

NEW MEXICO ENVIRONMENT DEPARTMENT VOLUNTARY REMEDIATION AGREEMENT

I. Introduction

This Voluntary Remediation Agreement (“Agreement”) is entered into voluntarily by **TP SMVW, LLC**, represented by **Forrest Thomas, Manager**, 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 **1710 Llano St.** (“Site”), located at **1710 Llano St.** in **Santa Fe**, under the Voluntary Remediation Program (**VRP Site No. 53251003**). This Voluntary Remediation Agreement is issued pursuant to Section 20.6.3.300 NMAC and the Delegation Order dated November 26, 2024, through which the Cabinet Secretary has delegated signatory authority to the Chief of the Ground Water Quality Bureau.

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 February 18, 2025, 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. Signatory documents, such as Voluntary Remediation Agreements, shall be sent via Electronic Signature software, such as DocuSign™. Please notify NMED if you are unable to sign the VRA electronically and NMED will provide a hard copy via mail.

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

Mailing Address:

Tim Noger
Ground Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502
E-mail: tim.noger@env.nm.gov
Phone number: (505) 629-8604
Fax number: (505) 827-2965

Physical Address:

Tim Noger
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:

Forrest Thomas
340 East Berger Street
Santa Fe, NM 87505
thomasprop@newmexico.com

Physical Address:

Same as Mailing Address

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:

- *Indoor Air, Soil Gas, Soil – Volatile organic compounds including the following: Tetrachloroethene (PCE), Trichloroethene (TCE), 1,1-Dichloroethene (1,1-DCE), Trans-1,2-Dichloroethene (trans-1,2-DCE), Cis-1,2-Dichloroethene (cis-1,2-DCE), and Vinyl Chloride*

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

- *New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation, November 2022*

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 45 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 45 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:

The first status report shall be submitted by the Participant no later than 90 days after this Agreement has been signed. Subsequent status reports shall be submitted on a semi-annual basis until the completion report is submitted to the Department.

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.I 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 \$125.00 per hour. The hourly rate is calculated and updated on November 1 of each year, following a 30 calendar day public comment period. The hourly rate was revised on November 1, 2023. 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.

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

1710 Llano St.
VRP Site No. 53251003

The site is a 0.53 acre parcel with an approximate 1,618 square foot building located at 1710 Llano Street in Santa Fe, more particularly described as Township 17 North, Range 9 East, Section 34; with coordinates 35.658170° -105.973152°. The full legal description is included on the following survey.

LEGEND

- POINTS FOUND
- SET POINT, NAIL WITH SHINER, PS 12451
- CALCULATED POINT (NOT SET)
- GAS METER (gm)
- ELECTRIC TRANSFORMER
- WATER METER
- WATER VALVE
- ELECTRIC METER
- LIGHT POLE
- CABLE TV PEDESTAL
- CLEAN OUT
- TELEPHONE PEDESTAL
- FIRE HYDRANT
- MANHOLE
- TRAFFIC SIGNAL BOX
- IRRIGATION VALVE
- ELECTRIC PANEL
- YARD HYDRANT
- GAS TEST VALVE
- ELECTRIC BOX
- CHAIN LINK FENCELINE
- EDGE OF ASPHALT
- SEWER LINE (NOT FIELD VERIFIED)
- P/N# PLAT OF NOTE #
- D/N# DOCUMENT OF NOTE #
- SMVW ST MICHAELS VILLAGE WEST
- cc CURB CUT
- p1t PLANTER
- hcap HANDICAP RAMP
- CONCRETE SURFACE
- RAILROAD TIES
- BLOCK WALL
- CURBING

FLOOD ZONE NOTE
THIS PROPERTY LIES WITHIN ZONE "X": AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. REFER TO FEMA FIRM MAP NO. 35049C0411D, DATED 6/17/08.

BOUNDARY CURVE DATA					
L/C	CHORD BEARING	ARC	DELTA	RADIUS	CHORD
C1	N11°13'50"W	195.79'	11°21'15"	988.00'	195.47'
C2	N03°36'42"W	72.51'	4°12'17"	988.00'	72.49'
C3	N74°08'09"W	82.31'	3°07'43"	1507.40'	82.30'
C4	N70°38'45"W	94.97'	3°35'35"	1507.40'	94.95'
C5	N65°15'35"W	191.04'	7°15'41"	1507.40'	190.91'
C6	N59°49'04"W	94.05'	3°34'29"	1507.40'	94.03'
C7	N54°15'47"W	201.07'	7°38'34"	1507.40'	200.92'

(PREVIOUS SURVEY DATA)					
L/C	CHORD BEARING	ARC	DELTA	RADIUS	CHORD
C1	N11°04'42"W	XXXXXX	XXXXXX	988.00'	195.25'
C2	N03°13'30"W	XXXXXX	XXXXXX	988.00'	72.94'
C3	N74°03'24"W	XXXXXX	XXXXXX	1507.40'	82.32'
C4	N70°34'00"W	XXXXXX	XXXXXX	1507.40'	94.97'
C5	N65°10'30"W	XXXXXX	XXXXXX	1507.40'	180.95'
C6	N59°45'00"W	XXXXXX	XXXXXX	1507.40'	94.05'
C7	N54°11'00"W	XXXXXX	XXXXXX	1507.40'	200.95'

BOUNDARY SURVEY PLAT FOR TP-SMVW LLC, A NEW MEXICO LIMITED LIABILITY COMPANY LOT 1 & TRACT B ST. MICHAELS VILLAGE WEST

LYING & BEING SITUATE WITHIN
PROJECTED SECTION 34, T 17 N, R 9 E
SANTA FE GRANT, NMMP
CITY & COUNTY OF SANTA FE,
NEW MEXICO

Tract B = 1.007 Acres ±
Lot 1 = 6.056 Acres ±
Containing 7.063 Acres ±

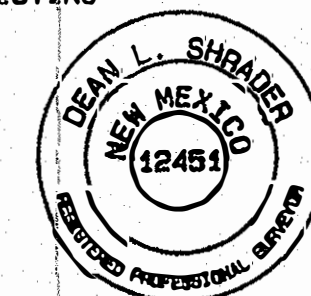
NOTES

- REFER TO A PLAT OF SURVEY FOR "THOMAS COMMERCIAL UNIT B" PREPARED BY GEORGE RIVERA, PS 3149, DATED JUNE 12th, 1972, AND RECORDED IN THE SANTA FE COUNTY CLERK'S OFFICE IN PLAT BOOK 25, PAGE 36, AS DOCUMENT NO. 344,780.
- REFER TO A "REPLAT PREPARED FOR COLLEGE OF SANTA FE" PREPARED BY GARY E. DAWSON, PS 7014, DATED SEPTEMBER 15th, 2006, FILED IN THE SANTA FE COUNTY CLERK'S OFFICE IN PLAT BOOK 635, PAGES 46-47, AS DOCUMENT NO. 1441,270.
- REFER TO NMSHD CONSTRUCTION (AND MAINTENANCE) AGREEMENT EXECUTED 12-18-72.
- LINEWORK SHOWING PORTION OR DIVISION OF BUSINESSES WITHIN OVERALL STRUCTURES IS APPROXIMATE AND NOT INTENDED FOR ANY DESIGN USE OR AREA CALCULATIONS. LINEWORK IS NOT INTENDED TO INDICATE ANY WALL OR STRUCTURE, BUT IS INTENDED TO INDICATE BUSINESS OCCUPANCY ONLY.
- REFER TO A "PLAT OF SURVEY FOR MARBERRY ENT. DATED 5/9/70." PREPARED BY GEORGE RIVERA, PS 3149, PROJECT NO. A2-252.

Surveyors Certificate

I HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE NOTES SHOWN HEREON WERE PREPARED BY ME OR UNDER MY PERSONAL DIRECTION AND ARE A TRUE & ACCURATE REPRESENTATION OF A FIELD SURVEY WHICH WAS COMPLETED ON 11/19/2008. TO THE BEST OF MY INFORMATION, KNOWLEDGE AND BELIEF, THIS PLAT MEETS OR EXCEEDS THE "MINIMUM STANDARDS FOR LAND SURVEYING IN NEW MEXICO." I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS IS A BOUNDARY SURVEY PLAT OF AN EXISTING TRACT OR TRACTS.

DEAN L. SHRAEDER
NEW MEXICO PROFESSIONAL SURVEYOR NO. 12451



First 1548747

COUNTY OF SANTA FE
STATE OF NEW MEXICO
I hereby certify that this instrument was filed for record on the 9 day of Jan, A.D. 20 09, at 10:00 o'clock A.M. and was duly recorded in book 696 page 0392016 of the records of SANTA FE COUNTY.

Witness my Hand and Seal of Office
Valerie Espinoza
County Clerk, Santa Fe County, N.M.

