9	51.7	125	2.71	20	
Benzene	0.92	0.025	0.9881	0	93.6	63.9	127	0.624	20	
Toluene	0.99	0.049	0.9881	0	100	69.9	131	0.129	20	
Ethylbenzene	1.0	0.049	0.9881	0	101	71	132	1.01	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: 1907902-002AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles						
Client ID: KMF-FT-1		Batch ID: 46308		RunNo: 61588						
Prep Date: 7/22/2019		Analysis Date: 7/23/2019		SeqNo: 2087853		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.0	0.099	2.964	0.01709	99.9	71.8	131	1.53	20	
Surr: 4-Bromofluorobenzene	0.91		0.9881		92.1	80	120	0	0	

Sample ID: MB-46343		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS		Batch ID: 46343		RunNo: 61629						
Prep Date: 7/23/2019		Analysis Date: 7/24/2019		SeqNo: 2088963			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		89.5	80	120			

Sample ID: LCS-46343		SampType: LCS		TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS		Batch ID: 46343		RunNo: 61629						
Prep Date: 7/23/2019		Analysis Date: 7/24/2019		SeqNo: 2088964		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.4	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: lcs-46392	SampType: LCS				TestCode: EPA Method 8270C: PAHs					
Client ID: LCSS	Batch ID: 46392				RunNo: 61759					
Prep Date: 7/25/2019	Analysis Date: 7/30/2019				SeqNo: 2093667	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.26	0.020	0.3300	0	79.4	33.5	118			
1-Methylnaphthalene	0.26	0.020	0.3300	0	79.2	41	120			
2-Methylnaphthalene	0.28	0.020	0.3300	0	83.6	38.1	116			
Acenaphthylene	0.21	0.020	0.3300	0	63.6	34.2	120			
Acenaphthene	0.22	0.020	0.3300	0	67.7	43.8	118			
Fluorene	0.24	0.020	0.3300	0	71.6	48.1	122			
Phenanthrene	0.28	0.020	0.3300	0	83.4	56.6	115			
Anthracene	0.26	0.020	0.3300	0	77.9	54.6	125			
Fluoranthene	0.30	0.020	0.3300	0	90.0	61.9	120			
Pyrene	0.25	0.020	0.3300	0	77.0	59.3	120			
Benz(a)anthracene	0.26	0.020	0.3300	0	77.7	54.4	121			
Chrysene	0.21	0.020	0.3300	0	62.2	48.5	113			
Benzo(b)fluoranthene	0.30	0.020	0.3300	0	90.7	60.2	120			
Benzo(k)fluoranthene	0.28	0.020	0.3300	0	86.3	60.2	131			
Benzo(a)pyrene	0.30	0.020	0.3300	0	89.5	51.6	127			
Dibenz(a,h)anthracene	0.27	0.020	0.3300	0	82.7	49.9	120			
Benzo(g,h,i)perylene	0.32	0.020	0.3300	0	97.9	56.8	117			
Indeno(1,2,3-cd)pyrene	0.29	0.020	0.3300	0	89.3	60.2	132			
Surr: N-hexadecane	1.1		1.460		76.1	38.8	100			
Surr: Benzo(e)pyrene	0.27		0.3300		81.9	38.5	107			

Sample ID: mb-46392	SampType: MBLK				TestCode: EPA Method 8270C: PAHs					
Client ID: PBS	Batch ID: 46392				RunNo: 61804					
Prep Date: 7/25/2019	Analysis Date: 7/31/2019				SeqNo: 2095198	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.020								
1-Methylnaphthalene	ND	0.020								
2-Methylnaphthalene	ND	0.020								
Acenaphthylene	ND	0.020								
Acenaphthene	ND	0.020								
Fluorene	ND	0.020								
Phenanthrene	ND	0.020								
Anthracene	ND	0.020								
Fluoranthene	ND	0.020								
Pyrene	ND	0.020								
Benz(a)anthracene	ND	0.020								
Chrysene	ND	0.020								
Benzo(b)fluoranthene	ND	0.020								

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907902

01-Aug-19

Client: Glorieta GeoScience

Project: TSV KMF

Sample ID: mb-46392	SampType: MBLK		TestCode: EPA Method 8270C: PAHs							
Client ID: PBS	Batch ID: 46392		RunNo: 61804							
Prep Date: 7/25/2019	Analysis Date: 7/31/2019		SeqNo: 2095198		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	ND	0.020								
Benzo(a)pyrene	ND	0.020								
Dibenz(a,h)anthracene	ND	0.020								
Benzo(g,h,i)perylene	ND	0.020								
Indeno(1,2,3-cd)pyrene	ND	0.020								
Surr: N-hexadecane	1.1		1.460		75.2	38.8	100			
Surr: Benzo(e)pyrene	0.26		0.3300		79.9	38.5	107			

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 Quantitative 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



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: GGI

Work Order Number: 1907902

RcptNo: 1

Received By: Desiree Dominguez 7/17/2019 1:20:00 PM

Completed By: Anne Thorne 7/18/2019 11:42:41 AM

Reviewed By:

mg

07/18/19

DS
Anne Thorne

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 $>0^{\circ}\text{C}$ 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 preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: ENM 7/18/A

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

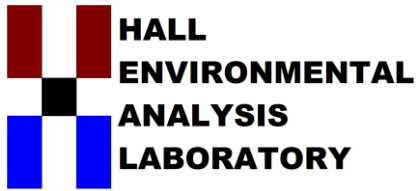
Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			



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

July 24, 2020

Paul Drakos
Glorieta GeoScience
P.O. Box 5727
Santa Fe, NM 87502
TEL:
FAX

RE: TSV KMF VRP

OrderNo.: 2007334

Dear Paul Drakos:

Hall Environmental Analysis Laboratory received 4 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.

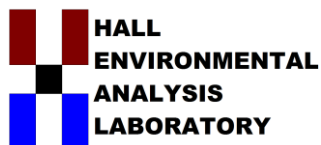
Please don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



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

Case Narrative

WO#: 2007334
Date: 7/24/2020

CLIENT: Glorieta GeoScience
Project: TSV KMF VRP

Analytical Notes Regarding EPA Method 8270:
The LCS/LCSD had low recoveries for the "S" flagged compounds.

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Rinsate

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:00:00 AM

Lab ID: 2007334-001

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/12/2020 12:19:00 PM	G70266
Surr: BFB	95.7	70-130		%Rec	1	7/12/2020 12:19:00 PM	G70266
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/10/2020 6:43:52 PM	53607
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/10/2020 6:43:52 PM	53607
Surr: DNOP	99.0	70-130		%Rec	1	7/10/2020 6:43:52 PM	53607
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Acenaphthylene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Aniline	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Anthracene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Azobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benz(a)anthracene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzo(a)pyrene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzo(b)fluoranthene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzo(k)fluoranthene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzoic acid	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Benzyl alcohol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Butyl benzyl phthalate	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Carbazole	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Chloroaniline	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Chloronaphthalene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Chlorophenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Chrysene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Di-n-butyl phthalate	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Di-n-octyl phthalate	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Dibenzofuran	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
1,2-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
1,3-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Rinsate

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:00:00 AM

Lab ID: 2007334-001

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Diethyl phthalate	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Dimethyl phthalate	ND	30		µg/L	1	7/21/2020 3:13:44 PM	53602
2,4-Dichlorophenol	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
2,4-Dimethylphenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
2,4-Dinitrophenol	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
2,4-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2,6-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Fluoranthene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Fluorene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Hexachlorobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Hexachlorobutadiene	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Hexachlorocyclopentadiene	ND	30		µg/L	1	7/21/2020 3:13:44 PM	53602
Hexachloroethane	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Isophorone	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
1-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Methylphenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
3+4-Methylphenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
N-Nitrosodimethylamine	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Naphthalene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
3-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Nitrobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2-Nitrophenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
4-Nitrophenol	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Pentachlorophenol	ND	20		µg/L	1	7/21/2020 3:13:44 PM	53602
Phenanthrene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Phenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Pyrene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Pyridine	ND	30		µg/L	1	7/21/2020 3:13:44 PM	53602
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Rinsate