Carla L. Montoya
Deputy

SCALE: 1" = 40'

SHEET 1 OF 2

INDEXING INFORMATION FOR COUNTY CLERK

UPC#		TRACT B: 1-052-097-300-195		LOT 1: 1-062-097-300-195	
OWNER	SECTION	TWNHP.	RANGE	STREET NAME	
TP-SMVW LLC	PROJ 34	T 17 N	R 9 E	SAINT MICHAELS & LLANO	

HIGH DESERT SURVEYING, INC. PROFESSIONAL SURVEYING

1925 ASPEN DRIVE, SUITE 401
SANTA FE, NM. 87505
PHONE: (505) 436-8094
FAX: (505) 424-1708

Fr-1, Jan 9, 2009

DWG. NAME: BOUNDARY FOR ST. MICHAELS VILLAGE WEST PROJECT NO. 05107-SMV

Roughly 23,000 square feet with the coordinates by latitude and longitude:
NW Corner 35.658389°, -105.973406°;
NE Corner 35.658389°, -105.972919°;
SE Corner 35.657988°, -105.972812°;
and SW Corner 35.657994°, -105.973407°. Latitude/Longitude from Google Earth Pro.

PUBLIC NOTICE:

THIS SURVEY IS BASED ON THOSE RECORDED DOCUMENTS NOTED HEREON. THE CITY OF SANTA FE STAFF MUST APPROVE ALL DOCUMENTS SUBMITTED WITH AN APPLICATION FOR A BUILDING PERMIT AND MAY REQUIRE SUBMITTAL OF ADDITIONAL DOCUMENTATION TO PROVE LEGAL LOT OF RECORD.

TRACT R
N/F
COLLEGE OF SANTA FE
PLAT OF NOTE 2

TRACT M
N/F
COLLEGE OF SANTA FE
PLAT OF NOTE 2

TRACT B
1.007 ACRES ±

LOT 1
6.056 ACRES ±

TRACT L
N/F
TP-LLANO LLC
(VACANT LOT)
DOC# 1603,972

Figure 1 - Sample Locations Map

1710 Llano Street
Santa Fe, New Mexico

Legend

● Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)

■ Passive Soil Gas Samples

PSG-2

PSG-1

PSG-3

Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)

N

50 ft



NEW MEXICO ENVIRONMENT DEPARTMENT
VOLUNTARY REMEDIATION AGREEMENT

EXHIBIT 2
Preliminary Voluntary Remediation Work Plan

1710 Llano St.
VRP Site No. 53251003

DRAFT



EA Engineering, Science, and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102
Phone: (505) 224-9013

**PRELIMINARY VOLUNTARY REMEDIATION PROGRAM
WORK PLAN
1710 LLANO STREET,
SANTA FE, NEW MEXICO**

Prepared for:

New Mexico Environment Department
Ground Water Quality Bureau
1190 St. Francis Drive / PO Box 5469
Santa Fe, NM 87502

and

TP-SMVW, Inc., LLC
340 East Berger Street
Santa Fe, NM 87505

Prepared by:

EA Engineering, Science,
and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102

February 2025

EA Project No. 16326-01-00

PRELIMINARY VOLUNTARY REMEDIATION PROGRAM
WORK PLAN
1710 LLANO STREET,
SANTA FE, NEW MEXICO

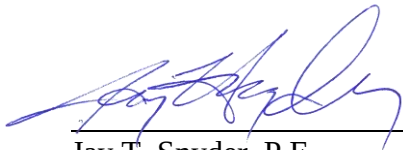
Prepared for:

New Mexico Environment Department
Ground Water Quality Bureau
1190 St. Francis Drive / PO Box 5469
Santa Fe, NM 87502
and

TP-SMVW, Inc., LLC
340 East Berger Street
Santa Fe, NM 87505

Prepared by:

EA Engineering, Science,
and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico



Jay T. Snyder, P.E.
Project Manager

February 19, 2025
Date

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1.0 INTRODUCTION

On behalf of TP-SMVW, LLC (TP-SMVW), EA Engineering Science and Technology, Inc., PBC (EA) is submitting this Preliminary Voluntary Remediation Program (VRP) work plan for 1710 Llano Street, Santa Fe, New Mexico. The site was identified as a former dry cleaner which may pose human health concerns in the event of a past release to subsurface soil. TP-SMVW retained EA to evaluate the vapor intrusion (VI) pathway and advise on path forward.

The Preliminary VRP work plan documents voluntary corrective actions performed at the site under 20.6.2.1203 New Mexico Administrative Code (NMAC). Based on the corrective actions taken to date and comparison to New Mexico Environment Department (NMED) Risk Assessment Guidance for Site Investigations and Remediation (NMED 2022) screening levels, additional corrective actions are required to achieve NMED Vapor Intrusion Screening Levels (VISL).

2.0 SITE BACKGROUND

2.1 Site Location

The site comprises an approximate 0.06-acre parcel developed with an approximate 1,618 square foot (SF) building located at 1710 Llano Street in Santa Fe, Santa Fe County, New Mexico, identified as Parcel ID16005224. The site is occupied by Big Brother Big Sisters Donation Center. Please refer to Exhibit 2 in Appendix A for a diagram of the site.

2.2 Site History

A review of historical topographic maps, aerial photographs, and city directories was conducted for the site and surrounding properties. The site was undeveloped land from prior to 1935 until at least 1976 with the existing building was developed. City directories indicate One Hour Martinizing operated on-site from at least 1978 through 2011. Thereafter Big Brother Big Sisters Donation Center became the next tenant and remains the current occupant of the site.

The Geo-Test November 10, 2008, Phase I ESA reported the site to consist of a +/-3.6- acre parcel improved with six buildings (retail) and two large anchor tenants. The report also noted that there was a dry cleaner under the name Green Earth Martinizing & Dry-Cleaning Store on the property that has been in operation for the past 20 years under different names. The Geo-Test report indicates there is no evidence of environmental impact from this dry cleaner. The report notes that a fueling station adjoins the retail property at the northwest corner and reports no releases have occurred. However, Mr. Thomas noted that releases at subject station have been remediated by Giant Industrie The report includes an interview with Mr. Forrest Thomas, manager of the property. Mr. Thomas indicated the buildings were constructed between 1973 and 1980. The report found no indication of RECs.

A letter from NMED GWQB dated August 17, 2021, stated NMED identified the site (1710 Llano Street) potentially impacted by past releases of chlorinated solvents due to the former dry-cleaning operation. This prompted evaluation of the VI pathway by EA (2022) and subsequent corrective actions outlined in Section 2.

2.3 Contaminants of Concern

Being a former dry cleaner, the primary Contaminant of Concern (COC) at the site is tetrachloroethene (perchloroethene “PCE”) presumably released from former drycleaning operations. Initial sub-slab soil gas also contained the degradation product trichloroethene (TCE) at around 0.5 percent the PCE concentration, indicating little natural degradation had occurred.

3.0 PROPOSED PERFORMANCE STANDARDS

The proposed performance standards for the 1710 Llano Street site are NMED VISLs and Soil Screening Levels (SSLs) as developed and provided in NMED Risk Assessment Guidance for Site Investigations and Remediation (NMED 2022).

4.0 SUMMARY OF PROPOSED SAMPLING AND ANALYSIS

Sampling will consist of collecting soil gas samples from the SVE system and from a sub-slab port in the building near the former dry-cleaning machine. Two types and levels of data quality will be collected:

- Periodic performance assessment samples
 - Collected from the SVE system and select SVE wells via Tedlar™ bag
 - Samples will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260 modified
 - Used to evaluate progress toward achieving VRP Performance Standards
 - Frequency of collection will be a function of trends of field measurements collected with a photo-ionization detector (PID)
- Risk Screening Samples
 - Collected from the sub-slab port in the building following EPA VI protocols (EPA 2015).
 - Collected in laboratory certified clean Summa canisters delivered under vacuum
 - Analyzed by EPA Method TO-15 for VOCs
 - Data compared directly to Industrial Soil Gas VISLs in NMED 2022
 - Data are sufficient quality to:
 - Terminate active SVE
 - Following a relaxation period, check for rebound
 - Make decisions regarding VRP completion

5.0 SUMMARY OF PROPOSED REMEDIATION

NMED identified the site as a former dry cleaner and notified TP-SMVW in 2021. In response, TP-SMVW hired EA to perform a VI investigation to evaluate if a release of dry cleaner solvent had occurred and to compare to VISLs to determine if a risk to human health existed. The VI investigation confirmed a release and that PCE concentrations in sub-slab soil gas exceeded the PCE VISL. EA prepared a Corrective Action Plan (CAP) under 20.6.2.1203 NMAC to investigate the vertical extent of soil vapor

contamination via nested vapor monitoring wells. To abate the vapors, the vapor monitoring wells were connected to a rotary vane pump soil vapor extraction (SVE) system, operation of which continues today. Subsequent to SVE operation, a sub-slab vapor extraction well was installed inside the building with screen from 3 to 8 feet below slab. This well was connected to the SVE header and has been the focus of abatement. As of fall 2024, PCE concentrations have been reduced an order of magnitude, but still exceed the PCE VISL six-fold. Accordingly, SVE continues.

NMED correspondence and CAP documents are attached to this Preliminary VRP Work Plan, and include:

- Notification of Records Review Related to Public Health Protection, NMED, August 17, 2021
- Conditional Work Plan Approval, NMED, April 1, 2022
- Conditional Corrective Action Report Approval, NMED, May 8, 2023
- Conditional Corrective Action Work Plan Approval, NMED, June 12, 2023
- Vapor Intrusion Assessment Report, EA, January 4, 2022
- Soil Vapor Extraction Well Installation and Sampling Report, EA, March 21, 2023
- Soil Vapor Extraction System Installation Report, EA, September 13, 2023

6.0 HOW PROPOSED ACTION WILL MEET VRP PERFORMANCE STANDARDS

SVE is a presumptive remedy in permeable soil for VOCs (EPA 1996). Ongoing SVE has already reduced contaminant concentrations significantly and is expected to achieve VRP Performance Standards with continued operation.