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:00:00 AM

Lab ID: 2007334-001

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/21/2020 3:13:44 PM	53602
Surr: 2-Fluorophenol	43.4	19.1-74.7		%Rec	1	7/21/2020 3:13:44 PM	53602
Surr: Phenol-d5	35.4	19.2-57		%Rec	1	7/21/2020 3:13:44 PM	53602
Surr: 2,4,6-Tribromophenol	60.2	31-96.4		%Rec	1	7/21/2020 3:13:44 PM	53602
Surr: Nitrobenzene-d5	57.3	46.2-101		%Rec	1	7/21/2020 3:13:44 PM	53602
Surr: 2-Fluorobiphenyl	49.1	39.7-98.2		%Rec	1	7/21/2020 3:13:44 PM	53602
Surr: 4-Terphenyl-d14	79.9	31.1-102		%Rec	1	7/21/2020 3:13:44 PM	53602
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Toluene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Ethylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Naphthalene	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
2-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Acetone	ND	10		µg/L	1	7/12/2020 12:19:00 PM	R70266
Bromobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Bromodichloromethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Bromoform	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Bromomethane	ND	3.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
2-Butanone	ND	10		µg/L	1	7/12/2020 12:19:00 PM	R70266
Carbon disulfide	ND	10		µg/L	1	7/12/2020 12:19:00 PM	R70266
Carbon Tetrachloride	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Chlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Chloroethane	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Chloroform	1.6	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Chloromethane	ND	3.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
2-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
4-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
cis-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Dibromochloromethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Dibromomethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Rinsate

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:00:00 AM

Lab ID: 2007334-001

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1-Dichloroethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1-Dichloroethene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,3-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
2,2-Dichloropropane	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Hexachlorobutadiene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
2-Hexanone	ND	10		µg/L	1	7/12/2020 12:19:00 PM	R70266
Isopropylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
4-Isopropyltoluene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
4-Methyl-2-pentanone	ND	10		µg/L	1	7/12/2020 12:19:00 PM	R70266
Methylene Chloride	ND	3.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
n-Butylbenzene	ND	3.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
n-Propylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
sec-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Styrene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
tert-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
trans-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Trichlorofluoromethane	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Vinyl chloride	ND	1.0		µg/L	1	7/12/2020 12:19:00 PM	R70266
Xylenes, Total	ND	1.5		µg/L	1	7/12/2020 12:19:00 PM	R70266
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	7/12/2020 12:19:00 PM	R70266
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/12/2020 12:19:00 PM	R70266
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	7/12/2020 12:19:00 PM	R70266
Surr: Toluene-d8	101	70-130		%Rec	1	7/12/2020 12:19:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Culvert Well

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:45:00 AM

Lab ID: 2007334-002

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/12/2020 1:31:00 PM	R70266
Surr: BFB	97.5	70-130		%Rec	1	7/12/2020 1:31:00 PM	R70266
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/10/2020 7:56:38 PM	53607
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/10/2020 7:56:38 PM	53607
Surr: DNOP	105	70-130		%Rec	1	7/10/2020 7:56:38 PM	53607
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Acenaphthylene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Aniline	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Anthracene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Azobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benz(a)anthracene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzo(a)pyrene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzo(b)fluoranthene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzo(k)fluoranthene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzoic acid	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Benzyl alcohol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Butyl benzyl phthalate	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Carbazole	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Chloroaniline	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Chloronaphthalene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Chlorophenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Chrysene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Di-n-butyl phthalate	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Di-n-octyl phthalate	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Dibenzofuran	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
1,2-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
1,3-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Culvert Well

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:45:00 AM

Lab ID: 2007334-002

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Diethyl phthalate	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Dimethyl phthalate	ND	30		µg/L	1	7/21/2020 3:57:09 PM	53602
2,4-Dichlorophenol	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
2,4-Dimethylphenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
2,4-Dinitrophenol	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
2,4-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2,6-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Fluoranthene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Fluorene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Hexachlorobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Hexachlorobutadiene	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Hexachlorocyclopentadiene	ND	30		µg/L	1	7/21/2020 3:57:09 PM	53602
Hexachloroethane	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Isophorone	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
1-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Methylphenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
3+4-Methylphenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
N-Nitrosodimethylamine	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Naphthalene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
3-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Nitroaniline	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Nitrobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2-Nitrophenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
4-Nitrophenol	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Pentachlorophenol	ND	20		µg/L	1	7/21/2020 3:57:09 PM	53602
Phenanthrene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Phenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Pyrene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Pyridine	ND	30		µg/L	1	7/21/2020 3:57:09 PM	53602
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Culvert Well

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:45:00 AM

Lab ID: 2007334-002

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/21/2020 3:57:09 PM	53602
Surr: 2-Fluorophenol	42.9	19.1-74.7		%Rec	1	7/21/2020 3:57:09 PM	53602
Surr: Phenol-d5	33.2	19.2-57		%Rec	1	7/21/2020 3:57:09 PM	53602
Surr: 2,4,6-Tribromophenol	48.9	31-96.4		%Rec	1	7/21/2020 3:57:09 PM	53602
Surr: Nitrobenzene-d5	54.1	46.2-101		%Rec	1	7/21/2020 3:57:09 PM	53602
Surr: 2-Fluorobiphenyl	45.6	39.7-98.2		%Rec	1	7/21/2020 3:57:09 PM	53602
Surr: 4-Terphenyl-d14	70.4	31.1-102		%Rec	1	7/21/2020 3:57:09 PM	53602
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Toluene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Ethylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Naphthalene	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
2-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Acetone	ND	10		µg/L	1	7/12/2020 1:31:00 PM	R70266
Bromobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Bromodichloromethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Bromoform	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Bromomethane	ND	3.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
2-Butanone	ND	10		µg/L	1	7/12/2020 1:31:00 PM	R70266
Carbon disulfide	ND	10		µg/L	1	7/12/2020 1:31:00 PM	R70266
Carbon Tetrachloride	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Chlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Chloroethane	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Chloroform	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Chloromethane	ND	3.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
2-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
4-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
cis-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Dibromochloromethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Dibromomethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Culvert Well

Project: TSV KMF VRP

Collection Date: 7/6/2020 10:45:00 AM

Lab ID: 2007334-002

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1-Dichloroethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1-Dichloroethene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,3-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
2,2-Dichloropropane	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Hexachlorobutadiene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
2-Hexanone	ND	10		µg/L	1	7/12/2020 1:31:00 PM	R70266
Isopropylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
4-Isopropyltoluene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
4-Methyl-2-pentanone	ND	10		µg/L	1	7/12/2020 1:31:00 PM	R70266
Methylene Chloride	ND	3.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
n-Butylbenzene	ND	3.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
n-Propylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
sec-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Styrene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
tert-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
trans-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Trichlorofluoromethane	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Vinyl chloride	ND	1.0		µg/L	1	7/12/2020 1:31:00 PM	R70266
Xylenes, Total	ND	1.5		µg/L	1	7/12/2020 1:31:00 PM	R70266
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/12/2020 1:31:00 PM	R70266
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/12/2020 1:31:00 PM	R70266
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/12/2020 1:31:00 PM	R70266
Surr: Toluene-d8	97.8	70-130		%Rec	1	7/12/2020 1:31:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: 1993 MW

Project: TSV KMF VRP

Collection Date: 7/6/2020 11:35:00 AM

Lab ID: 2007334-003

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/12/2020 2:45:00 PM	G70266
Surr: BFB	102	70-130		%Rec	1	7/12/2020 2:45:00 PM	G70266
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/10/2020 8:21:21 PM	53607
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/10/2020 8:21:21 PM	53607
Surr: DNOP	104	70-130		%Rec	1	7/10/2020 8:21:21 PM	53607
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Acenaphthylene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Aniline	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Anthracene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Azobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benz(a)anthracene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzo(a)pyrene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzo(b)fluoranthene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzo(k)fluoranthene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzoic acid	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Benzyl alcohol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Butyl benzyl phthalate	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Carbazole	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Chloroaniline	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Chloronaphthalene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Chlorophenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Chrysene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Di-n-butyl phthalate	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Di-n-octyl phthalate	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Dibenzofuran	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
1,2-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
1,3-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: 1993 MW