7.0 REFERENCES

EA Engineering Science and Technology Inc., PBC (EA). 2022. Vapor Intrusion Assessment Report, 1710 Llano Street, Santa Fe. January 4.

EA 2023. Soil Vapor Extraction Well Installation and Sampling Report, 1710 Llano Street, Santa Fe. March 21.

EA 2023. Soil Vapor Extraction System Installation Report, 1710 Llano Street, Santa Fe. September 13.

New Mexico Environment Department (NMED) 2021. Notification of Records Review Related to Public Health Protection, 1710 Llano Street, Santa Fe to TP SVMW. August 17, 2021.

NMED 2022. Risk Assessment Guidance for Site Investigations and Remediation. November.

NMED 2022. Conditional Work Plan Approval, 1710 Llano Street, Santa Fe to TP-SVMW, LLC.
April 1.

NMED 2023. Conditional Corrective Action Report Approval, 1710 Llano Street, Santa Fe to TP
SVMW. May 8.

NMED 2023. Conditional Corrective Action Work Plan Approval, 1710 Llano Street, Santa Fe to TP
SVMW. June 12, 2023.

Terracon 2024. Phase 1 Environmental Site Assessment, Former Dry Cleaner, 1710 Llano Street, Santa
Fe, Santa Fe County, New Mexico. November 5.

United States Environmental Protection Agency (EPA) 2015. OSWER Technical Guide for Assessing
and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air.
Office of Solid Waste and Emergency Response Publication 9200.2-154. June.

EPA 1996. User's Guide to the VOCs in Soil Presumptive Remedy. Directive No. 9355.0-63FS, EPA
540/F-96/008, PB 96-963308. July.

ATTACHMENT 1
NMED CORRESPONDENCE



August 17, 2021

GWQB Reference ID: SF_DC_0011

TP-smvw LLC
340 E Berger St
Santa Fe, NM 87501

Subject: Notification of Records Review Related to Public Health Protection

Dear Property Owner,

The New Mexico Environment Department (NMED) is providing this letter to notify you that during a review of historic records, we identified historical land use activities that occurred in or around the property at 1710 Llano St, Santa Fe that may have resulted in environmental contamination that could impact human health and be subject to regulatory requirements. As the property owner, it is necessary for you to read this notification carefully, understand your responsibilities, and pursue further activities, as appropriate, to protect the health of building occupants.

As background, when chemicals or petroleum products are spilled or leaked into soil or groundwater, they can give off gases or vapors that can get inside buildings, resulting in "vapor intrusion." Vapor intrusion is the process by which volatile chemicals residing in contaminated soil or groundwater move from underground and seep into buildings through microscopic air particles.

NMED has the authority to implement applicable requirements to protect human health associated with vapor intrusion. In December 2018, the New Mexico Water Quality Control Commission amended the New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC) to include explicit regulatory language requiring the responsible person clean-up the vadose zone (defined as the area between ground surface and the saturated zone, or water table) if vapors are present in concentrations that may accumulate in buildings, utility infrastructure, and excavations and subsequently threaten human health. Specifically, the regulations at 20.6.2.4103(A)(2) NMAC state that "any toxic pollutant in the vadose zone shall be abated so that it is not capable of endangering human health due to inhalation of vapors that may accumulate in structures, utility infrastructure or construction excavations." The purpose of this requirement is to address the concern for a toxic pollutant to produce vapors in sufficient quantity as to generate a human health concern for occupants of nearby buildings via vapor intrusion. Human health impacts from indoor exposure to chlorinated solvent vapors can include central nervous system damage, reproductive damage, liver and kidney toxicity and carcinogenicity (cancer). Under state law, current property owners and identified responsible persons are responsible for cleanup of contaminated properties if contamination is confirmed.

The NMED Ground Water Quality Bureau (GWQB) is tasked with implementing the regulations referenced above. As part of its program implementation activities, the GWQB is conducting a historical records review to identify properties with a recorded history of dry-cleaning related operations, starting with the Albuquerque and Santa Fe areas. GWQB's review methodology is generally consistent with standard industry practice for Phase I Environmental Site Assessments, including ASTM E1527, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Specifically, staff reviewed historic city directories, Sanborn Fire Insurance Maps, aerial photographs and Google maps (e.g., street view),

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and county assessor GIS websites. Dry cleaners and associated industries pose environmental concern and threats to public health due to common releases of chlorinated solvents to the environment. For that reason, discovery of a former dry-cleaning operation during an environmental site assessment is often characterized by environmental professionals as a Recognized Environmental Condition, which then triggers further investigation into potential environmental contamination at the property.

Based on our preliminary records review, NMED identified your property at 1710 Llano St as a location that may be impacted by past releases of chlorinated solvents. Specifically, NMED identified a dry-cleaning operation that operated at 1710 Llano St (Site) in Santa Fe. As such, pursuant to 20.6.2 NMAC, the Site may require further assessment and possible remediation (cleanup), depending on past reliable environmental assessments of the Site. Please note that, at this time, NMED has no data to confirm dangerous indoor vapors are or are not present. Enclosed please find a summary of the information NMED relied upon to prepare this notification, along with a Fact Sheet on vapor intrusion. If NMED obtains any further information related to indoor air quality at the Site, the Department will share that information with you promptly.

Because of the significant health impacts associated with human exposure to the vapors, NMED advises you, as the owner, to take the following actions:

- Carefully review the enclosed Fact Sheet.
- Immediately review all your records about the property's history, including any past environmental reviews, and share relevant information with NMED.
- Immediately notify all Site occupants and take appropriate actions to protect them from exposure.

It is important that you review this information promptly and reach out to us with any questions. Our technical experts are available to provide further information about vapor intrusion and the options available to you to further investigate the potential for health risks at your property.

Please contact NMED GWQB within 45 days to discuss a plan forward. We can be reached at (505) 827-2456 or at gwqb.general@state.nm.us.

Sincerely,
/s/ Michelle Hunter

Michelle Hunter, Chief
Ground Water Quality Bureau

Enclosures: GWQB Findings for 1710 Llano St, Santa Fe
Vapor Intrusion Fact Sheet

Cc: John Rhoderick, Acting NMED Water Protection Division Director
Chris Catechis, Acting NMED Resource Protection Division Director
Annie Maxfield, NMED Office of General Counsel
Karen Menetrey, NMED GWQB Remediation ROS
Matthew Smith, NMED GWQB SCP
ROS Reading File

NMED Findings for: 1710 Llano St, Santa Fe, NM

Dry Cleaner or Laundry Name(s)	One Hour Martinizing
NMED Reference Number	SF_DC_0011
Sources of information Checked by NMED	
City Directory *	yes
Sanborn Fire Insurance Map**	no
Aerial Photos	yes
NMED property notes, if applicable	

* City Directories are available at the Santa Fe Public Library at 145 Washington Avenue, Santa Fe or NM State Library at 1209 Camino Carlos Rey, Santa Fe

** Sanborn Fire Insurance Maps were phased out by 1960

Property recorded as a dry cleaner associated industry on the following city directories														
1942	1947	1951	1953	1960	1964	1971	1975	1979	1981	1989	1992	1994	1998	2002
								x	x	x	x	x	x	x

Key: X = yes



Via Email

April 1, 2022

TP-SMVW LLC
Attn: Matt O'Reilly
340 E Berger St
Santa Fe, New Mexico 87501
MOThomasprop@newmexico.com

RE: Conditional Work Plan Approval, 1710 Llano St, Santa Fe, New Mexico

Dear Matt O'Reilly:

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) received the document titled *Notification of Discharge and Corrective Action Report for 1710 Llano Street, Santa Fe, New Mexico* (Work Plan) dated March 22, 2022, for the aforementioned property (Site). EA Engineering, Science, and Technology, Inc., PBC (EA) submitted the Work Plan on your behalf to characterize the release of chlorinated volatile organic compounds (CVOCs) to the vadose zone at the Site. The Work Plan proposes the installation of nested vapor probes to define the vertical extent of the CVOC release and the installation and management of a Soil Vapor Extraction System (SVES).

Conditions for Approval

The GWQB hereby conditionally approves the activities as presented in the Work Plan per Subsection 1203.A of the New Mexico Ground and Surface Water Protection regulations (20.6.2 NMAC), contingent upon the following conditions:

- Installation of a minimum of three passive soil vapor samplers (PSVS). PSVSs shall be installed within 50ft of the building's exterior walls on the north, east, and west side of the Site to define the horizontal extent of the CVOC release.
- TP-SMVW LLC shall delay installation of the SVES until the spatial extent of CVOC release has been fully delineated.

Please be advised that GWQB approval does not relieve you of responsibility if the Site assessment activities fail to adequately identify contamination related to the Site. In addition, GWQB approval does not relieve you of responsibility to comply with any other applicable federal, state, or local laws and regulations, such as zoning requirements and nuisance ordinances.