Project: TSV KMF VRP

Collection Date: 7/6/2020 11:35:00 AM

Lab ID: 2007334-003

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Diethyl phthalate	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Dimethyl phthalate	ND	30		µg/L	1	7/21/2020 4:40:43 PM	53602
2,4-Dichlorophenol	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
2,4-Dimethylphenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
2,4-Dinitrophenol	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
2,4-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2,6-Dinitrotoluene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Fluoranthene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Fluorene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Hexachlorobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Hexachlorobutadiene	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Hexachlorocyclopentadiene	ND	30		µg/L	1	7/21/2020 4:40:43 PM	53602
Hexachloroethane	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Isophorone	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
1-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Methylnaphthalene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Methylphenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
3+4-Methylphenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
N-Nitrosodimethylamine	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Naphthalene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Nitroaniline	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
3-Nitroaniline	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Nitroaniline	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Nitrobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2-Nitrophenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
4-Nitrophenol	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Pentachlorophenol	ND	20		µg/L	1	7/21/2020 4:40:43 PM	53602
Phenanthrene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Phenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Pyrene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Pyridine	ND	30		µg/L	1	7/21/2020 4:40:43 PM	53602
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: 1993 MW

Project: TSV KMF VRP

Collection Date: 7/6/2020 11:35:00 AM

Lab ID: 2007334-003

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/21/2020 4:40:43 PM	53602
Surr: 2-Fluorophenol	47.1	19.1-74.7		%Rec	1	7/21/2020 4:40:43 PM	53602
Surr: Phenol-d5	34.5	19.2-57		%Rec	1	7/21/2020 4:40:43 PM	53602
Surr: 2,4,6-Tribromophenol	58.2	31-96.4		%Rec	1	7/21/2020 4:40:43 PM	53602
Surr: Nitrobenzene-d5	55.1	46.2-101		%Rec	1	7/21/2020 4:40:43 PM	53602
Surr: 2-Fluorobiphenyl	48.4	39.7-98.2		%Rec	1	7/21/2020 4:40:43 PM	53602
Surr: 4-Terphenyl-d14	75.8	31.1-102		%Rec	1	7/21/2020 4:40:43 PM	53602
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Toluene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Ethylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Naphthalene	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
2-Methylnaphthalene	ND	4.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Acetone	ND	10		µg/L	1	7/12/2020 2:45:00 PM	R70266
Bromobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Bromodichloromethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Bromoform	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Bromomethane	ND	3.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
2-Butanone	ND	10		µg/L	1	7/12/2020 2:45:00 PM	R70266
Carbon disulfide	ND	10		µg/L	1	7/12/2020 2:45:00 PM	R70266
Carbon Tetrachloride	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Chlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Chloroethane	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Chloroform	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Chloromethane	ND	3.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
2-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
4-Chlorotoluene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
cis-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Dibromochloromethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Dibromomethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: 1993 MW

Project: TSV KMF VRP

Collection Date: 7/6/2020 11:35:00 AM

Lab ID: 2007334-003

Matrix: AQUEOUS

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1-Dichloroethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1-Dichloroethene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,3-Dichloropropane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
2,2-Dichloropropane	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Hexachlorobutadiene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
2-Hexanone	ND	10		µg/L	1	7/12/2020 2:45:00 PM	R70266
Isopropylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
4-Isopropyltoluene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
4-Methyl-2-pentanone	ND	10		µg/L	1	7/12/2020 2:45:00 PM	R70266
Methylene Chloride	ND	3.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
n-Butylbenzene	ND	3.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
n-Propylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
sec-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Styrene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
tert-Butylbenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
trans-1,2-DCE	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Trichlorofluoromethane	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Vinyl chloride	ND	1.0		µg/L	1	7/12/2020 2:45:00 PM	R70266
Xylenes, Total	ND	1.5		µg/L	1	7/12/2020 2:45:00 PM	R70266
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/12/2020 2:45:00 PM	R70266
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	7/12/2020 2:45:00 PM	R70266
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/12/2020 2:45:00 PM	R70266
Surr: Toluene-d8	99.2	70-130		%Rec	1	7/12/2020 2:45:00 PM	R70266

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Trip Blank

Project: TSV KMF VRP

Collection Date:

Lab ID: 2007334-004

Matrix: TRIP BLANK

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Toluene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Ethylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Naphthalene	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1-Methylnaphthalene	ND	4.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
2-Methylnaphthalene	ND	4.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Acetone	ND	10		µg/L	1	7/13/2020 11:22:00 AM	R70278
Bromobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Bromodichloromethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Bromoform	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Bromomethane	ND	3.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
2-Butanone	ND	10		µg/L	1	7/13/2020 11:22:00 AM	R70278
Carbon disulfide	ND	10		µg/L	1	7/13/2020 11:22:00 AM	R70278
Carbon Tetrachloride	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Chlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Chloroethane	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Chloroform	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Chloromethane	ND	3.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
2-Chlorotoluene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
4-Chlorotoluene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
cis-1,2-DCE	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Dibromochloromethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Dibromomethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1-Dichloroethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1-Dichloroethene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2-Dichloropropane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,3-Dichloropropane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
2,2-Dichloropropane	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007334

Date Reported: 7/24/2020

CLIENT: Glorieta GeoScience

Client Sample ID: Trip Blank

Project: TSV KMF VRP

Collection Date:

Lab ID: 2007334-004

Matrix: TRIP BLANK

Received Date: 7/7/2020 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Hexachlorobutadiene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
2-Hexanone	ND	10		µg/L	1	7/13/2020 11:22:00 AM	R70278
Isopropylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
4-Isopropyltoluene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
4-Methyl-2-pentanone	ND	10		µg/L	1	7/13/2020 11:22:00 AM	R70278
Methylene Chloride	ND	3.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
n-Butylbenzene	ND	3.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
n-Propylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
sec-Butylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Styrene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
tert-Butylbenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
trans-1,2-DCE	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Trichlorofluoromethane	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Vinyl chloride	ND	1.0		µg/L	1	7/13/2020 11:22:00 AM	R70278
Xylenes, Total	ND	1.5		µg/L	1	7/13/2020 11:22:00 AM	R70278
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	7/13/2020 11:22:00 AM	R70278
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	7/13/2020 11:22:00 AM	R70278
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/13/2020 11:22:00 AM	R70278
Surr: Toluene-d8	98.9	70-130		%Rec	1	7/13/2020 11:22:00 AM	R70278

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: MB-53607	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: PBW	Batch ID: 53607	RunNo: 70238								
Prep Date: 7/9/2020	Analysis Date: 7/10/2020	SeqNo: 2442178 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		103	70	130			

Sample ID: LCS-53607	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: LCSW	Batch ID: 53607	RunNo: 70238								
Prep Date: 7/9/2020	Analysis Date: 7/10/2020	SeqNo: 2442179 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	109	70	130			
Surr: DNOP	0.51		0.5000		103	70	130			

Sample ID: 2007334-001CMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: Rinsate	Batch ID: 53607	RunNo: 70238								
Prep Date: 7/9/2020	Analysis Date: 7/10/2020	SeqNo: 2442181 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	70	130			
Surr: DNOP	0.53		0.5000		105	70	130			

Sample ID: 2007334-001CMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: Rinsate	Batch ID: 53607	RunNo: 70238								
Prep Date: 7/9/2020	Analysis Date: 7/10/2020	SeqNo: 2442182 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	70	130	0.0514	20	
Surr: DNOP	0.52		0.5000		105	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R70266		RunNo: 70266							
Prep Date:	Analysis Date: 7/12/2020		SeqNo: 2442457		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			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.8	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.5	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	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R70266			RunNo: 70266						
Prep Date:	Analysis Date: 7/12/2020			SeqNo: 2442458		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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R70266			RunNo: 70266						
Prep Date:	Analysis Date: 7/12/2020			SeqNo: 2442458	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442458	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	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			