At any point during the Site investigation overseen pursuant to 20.6.2 NMAC, TP-SMVW LLC may provide written notification to GWQB's State Cleanup Program (SCP) that TP-SMVW LLC intends to pursue voluntary Site remediation pursuant to the New Mexico Voluntary Remediation Regulations (20.6.3 NMAC). Acceptance into the Voluntary Remediation Program (VRP) is contingent upon meeting eligibility requirements as defined pursuant to 20.6.3.200 NMAC. Once GWQB-SCP has been informed

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1710 Llano St.

April 1, 2022

that TP-SMVW LLC has been accepted into the VRP, GWQB-SCP shall provide written notification of regulatory oversight transfer the GWQB-VRP.

If you have any questions regarding 20.6.2 NMAC obligations please contact Matthew Smith, SCP Project Manager, at (505) 660-8497 or matthew.smith3@state.nm.us. If you have any questions regarding 20.6.3 NMAC and the VRP process, please contact Rebecca Cook, VRP/Brownfield Program Team Leader at (505) 670-2135 or rebecca.cook@state.nm.us

Sincerely,

Justin Ball, Chief
Ground Water Quality Bureau

Cc: Jay Snyder, EA Engineering, jsnyder@eaest.com
David Werth, EA Engineering, dwerth@eaest.com
Karen Menetrey, GWQB-ROS
Rebecca Cook, GWQB-VRP
Matthew Smith, GWQB-SCP
ROS Reading File



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

Via Email

May 8, 2023

Wirtco, Inc.
Attn: Jana M. Janssen
P.O. Box 876
Santa Fe, New Mexico 87504
Janaj@easymanager.net

TP-SMVW LLC
Attn: Matt O'Reilly
340 E Berger St
Santa Fe, New Mexico 87501
MOThomasprop@newmexico.com

RE: Conditional Corrective Action Report Approval, 1710 Llano Street, Santa Fe, New Mexico

Dear Jana Janssen and Matt O'Reilly:

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) is in receipt of the document titled *Soil Vapor Extraction Well Installation and Sampling Report* dated March 21, 2023 and herein referred to as the corrective action report (CAR) for the aforementioned property (Site). EA Engineering, Science, and Technology, Inc., PBC (EA) submitted the CAR on your behalf on April 18, 2023 in accordance with Section 1203.A of New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC). The CAR presents results from Site characterization activities completed to define the spatial extent of the release of chlorinated volatile organic compounds (CVOC) to the vadose zone at the site. Completed activities include those proposed by EA in the Site corrective action work plan dated March 22, 2022, conditionally approved by GWQB on April 1, 2022.

GWQB has reviewed the CAR and, pursuant to 20.6.2.1203.A NMAC, approves the CAR contingent upon the following:

- Within 30 days of the date of this correspondence. TP-SMVW LLC and/or Wirtco, Inc. shall submit a Corrective Action Work Plan to propose remedial actions to mitigate the release of CVOCs to the vadose zone above the NMED industrial soil-gas vapor intrusion screening levels to be protective of public health and the environment.

NMED approval of the CAR does not relieve TP-SMVW LLC and Wirtco, Inc. of responsibility to comply with all other federal, state, and local laws and regulations, including zoning requirements and nuisance ordinances. If you have any questions please contact Matthew Smith, State Cleanup Program Project Manager, at (505) 660-8497 or matthew.smith3@env.nm.gov or ros.general@env.nm.gov.

Sincerely,

Justin Ball, Chief
Ground Water Quality Bureau

cc: Thomas Hnasko, Hinkle Shanor LLP, THnasko@hinklelawfirm.com
Jay Snyder, EA Engineering, jsnyder@eaest.com

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1710 Llano Street

May 8, 2023

Elliott Andelman, EA Engineering, eandelman@eaest.com

Christal Weatherly, NMED-OGC

Gail Cooke, GWQB-ROS

Paul Chamberlain, GWQB-SCP

Matthew Smith, GWQB-SCP

ROS Reading File



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

Via Email

June 12, 2023

Wirtco, Inc.
Attn: Jana M. Janssen
P.O. Box 876
Santa Fe, New Mexico 87504
Janaj@easymanager.net

TP-SMVW LLC
Attn: Matt O'Reilly
340 E Berger St
Santa Fe, New Mexico 87501
MOThomasprop@newmexico.com

RE: Conditional Corrective Action Work Plan Approval, 1710 Llano Street, Santa Fe, New Mexico

Dear Jana Janssen and Matt O'Reilly:

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) is in receipt of the document titled *Corrective Action Work Plan* (Work Plan) dated May 31, 2023 for the aforementioned property (Site). EA Engineering, Science, and Technology, Inc., PBC (EA) submitted the Work Plan on your behalf in accordance with Section 1203.A of New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC) to propose corrective actions to mitigate the release of chlorinated volatile organic compounds (CVOC) to the vadose zone at the Site. The Work Plan proposes the following:

1. Install a soil vapor extraction (SVE) system at the facility, plumbed to newly installed nested vapor probe(s), as appropriate.
2. Perform periodic SVE system operation and maintenance (O&M) activities at the site, including the monitoring of extracted soil vapor concentrations.
3. Comparison of new and existing analytical results to Soil Screening Levels (SSLs) and Vapor Intrusion Screening Levels (VISLs) provided in New Mexico Environment Department Risk Assessment Guidelines for Site Investigation and Remediation, November 2022.
4. Semi-annual reporting.

GWQB has reviewed the Work Plan and, pursuant to 20.6.2.1203.A NMAC, approves the Work Plan contingent upon the following:

- Within 30 days of the date of this correspondence, you must submit an implementation schedule for the installation and commencement of the SVE system.
- Within 30 days of SVE installation completion, you must submit a SVE installation completion report that incorporates SVE schematics, photographic documentation, and an O&M schedule, which should identify all O&M activities and monitoring parameters with analytical methods employed.

NMED approval of the Work Plan does not relieve TP-SMVW LLC and Wirtco, Inc. of responsibility to comply with all other federal, state, and local laws and regulations, including zoning requirements and nuisance ordinances.

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Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

1710 Llano Street

June 12, 2023

If you have any questions please contact Matthew Smith, State Cleanup Program Project Manager, at (505) 660-8497 or matthew.smith3@env.nm.gov or ros.general@env.nm.gov.

Sincerely,

Justin Ball, Chief

Ground Water Quality Bureau

cc: Thomas Hnasko, Hinkle Shanor LLP, THnasko@hinklelawfirm.com
Jay Snyder, EA Engineering, jsnyder@eaest.com
David Werth, EA Engineering, dwerth@eaest.com
Elliott Andelman, EA Engineering, eandelman@eaest.com
Christal Weatherly, NMED-OGC
Gail Cooke, GWQB-ROS
Paul Chamberlain, GWQB-SCP
Matthew Smith, GWQB-SCP
ROS Reading File

ATTACHMENT 2
EA TECHNICAL REPORTS



EA Engineering, Science, & Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102
Phone: (505) 224-9013

January 4, 2022

Mr. Matthew Smith
New Mexico Environment Department
Ground Water Quality Bureau
Remediation Oversight Section
121 Tijeras Avenue NE
Albuquerque, New Mexico 87102

VIA E-MAIL

**RE: VAPOR INTRUSION ASSESSMENT REPORT,
1710 LLANO STREET, SANTA FE, NEW MEXICO**

Dear Mr. Smith:

On behalf of TP-SMVW, LLC, EA Engineering, Science, and Technology, Inc. (EA) is submitting this Vapor Intrusion assessment report for the facility (an approximately 1,500 square-foot, single-story, frame building) located at 1710 Llano Street, Santa Fe, New Mexico (Figure 1). This report documents the industrial/commercial vapor intrusion (VI) assessment conducted in response to the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) letter dated August 17, 2021.

Corrective Actions Completed to Date

The scope of work to confirm or deny a suspected release and assess the VI pathway that have been completed follows:

- Installed a temporary sub-slab sample port and collected one soil gas sample for VOC analysis by EPA Method TO-15.
- Completed VI assessment in accordance with EPA protocols including indoor and outdoor air sampling.
- Compared analytical results to VI Screening Levels (VISLs) provided in New Mexico Environment Department Risk Assessment Guidelines for Site Investigation and Remediation, November 2021.

Vapor Intrusion Assessment

Prior to sample collection, a temporary sub-slab soil gas sampling port was installed to ensure that ambient air intrusion into the sub-slab environment and/or the sampling media would not dilute the collected samples. The sub-slab soil gas sampling port was installed on November 15, 2021, by drilling a 0.25-in. diameter hole through the concrete slab using a hand-held electric hammer drill.

Upon completion of the sub-slab borehole, an appropriate length of 0.25-in. outside diameter Teflon-lined poly tubing was inserted into the borehole and sealed with bee's wax immediately prior to sampling. Once the port was constructed, the poly tubing was cut to allow approximately

3-feet of tubing to remain above the slab for leak-check testing and port purging.

Leak-Check Testing and Port Purging

Leak-check testing was conducted at the sub-slab sampling port prior to sampling. The leak test employed included a shut-in leak test and a tracer leak test. The leak test was conducted to assess whether a good seal was established in the sampling train and the monitoring point interface with the concrete slab. The monitoring port seal integrity was confirmed in real-time by analyzing soil gas purge samples for the selected tracer compound. Helium was used as the tracer compound during field activities.

The shut-in test is designed to check for leaks in aboveground fittings and was conducted prior to the tracer leak test. To perform the shut-in test, air was evacuated from the aboveground sample train to a measured vacuum of approximately 20 inches of mercury (in. Hg) using a Mityvac vacuum hand pump (model MV8500). The valves on the opposite ends (Summa[®] canister valve and valve before the tubing entering the monitoring port) of the sample train were closed and the vacuum gauge was observed for at least 1 minute. There was no observable loss of vacuum (>1 in. Hg) during this test.

The tracer leak test was conducted by placing a shroud over the sub-slab soil gas monitoring port and the length of tubing inserted into the monitoring point as mentioned above was pulled through the shroud and attached to the sample train. A GilAir Plus sampling pump was also connected to the sample train with tubing. The outlet of the GilAir Plus pump was connected to a 1-liter (L) Tedlar bag using tubing. Helium tracer gas was then infused into the shroud covering the sub-slab soil gas monitoring port by directing a tube from a helium tank source to a 0.25-in. threaded male-barred fitting into the shroud. The interior space of the shroud was then monitored for helium concentration using a Dielectric MGD-2002 multi-gas detector. Once the interior of the shroud reached a concentration greater than 50 percent helium, the helium detector was removed from the shroud, the barb was immediately plugged, and the GilAir Plus pump was activated and allowed to purge approximately 1 L of soil gas from the sub-slab soil gas monitoring port into the Tedlar bag. Upon completion of purging, the Tedlar bag was closed, and the purging pump shut down. The monitoring port seal integrity was confirmed in real-time by analyzing the soil gas purge samples for the helium.

The helium detector was allowed to equilibrate with the atmosphere and then inserted into the Tedlar bag to assess helium concentrations from the purged volume. The monitoring point was considered sealed from atmospheric air intrusion if helium was detected at less than 10 percent of maximum helium concentration observed in the shroud prior to purging. Helium was not detected in the sub-slab soil gas monitoring port purge sample during the tracer gas testing. Leak-check testing result were recorded in field form and is included in Attachment 1.

Sample Collection

6-L Summa[®] canisters with vacuum gauges and 8-hour flow controllers were used to collect the sub-slab soil gas, indoor air, and outdoor air samples. The canisters were individually certified clean in accordance with EPA Method Toxic Organics (TO)-15/TO-15 Selective Ion Monitoring (SIM) and under a vacuum pressure of no less than -22.5 in. Hg. Each 6-L Summa[®] canister was paired with an associated vacuum gauge and flow controller by the laboratory during the certification process and used at only one location. The flow controllers, which feature a particulate filter and vacuum gauge, were set to the appropriate flow-rate by the analytical

laboratory prior to shipping. Initial vacuum gauge readings were recorded on field sampling forms prior to sample collection.

To initiate sample collection, the valves on the Summa[®] canisters were opened to allow sample media flow through the flow controllers attached to the top of the canister. Indoor air and outdoor air samples did not require additional equipment to be attached to the flow controller, and soil gas collection equipment was set up as described above.

Following the prescribed collection period, the Summa[®] canister valves were closed to terminate sample collection. If Summa[®] canister reached less than 5 in. Hg vacuum before the prescribed collection period had concluded, the canister valves were closed to terminate sample collection. As with many flow regulating devices that are continuously recalibrated and reused, there are inherent minor discrepancies between the actual flow rate achieved in a field setting and those achieved during the calibration process. Flow regulator ending gauge pressures and sample end times were recorded on the canister identification tags and the field sampling forms. Once sample collection was completed, the canister and flow controllers were disconnected from the sample tubing and a cap was tightened onto the Summa[®] canister. Pertinent sample information was recorded on the associated chain of custody and the canister was repackaged into the originating box.

The Summa[®] canisters were packed in the shipping containers provided by the lab, Eurofins Air Toxics, Inc. (Eurofins), and submitted to Eurofins under chain-of-custody for analysis of VOCs including PCE and TCE by Modified TO-15 SIM. Copies of field forms generated during the VI assessment are included as Attachment 1. Analytical laboratory reports are provided in Attachment 2.

Sample Analytical Results

Following is discussion of sample results from the assessment conducted by EA at this facility. All these results are summarized in Table 1, shown on Figure 1, and the laboratory results are included in Attachment 2.

Indoor Air Results

Results of the indoor air analytical results indicate the presence of PCE in the indoor air sample collected (IA-01) at a concentration of 5.9 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) which is significantly below the NMED Indoor Air Industrial/Occupational VISL of $197 \mu\text{g}/\text{m}^3$. No other contaminants of concern were detected in the sample (Table 1).

Outdoor Air Results

No contaminants of concern were detected in the outdoor air sample collected (Table 1).

Sub-Slab Soil Gas Results

PCE and TCE were present in the sub-slab sample collected (SS-01) at concentrations of $230,000 \mu\text{g}/\text{m}^3$ and $1,200 \mu\text{g}/\text{m}^3$, respectively. No other COCs were detected in this sample. These PCE and TCE concentrations exceed the NMED Soil Gas Industrial/Occupational VISLs of $6,550 \mu\text{g}/\text{m}^3$ and $328 \mu\text{g}/\text{m}^3$, respectively. No other contaminants of concern were detected in the sample (Table 1).

Summary and Recommendations

Vapor Intrusion

The results of the VI assessment indicate an incomplete VI pathway at this facility, and VI does not appear to pose a risk to human health. Despite the detections of PCE and TCE directly beneath the facility, there were no exceedances of the NMED Indoor Air Industrial/Occupational VISLs at this facility.

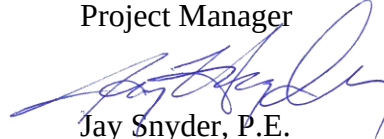
References

Please let us know if you have any questions regarding the information provided in this addendum.

Sincerely,



David L. Werth, P.G.
Project Manager



Jay Snyder, P.E.
Senior Hydrogeologist

Attachments

Cc: Matthew O'Reilly.
File

TABLE

TABLE 1. SUMMARY OF INDUSTRIAL/COMMERCIAL VAPOR INTRUSION ANALYTICAL RESULTS
1710 LLANO STREET
SANTA FE, NEW MEXICO

Sample Identification	Sample Location ¹	Sample Date	PCE (µg/m ³)	TCE (µg/m ³)	cis-1,2-DCE (µg/m ³)	trans-1,2-DCE (µg/m ³)	VC (µg/m ³)
OA-01	Out Door -Background Up Wind	11/15/2021	<0.27	<0.21	<0.16	<0.79	<0.051
IA-01	Indoor Air	11/15/2021	5.9	<0.20	<0.15	<0.74	<0.048
SS-01	Sub-Slab	11/15/2021	230,000	1,200	<130	<130	<87
NMED Indoor Air Industrial/Occupational Screening Levels²			197	9.83	Not Specified	295	31.3
NMED Soil Gas Industrial/Occupational Screening Levels²			6,550	328	Not Specified	9,830	1,040
Notes: ¹ Analytical laboratory samples collected in 6-Liter Summa canisters with 8-hour regulators and samples analyzed by TO-15/ TO-15 SIM. ² New Mexico Environment Dept. Risk Assessment Guidance for Site Investigations and Remediation, Appendix A Table A-3, March 2017. cis-1,2-DCE = cis-1,2-Dichloroethene NMED = New Mexico Environment Department PCE = Tetrachloroethene SIM = Selective Ion Monitoring TCE = Trichloroethene trans, 1,2-DCE = trans-1,2-Dichloroethene VC = vinyl chloride µg/m ³ = micrograms per cubic meter							

FIGURE

Figure 1 - Vapor Intrusion Assessment Map

1710 Llano Street
Santa Fe, New Mexico

Legend

Summa Canister Sample Location

NOTE:
Concentrations are
in micrograms per
cubic meter

OA-01

PCE	<0.27
TCE	<0.21
Cis-1,2-DCE	<0.16
Trans-1,2-DCE	<0.79
Vinyl Chloride	<0.051

SS-01 / IA-01

PCE	230,000
TCE	1,200
Cis-1,2-DCE	<130
Trans-1,2-DCE	<130
Vinyl Chloride	<87

PCE	5.9
TCE	<0.20
Cis-1,2-DCE	<0.15
Trans-1,2-DCE	<0.74
Vinyl Chloride	<0.048



ATTACHMENT 1
FIELD FORMS



FIELD SAMPLING FORM FOR VI ASSESSMENT

Samplers: DW	Site ID 1710 Llano	EA Project #: Client: Thomas Properties Site: Description: Vapor Intrusion Assessment Sampling
------------------------	------------------------------	---

Location ID (Address): SS-01
Probe Installation Date/Time: 11-15-21
Slab Thickness: ~6" Probe Length: ~6"
Helium Leak Check Date/Time: 11-15-21 0745
He% Shroud 61.3 He% Tedlar Bag 0 VOC Purge NM
Shut in Check PSI drop in 1 minute: 0