Sample ID: 2007334-001ams	SampType: MS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: Rinsate	Batch ID: R70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442460	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.7	70	130			
Toluene	20	1.0	20.00	0	99.4	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.1	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: 2007334-001amsd	SampType: MSD	TestCode: EPA Method 8260B: VOLATILES								
Client ID: Rinsate	Batch ID: R70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442461	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.1	70	130	1.64	20	
Toluene	19	1.0	20.00	0	96.7	70	130	2.80	20	
Chlorobenzene	20	1.0	20.00	0	99.1	70	130	3.47	20	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	6.82	20	
Trichloroethene (TCE)	17	1.0	20.00	0	85.9	70	130	3.61	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130	0	0	
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130	0	0	
Surr: Toluene-d8	9.9		10.00		99.0	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R70278	RunNo: 70278								
Prep Date:	Analysis Date: 7/13/2020	SeqNo: 2445380	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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R70278	RunNo: 70278								
Prep Date:	Analysis Date: 7/13/2020	SeqNo: 2445380	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: 100NG LCS	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: LCSW	Batch ID: R70278	RunNo: 70278								
Prep Date:	Analysis Date: 7/13/2020	SeqNo: 2445382	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	21	1.0	20.00	0	104	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: 100NG LCS	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R70278		RunNo: 70278							
Prep Date:	Analysis Date: 7/13/2020		SeqNo: 2445382		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	98.7	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		101	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: mb-53602	SampType: MBLK	TestCode: EPA Method 8270C: Semivolatiles								
Client ID: PBW	Batch ID: 53602	RunNo: 70502								
Prep Date: 7/9/2020	Analysis Date: 7/21/2020	SeqNo: 2452297	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	20								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	30								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: mb-53602	SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles						
Client ID: PBW	Batch ID: 53602			RunNo: 70502						
Prep Date: 7/9/2020	Analysis Date: 7/21/2020			SeqNo: 2452297	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	20								
Hexachlorocyclopentadiene	ND	30								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	20								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	30								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	13		200.0		6.42	19.1	74.7			S
Surr: Phenol-d5	14		200.0		6.98	19.2	57			S
Surr: 2,4,6-Tribromophenol	10		200.0		5.01	31	96.4			S
Surr: Nitrobenzene-d5	71		100.0		70.7	46.2	101			
Surr: 2-Fluorobiphenyl	55		100.0		55.5	39.7	98.2			
Surr: 4-Terphenyl-d14	93		100.0		93.1	31.1	102			

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: Ics-53602	SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles							
Client ID: LCSW	Batch ID: 53602		RunNo: 70502							
Prep Date: 7/9/2020	Analysis Date: 7/21/2020		SeqNo: 2455448		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	46	10	100.0	0	46.3	46.3	97.3			
4-Chloro-3-methylphenol	110	10	100.0	0	108	46.9	99.1			S
2-Chlorophenol	31	10	100.0	0	31.2	39.1	98.2			S
1,4-Dichlorobenzene	35	10	100.0	0	34.7	28.6	87.9			
2,4-Dinitrotoluene	72	10	100.0	0	72.4	44	88.3			
N-Nitrosodi-n-propylamine	33	10	100.0	0	33.4	40.3	107			S
4-Nitrophenol	48	20	100.0	0	47.6	26.1	60.9			
Pentachlorophenol	73	20	100.0	0	72.8	30.6	83.6			
Phenol	20	10	100.0	0	20.0	22.7	63.7			S
Pyrene	69	10	100.0	0	69.3	51.4	90			
1,2,4-Trichlorobenzene	22	10	100.0	0	21.8	35	94.3			S
Surr: 2-Fluorophenol	21		100.0		20.6	19.1	74.7			
Surr: Phenol-d5	19		100.0		18.5	19.2	57			S
Surr: 2,4,6-Tribromophenol	65		100.0		65.5	31	96.4			
Surr: Nitrobenzene-d5	32		100.0		31.6	46.2	101			S
Surr: 2-Fluorobiphenyl	35		100.0		34.9	39.7	98.2			S
Surr: 4-Terphenyl-d14	67		100.0		67.2	31.1	102			