Sample Type /Analysis: ☐ Indoor Air
☒ Sub-Slab
☐ Outdoor Air
☐ Crawl Space Air

TO15 TO15 LL TO15 SIM

Duplicate: ☐ Yes ☒ No

Pressure recorded in Inches of Hg

Summa Sample ID: SS-01
Summa Canister ID: 6L1047
Initial Gauge Pressure: -23 Initial Reg. Pressure: -23
Flow Control ID: 24907
Flow Control Rate: 11-5 mL/min
Canister Start Time/Date: 0758 11-15-21
Canister End Time/Date: 1558 11-15-21
Final Canister Gauge Pressure: -6-5

Duplicate

Summa Sample ID: _____
Summa Canister ID: _____
Initial Gauge Pressure: _____ Initial Reg. Pressure: _____
Flow Control ID: _____
Flow Control Rate: _____
Canister Start Time/Date: _____
Canister End Time/Date: _____
Final Canister Gauge Pressure: _____

Comments/Observations:



FIELD SAMPLING FORM FOR VI ASSESSMENT

Samplers: DW	Site ID 1710 Llano	EA Project #: Client: Site: Description: Vapor Intrusion Assessment Sampling
------------------------	------------------------------	---

Location ID (Address): IA-01

Probe Installation Date/Time: —

Slab Thickness: — Probe Length: —

Helium Leak Check Date/Time: —

He% Shroud — He% Tedlar Bag — VOC Purge —

Shut in Check PSI drop in 1 minute: —

Sample Type /Analysis:

☒ Indoor Air☐ Sub-Slab☐ Outdoor Air☐ Crawl Space Air

TO15 TO15 LL TO15 SIM

Duplicate: ☐ Yes ☒ No

Pressure recorded in Inches of Hg

Summa Sample ID: IA-01

Summa Canister ID: 66-2814

Initial Gauge Pressure: -23.5 Initial Reg. Pressure: -23.5

Flow Control ID: 23426

Flow Control Rate: 11.5

Canister Start Time/Date: 0758 11-15-21

Canister End Time/Date: 1558 11-15-21

Final Canister Gauge Pressure: -6

Duplicate

Summa Sample ID: —

Summa Canister ID: —

Initial Gauge Pressure: — Initial Reg. Pressure: —

Flow Control ID: —

Flow Control Rate: —

Canister Start Time/Date: —

Canister End Time/Date: —

Final Canister Gauge Pressure: —

Comments/Observations:



FIELD SAMPLING FORM FOR VI ASSESSMENT

Samplers: DW	Site ID 1710 Llano	EA Project #: Client: Site: Description: Vapor Intrusion Assessment Sampling
------------------------	------------------------------	---

Location ID (Address): 0A-01
Probe Installation Date/Time:
Slab Thickness: Probe Length:
Helium Leak Check Date/Time:
He% Shroud He% Tedlar Bag VOC Purge
Shut in Check PSI drop in 1 minute:

Sample Type /Analysis: ☐ Indoor Air
☐ Sub-Slab
☒ Outdoor Air
☐ Crawl Space Air

TO15 TO15 LL TO15 SIM

Duplicate: ☐ Yes ☒ No

Pressure recorded in Inches of Hg

Duplicate

Summa Sample ID: 0A-01
Summa Canister ID: 620784
Initial Gauge Pressure: -23.5 Initial Reg. Pressure: -23.5
Flow Control ID: 23794
Flow Control Rate: 11.5
Canister Start Time/Date: 0800 11-15-21
Canister End Time/Date: 1600 11-15-21
Final Canister Gauge Pressure: -6.5

Summa Sample ID:
Summa Canister ID:
Initial Gauge Pressure: Initial Reg. Pressure:
Flow Control ID:
Flow Control Rate:
Canister Start Time/Date:
Canister End Time/Date:
Final Canister Gauge Pressure:

Comments/Observations:

ATTACHMENT 2
ANALYTICAL LABORATORY REPORTS

12/1/2021

Mr. David Werth

EA Engineering

320 Gold Avenue, SW

Suite 1300

Albuquerque NM 87102

Project Name: 1710 Llano St.

Project #:

Workorder #: 2111429A

Dear Mr. David Werth

The following report includes the data for the above referenced project for sample(s) received on 11/16/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Brian Whittaker

Project Manager

WORK ORDER #: 2111429A

Work Order Summary

CLIENT:	Mr. David Werth EA Engineering 320 Gold Avenue, SW Suite 1300 Albuquerque, NM 87102	BILL TO:	Accounts Payable - Lewisville EA Engineering 405 S. Highway 121 Suite C-100 Lewisville, TX 75067
PHONE:	(505) 224-9013	P.O. #	22933
FAX:	(505) 224-9016	PROJECT #	1710 Llano St.
DATE RECEIVED:	11/16/2021	CONTACT:	Brian Whittaker
DATE COMPLETED:	12/01/2021		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SS-01	Modified TO-15 SIM	13.5 "Hg	1.8 psi
02A	Lab Blank	Modified TO-15 SIM	NA	NA
03A	CCV	Modified TO-15 SIM	NA	NA
04A	LCS	Modified TO-15 SIM	NA	NA
04AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:



Technical Director

DATE: 12/01/21

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified TO-15 SIM
EA Engineering
Workorder# 2111429A

One 6 Liter Summa Canister (100% SIM Ambient) sample was received on November 16, 2021. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	TO-15	ATL Modifications
ICAL %RSD acceptance criteria	$\leq 30\%$ RSD with 2 compounds allowed out to $< 40\%$ RSD	Project specific; default criteria is $\leq 30\%$ RSD with 10% of compounds allowed out to $< 40\%$ RSD
Daily Calibration	$\pm 30\%$ Difference	Project specific; default criteria is $\leq 30\%$ Difference with 10% of compounds allowed out up to $\leq 40\%$.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample SS-01 due to the presence of high level target species.

Sample SS-01 was transferred from SIM analysis to full scan TO-15 due to high levels of target compounds.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

CN- See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD TO-15 GC/MS

Client Sample ID: SS-01

Lab ID#: 2111429A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	34	230	180	1200
Tetrachloroethene	34	34000	230	230000

Client Sample ID: SS-01

Lab ID#: 2111429A-01A

EPA METHOD TO-15 GC/MS

File Name:	14113040	Date of Collection: 11/15/21 3:58:00 PM
Dil. Factor:	6.79	Date of Analysis: 12/1/21 01:24 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	34	Not Detected	87	Not Detected
trans-1,2-Dichloroethene	34	Not Detected	130	Not Detected
Trichloroethene	34	230	180	1200
cis-1,2-Dichloroethene	34	Not Detected	130	Not Detected
Tetrachloroethene	34	34000	230	230000

Container Type: 6 Liter Summa Canister (100% SIM Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2111429A-02A

EPA METHOD TO-15 GC/MS

File Name:	14113007c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/30/21 08:59 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: CCV

Lab ID#: 2111429A-03A

EPA METHOD TO-15 GC/MS

File Name:	14113002x	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/30/21 06:46 AM

Compound	%Recovery
----------	-----------

Vinyl Chloride	102
trans-1,2-Dichloroethene	97
Trichloroethene	101
cis-1,2-Dichloroethene	98
Tetrachloroethene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: LCS

Lab ID#: 2111429A-04A

EPA METHOD TO-15 GC/MS

File Name:	14113003x	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/30/21 07:09 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	104	70-130
trans-1,2-Dichloroethene	105	70-130
Trichloroethene	105	70-130
cis-1,2-Dichloroethene	98	70-130
Tetrachloroethene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCSD

Lab ID#: 2111429A-04AA

EPA METHOD TO-15 GC/MS

File Name:	14113004x	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/30/21 07:32 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	105	70-130
trans-1,2-Dichloroethene	100	70-130
Trichloroethene	105	70-130
cis-1,2-Dichloroethene	98	70-130
Tetrachloroethene	103	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

12/15/2021

Mr. David Werth

EA Engineering

320 Gold Avenue, SW

Suite 1300

Albuquerque NM 87102

Project Name: 1710 Llano St.

Project #:

Workorder #: 2111429B

Dear Mr. David Werth

The following report includes the data for the above referenced project for sample(s) received on 11/16/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Brian Whittaker

Project Manager

WORK ORDER #: 2111429B

Work Order Summary

CLIENT:	Mr. David Werth EA Engineering 320 Gold Avenue, SW Suite 1300 Albuquerque, NM 87102	BILL TO:	Accounts Payable - Lewisville EA Engineering 405 S. Highway 121 Suite C-100 Lewisville, TX 75067
PHONE:	(505) 224-9013	P.O. #	22933
FAX:	(505) 224-9016	PROJECT #	1710 Llano St.
DATE RECEIVED:	11/16/2021	CONTACT:	Brian Whittaker
DATE COMPLETED:	12/15/2021		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
02A	IA-01	Modified TO-15 SIM	12 "Hg	1.8 psi
03A	OA-01	Modified TO-15 SIM	13.1 "Hg	1.9 psi
04A	Lab Blank	Modified TO-15 SIM	NA	NA
05A	CCV	Modified TO-15 SIM	NA	NA
06A	LCS	Modified TO-15 SIM	NA	NA
06AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:



Technical Director

DATE: 12/15/21

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified TO-15 SIM
EA Engineering
Workorder# 2111429B

Two 6 Liter Summa Canister (100% SIM Ambient) samples were received on November 16, 2021. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	TO-15	ATL Modifications
ICAL %RSD acceptance criteria	$\leq 30\%$ RSD with 2 compounds allowed out to $< 40\%$ RSD	Project specific; default criteria is $\leq 30\%$ RSD with 10% of compounds allowed out to $< 40\%$ RSD
Daily Calibration	$\pm 30\%$ Difference	Project specific; default criteria is $\leq 30\%$ Difference with 10% of compounds allowed out up to $\leq 40\%$.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Samples IA-01 and OA-01 were removed from "Hold" and placed on "Active" status per client request on 12/03/2021.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

CN- See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: IA-01

Lab ID#: 2111429B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.037	0.87	0.25	5.9

Client Sample ID: OA-01

Lab ID#: 2111429B-03A

No Detections Were Found.