Sample ID: Icsd-53602	SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles							
Client ID: LCSS02	Batch ID: 53602		RunNo: 70502							
Prep Date: 7/9/2020	Analysis Date: 7/21/2020		SeqNo: 2455449		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	46	10	100.0	0	46.4	46.3	97.3	0.118	52.7	
4-Chloro-3-methylphenol	53	10	100.0	0	53.3	46.9	99.1	67.5	45.2	R
2-Chlorophenol	36	10	100.0	0	36.0	39.1	98.2	14.1	51.8	S
1,4-Dichlorobenzene	21	10	100.0	0	21.3	28.6	87.9	48.0	59.6	S
2,4-Dinitrotoluene	68	10	100.0	0	68.3	44	88.3	5.76	46.5	
N-Nitrosodi-n-propylamine	34	10	100.0	0	34.5	40.3	107	3.14	47.7	S
4-Nitrophenol	45	20	100.0	0	44.5	26.1	60.9	6.64	42.6	
Pentachlorophenol	73	20	100.0	0	73.3	30.6	83.6	0.591	48.7	
Phenol	21	10	100.0	0	21.2	22.7	63.7	5.98	47.1	S
Pyrene	70	10	100.0	0	69.8	51.4	90	0.769	26.6	
1,2,4-Trichlorobenzene	30	10	100.0	0	29.5	35	94.3	30.0	52.5	S
Surr: 2-Fluorophenol	26		100.0		25.7	19.1	74.7	0	0	
Surr: Phenol-d5	20		100.0		19.8	19.2	57	0	0	
Surr: 2,4,6-Tribromophenol	67		100.0		66.9	31	96.4	0	0	
Surr: Nitrobenzene-d5	37		100.0		36.6	46.2	101	0	0	S
Surr: 2-Fluorobiphenyl	37		100.0		37.1	39.7	98.2	0	0	S

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: lcscd-53602	SampType: LCSD	TestCode: EPA Method 8270C: Semivolatiles								
Client ID: LCSS02	Batch ID: 53602	RunNo: 70502								
Prep Date: 7/9/2020	Analysis Date: 7/21/2020	SeqNo: 2455449	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	68		100.0		68.0	31.1	102	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007334

24-Jul-20

Client: Glorieta GeoScience

Project: TSV KMF VRP

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBW	Batch ID: G70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442614 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.8		10.00		98.0	70	130			

Sample ID: 2.5 ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSW	Batch ID: G70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442615 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.0	70	130			
Surr: BFB	10		10.00		104	70	130			

Sample ID: 2007334-002ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Culvert Well	Batch ID: G70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442618 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	88.0	70	130			
Surr: BFB	11		10.00		105	70	130			

Sample ID: 2007334-002amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Culvert Well	Batch ID: G70266	RunNo: 70266								
Prep Date:	Analysis Date: 7/12/2020	SeqNo: 2442619 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.0	70	130	2.30	20	
Surr: BFB	11		10.00		106	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 Quantitative 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

Sample Log-In Check List

Client Name: **Glorieta GeoScience**

Work Order Number: **2007334**

RcptNo: 1

Received By: **Scott Anderson**

7/7/2020 3:20:00 PM

Completed By: **Isaiah Ortiz**

7/8/2020 10:34:24 AM

Reviewed By: **SPA**

7-8-20

I-0X

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 $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☐ No ☒ NA ☐
- Samples were collected the same day and chilled.
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 preserved? Yes ☒ 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

JR 7/8/20

Special Handling (if applicable)

15. 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.8	Good	Not Present			

Chain-of-Custody Record

Client: Glorieta Geosciences, Inc.

Mailing Address: P.O. Box 5727

Santa Fe, NM 87502

Phone #: 505-660-4509

email or Fax#: drakos@glorietageo.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

TSV KMP VRP

Project #:

20011

Project Manager:

Paul Drakos

Sampler:

Drakos/Greenwald

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 6.8-0 = 6.8 (°C)

Container Type and #

500 ml

Preservative Type

none

HEAL No.

2007334

7/6/20 10:00

Rinsate

500 ml

none

001

7/6/20 10:45

Ag. Culvert Well

500 ml

none

002

7/6/20 11:35

Ag. 1993 MW

500 ml

none

003

7/7/20 11:30

Trip Blank

2 x vva

HCl

004

50

Date:

7/7/20

Relinquished by:

Paul Drakos

Date:

7/7/20

Relinquished by:

SPA Corcoran

Received by:

SPA Corcoran

Date

7-7-20

Time

15:20

Received by:

SPA Corcoran

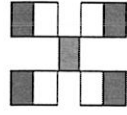
Date

7-7-20

Time

15:20

Remarks:



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)

☒

TPH:8015D(GRO / DRO / MRO)

☒

8081 Pesticides/8082 PCB's

☒

EDB (Method 504.1)

☒

PAHs by 8310 or 8270SIMS

☒

RCRA 8 Metals

☒

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

☒

8260 (VOA)

☒

8270 (Semi-VOA)

☒

Total Coliform (Present/Absent)

☒