Client Sample ID: IA-01

Lab ID#: 2111429B-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	60120706sim	Date of Collection: 11/15/21 3:58:00 PM
Dil. Factor:	1.87	Date of Analysis: 12/7/21 05:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	Not Detected	0.048	Not Detected
cis-1,2-Dichloroethene	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	0.87	0.25	5.9
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected

Container Type: 6 Liter Summa Canister (100% SIM Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	123	70-130
4-Bromofluorobenzene	82	70-130

Client Sample ID: OA-01

Lab ID#: 2111429B-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	60120707sim	Date of Collection: 11/15/21 4:00:00 PM
Dil. Factor:	2.00	Date of Analysis: 12/7/21 06:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.020	Not Detected	0.051	Not Detected
cis-1,2-Dichloroethene	0.040	Not Detected	0.16	Not Detected
Trichloroethene	0.040	Not Detected	0.21	Not Detected
Tetrachloroethene	0.040	Not Detected	0.27	Not Detected
trans-1,2-Dichloroethene	0.20	Not Detected	0.79	Not Detected

Container Type: 6 Liter Summa Canister (100% SIM Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	124	70-130
4-Bromofluorobenzene	80	70-130

Client Sample ID: Lab Blank

Lab ID#: 2111429B-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	60120705sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/7/21 04:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	123	70-130
4-Bromofluorobenzene	82	70-130

Client Sample ID: CCV

Lab ID#: 2111429B-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	60120702sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/7/21 01:43 PM

Compound	%Recovery
----------	-----------

Vinyl Chloride	111
cis-1,2-Dichloroethene	88
Trichloroethene	90
Tetrachloroethene	99
trans-1,2-Dichloroethene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	124	70-130
4-Bromofluorobenzene	86	70-130

Client Sample ID: LCS

Lab ID#: 2111429B-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: 60120703sim

Date of Collection: NA

Dil. Factor: 1.00

Date of Analysis: 12/7/21 02:26 PM

Compound	%Recovery	Method Limits
Vinyl Chloride	122	70-130
cis-1,2-Dichloroethene	96	70-130
Trichloroethene	98	70-130
Tetrachloroethene	107	70-130
trans-1,2-Dichloroethene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	124	70-130
4-Bromofluorobenzene	86	70-130

Client Sample ID: LCSD

Lab ID#: 2111429B-06AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	60120704sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/7/21 03:10 PM

Compound	%Recovery	Method Limits
Vinyl Chloride	120	70-130
cis-1,2-Dichloroethene	95	70-130
Trichloroethene	96	70-130
Tetrachloroethene	104	70-130
trans-1,2-Dichloroethene	99	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	125	70-130
4-Bromofluorobenzene	85	70-130



EA Engineering, Science, & Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102
Phone: (505) 224-9013

March 21, 2023

Mr. Matthew Smith
New Mexico Environment Department
Ground Water Quality Bureau
Remediation Oversight Section
121 Tijeras Avenue NE
Albuquerque, New Mexico 87102

VIA E-MAIL

**RE: SOIL VAPOR EXTRACTION WELL INSTALLATION AND SAMPLING
REPORT,
1710 LLANO STREET, SANTA FE, NEW MEXICO**

Dear Mr. Smith:

On behalf of Wirtco, Inc., EA Engineering, Science, and Technology, Inc. (EA) is submitting this soil vapor extraction (SVE) well installation, soil sampling, and soil gas sampling assessment report for the facility (an approximately 1,500 square-foot, single-story, frame building) located at 1710 Llano Street, Santa Fe, New Mexico (Figure 1). This report documents the soil gas investigation assessment conducted in response to the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) letter dated August 17, 2021.

Corrective Actions Completed to Date

The scope of work to confirm or deny the suspect release and assess the vapor intrusion pathway that have been completed as follows:

- Installed a temporary sub-slab sample port and collected one soil gas sample for VOC analysis by EPA Method TO-15.
- Completed VI assessment in accordance with EPA protocols including indoor and outdoor air sampling and submitted results to NMED in Assessment Report dated January 4, 2022.
- Installed a nested soil vapor extraction (SVE) well and collected two soil samples and four soil gas samples for VOC analysis by EPA Method 8260.
- Collected three passive soil gas (PSG) samples for VOC analysis by EPA Method 8260C.
- Compared new analytical results to Soil Screening Levels (SSLs) and Vapor Intrusion Screening Levels (VISLs) provided in New Mexico Environment

Department Risk Assessment Guidelines for Site Investigation and Remediation
November 2022.

Nested SVE Well Installation and Sampling

On November 21 and 22, 2022, four nested SVE wells [SVE-01 (screened 80'-100'), SVE-02 (50'-70'), SVE-03 (20'-40'), and SVE-04 (5'-15')] were installed in a single borehole (SB-1) at the site (Figure 1) in order to establish a vertical profile of soil gas contamination. Drilling was completed by Enviro-Drill, Inc. (EDI) using the hollow-stem auger drilling method. The boring was advanced as close to the southern wall of the facility as practicable and to a total depth of 100 ft bgs. The wells were constructed within the single borehole of 1-inch Schedule 40 polyvinyl chloride (PVC) flush thread-jointed casing with 10 to 20 feet of Schedule 40 PVC 0.010-inch machine-slotted screen. 12-20 silica sand filter pack was placed around each screen interval. Hydrated bentonite seals were placed between the screened intervals and filter packs. The nested wells were completed within an 8-inch well vault placed in a 2-foot by 2-foot by 4-inch thick concrete pad. The soil boring log/well completion diagram is included in Attachment 1, and photographs of the installation are included as Attachment 2.

During the drilling of borehole SB-1, soil samples were collected at 5-foot intervals with a split-spoon sampler and field screened with a photo-ionization detector (PID) via the heated headspace method. Two soil samples were collected from the boring: one sample from the interval with the highest PID measurement and a second sample from the bottom of the borehole. The soil samples were immediately field preserved using the methanol extraction procedure. The samples were extruded from clean 10-cc plungers into clean vials with pre-measured methanol. All samples were stored on ice and delivered to the Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, NM.

On December 14, 2022, each SVE well was developed by purging at least 10 well volumes with a vacuum pump at a flow rate of 5 cubic feet per minute (cfm). After the well was developed, the well was purged at a rate of 1 liter per minute (1L/min) while VOC concentrations were monitored with a photoionization detector (PID). Once stabilization of the PID readings occurred, a soil gas sample was collected in a 1-L Tedlar bag for VOC analysis by EPA Method 8260.

Passive Soil Gas Sampling

On February 17, 2023, a total of 3 PSG samplers were installed 50 feet to the west (PSG-1), north (PSG-2), and east (PSG-3) of the facility at 1710 Llano Street (Figure 1). PSG samplers were deployed to depths of approximately 18 inches below ground surface. Soil borings were advanced with a hammer drill equipped with a 1.5-inch-diameter bit to a maximum of 18 inches. The borehole was extended to a 3-foot depth using a 0.5-inch-diameter drill bit. Once the borehole was advanced, a metal sleeve was placed in the upper 18-inches of the borehole, and the PSG samplers were lowered into the hole attached to a retrieval wire. The hole was sealed with an aluminum foil plug and covered with soil or thin concrete patch depending on surrounding ground surface.

On February 24, 2023, approximately one week after deployment, the PSG samplers were

retrieved. The samplers were retrieved by pulling the PSG samplers out of the borehole via the retrieval wire and were placed into sample containers provided by Beacon Environmental Services, Inc. (Beacon). Each PSG sample was submitted under chain-of-custody to Beacon for analysis of volatile organic compounds (VOCs) by EPA Method 8260C. The borings were backfilled with sand, and the surface restored to its preexisting condition.

Sample Analytical Results

Following is a discussion of sample results from the investigations conducted by EA at this facility. All results are summarized in Table 1. Soil gas sample results collected during the current investigations performed by EA at this site are shown on Figure 2, and the laboratory results are included in Attachment 3.

Soil Sample Results

The analytical results from soil samples collected on November 22, 2022, from SB-1 were below method detection limits for all contaminants of concern (COCs). Soil analytical results from this event are summarized in Table 1, and laboratory analytical results are included in Attachment 3.

SVE Well Soil Gas Results

On December 14, 2022, four soil gas samples were collected from a set of nested SVE wells [SVE-1 (80'-100'), SVE-2 (50'-70'), SVE-3 (20'-40'), and SVE-4 (5'-15')]. One sample was collected from each well. PCE was detected in sample SVE-1 at a concentration of 3,100 $\mu\text{g}/\text{m}^3$, SVE-2 at 7,500 $\mu\text{g}/\text{m}^3$, SVE-3 at 2,500 $\mu\text{g}/\text{m}^3$, and SVE-4 at 1,300 $\mu\text{g}/\text{m}^3$. No other COCs were detected in any of the SVE wells.

Passive Soil Gas Results

The PSG survey indicated that PCE in soil gas was detected at a concentration of 14.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in sample PSG-3. All other contaminants of concern were below laboratory method detection limits with respect to the PSG sampling. Based on the results, all PSG samples were far below the New Mexico Environmental Department (NMED) Industrial soil gas VISLs. The Beacon report is provided in Attachment 3. Analytical results for contaminants of concern are presented in Table 1 and shown on Figure 2.

Summary and Recommendations

Soil Sampling

Based upon the results of soil sampling conducted by EA compared to the NMED SSLs, migration of contamination from soil to groundwater has not occurred at this facility (Table 1). All soil samples collected from the SB-1 were below laboratory method detection levels and define the vertical extent of contamination.

Nested SVE Wells

A set of four nested SVE wells were installed at the facility on November 21 and 22, 2022 in order to establish a vertical profile of soil gas contamination. These wells have screen intervals of 5-15 ft bgs (SVE-4), 20-40 ft bgs (SVE-3), 50-70 ft bgs (SVE-2), and 80-100 ft bgs (SVE-1). On December 14, 2022, a soil gas sample was collected from each of these wells. PCE was the only COC detected in each of these samples. The total depth of the borehole was 100 ft bgs and did not intercept groundwater.

Using the maximum PCE concentration seen in these samples ($7.5 \mu\text{g/L}_{\text{air}}$ in SVE-2 at 50-70 ft bgs), the Henry's Law partitioning coefficient for PCE of 0.762 (NMED Risk Assessment Guidelines Table B-2), and assuming local equilibrium between air and pore water, a pore-water concentration of $10.3 \mu\text{g/L}$ PCE was calculated at SVE-2 (Calculation A). Utilizing the default physical properties from Equation 48 in the NMED Risk Assessment Guidelines, the calculated equilibrium soil concentration corresponding to $10.3 \mu\text{g/L}$ pore water concentration is 0.00411 mg/kg (Calculation A). This is nearly two orders of magnitude below the NMED SSL for PCE of 0.321 mg/kg at a dilution attenuation factor (DAF) of 20 (NMED Risk Assessment Guidelines Table A-1). Since SVE-1 at 80-100 ft bgs was $3.1 \mu\text{g/L}_{\text{air}}$ PCE, indicating a decreasing concentration with depth, the soil leaching to groundwater pathway is incomplete.

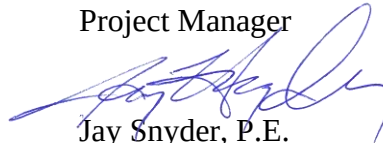
The data not only provide vertical delineation of soil gas contamination at the facility, but also reinforce the soil data findings that migration of contamination from soil to groundwater has not occurred at this facility. Based on these results, the only complete pathway for contamination is vapor intrusion for sub-slab soil gas beneath the facility. EA recommends active soil vapor extraction to remediate the VI pathway and restore the property to unconditional reuse without further VI abatement measures.

Please let us know if you have any questions regarding the information provided in this addendum.

Sincerely,



Elliott Andelman, P.G.
Project Manager



Jay Snyder, P.E.
Senior Hydrogeologist

Attachments

Cc: Matthew O'Reilly
Jana M. Janssen, Wirtco, Inc.
File

TABLE

Table 1. Soil and Soil Gas Analytical Results

[illegible]

FIGURES

Figure 1 - Sample Locations Map

1710 Llano Street
Santa Fe, New Mexico

Legend

- Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)
- Passive Soil Gas Samples

PSG-2

PSG-1

PSG-3

Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)



Figure 2 - Soil Gas Results

1710 Llano Street
Santa Fe, New Mexico

PSG-2
PCE ($<2.40 \mu\text{g}/\text{m}^3$)

Legend

- Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)
- Passive Soil Gas Samples

PSG-1
PCE ($<2.39 \mu\text{g}/\text{m}^3$)

PSG-3
PCE ($14.5 \mu\text{g}/\text{m}^3$)

SVE-1 (80-100 ft bgs) **SVE-2 (50-70 ft bgs)**
PCE ($3,100 \mu\text{g}/\text{m}^3$) PCE ($7,500 \mu\text{g}/\text{m}^3$)

SVE-3 (20-40 ft bgs) **SVE-4 (5-15 ft bgs)**
PCE ($2,500 \mu\text{g}/\text{m}^3$) PCE ($1,300 \mu\text{g}/\text{m}^3$)

ATTACHMENT 1
FIELD FORMS AND BORING LOG



EA Engineering, Science, and Technology, Inc.
405 S. Highway 121, Suite C-100
Lewisville, TX 75067
Phone: (972) 315-3922

SOIL VAPOR WELL SAMPLING FIELD FORM

WELL VOLUME CALCULATION

Well ID SVE-1 Date gauged 12-14-22
Site Wirtco Time gauged -
Depth to water - Feet Well volume 0.554 Cubic Feet
Total depth 100' Feet Pump rate 5 CFM
Well diameter 1" Inches Removal of 1 well vol 0.11 Minutes
Volume = $\pi r^2 h$ -
(10 well volumes = 1.1 Minutes)

VAPOR SAMPLING PURGE/DEVELOPMENT DATA

Time/date purged 0930 12-14-22 Development/Purge Method VAN PUMP

PERI PUMP					
Time	Minutes	PID Measurement (ppmv)	Time	Minutes	PID Measurement (ppmv)
0930	2	4.3			
0932	4	4.4			
0934	6	4.4			

Purged/sampled by E. ANDERMAN Field measurements stabilized within $\pm 10\%$? YES

SAMPLE METHOD

Time/date sampled 0935 12-14-22 Initial Pressure NA
Sample method PERI PUMP @ 1L/MIN Final Pressure NA
Requested analyses 8260
Comments/observations TEFLON BAG

Well Casing Area (πr^2)

2" diameter = 0.02 ft²/ft 4" diameter = 0.09 ft²/ft 6" diameter = 0.19 ft²/ft



EA Engineering, Science, and Technology, Inc.

405 S. Highway 121, Suite C-100

Lewisville, TX 75067

Phone: (972) 315-3922

SOIL VAPOR WELL SAMPLING FIELD FORM

WELL VOLUME CALCULATION

Well ID SVE-2 Date gauged 12-14-22
Site WIRTCO Time gauged —
Depth to water — Feet Well volume 0.338 Cubic Feet
Total depth 70' Feet Pump rate 5 CFM
Well diameter 1" Inches Removal of 1 well vol 0.07 Minutes
Volume = $\pi r^2 h$ —
(10 well volumes = 0.7 Minutes)

VAPOR SAMPLING PURGE/DEVELOPMENT DATA

Time/date purged 0940 12-14-22 Development/Purge Method VAIN PUMP

<u>PERI PUMP</u>					
Time	Minutes	PID Measurement (ppmv)	Time	Minutes	PID Measurement (ppmv)
<u>0940</u>	<u>2</u>	<u>9.0</u>			
<u>0942</u>	<u>4</u>	<u>9.0</u>			
<u>0944</u>	<u>6</u>	<u>9.1</u>			

Purged/sampled by E. ANDELMAN Field measurements stabilized within $\pm 10\%$? Yes

SAMPLE METHOD

Time/date sampled 0945 12-14-22 Initial Pressure NA
Sample method PERI PUMP @ 14/MIN Final Pressure NA
Requested analyses 8760
Comments/observations TEDLAR BAG

Well Casing Area (πr^2)2" diameter = 0.02 ft²/ft 4" diameter = 0.09 ft²/ft 6" diameter = 0.19 ft²/ft



SOIL VAPOR WELL SAMPLING FIELD FORM

WELL VOLUME CALCULATION

Well ID SVE-3 Date gauged 12-14-22
Site WIRTCO Time gauged —
Depth to water — Feet Well volume 0.222 Cubic Feet
Total depth 40' Feet Pump rate 14/min 5 CFM
Well diameter 1" Inches Removal of 1 well vol 0.04 Minutes
Volume = $\pi r^2 h$ —
(10 well volumes = 0.4 Minutes)

VAPOR SAMPLING PURGE/DEVELOPMENT DATA

Time/date purged 0950 12-14-22 Development/Purge Method VAIN PUMP

<u>Peri Pump</u> Time	Minutes	PID Measurement (ppmv)	Time	Minutes	PID Measurement (ppmv)
0950	2	81.3			
0952	4	82.4			
0954	6	82.6			

Purged/sampled by E. ANDERMAN Field measurements stabilized within $\pm 10\%$? yes

SAMPLE METHOD

Time/date sampled 0955 12-14-22 Initial Pressure NA
Sample method Peri Pump @ 14/min Final Pressure NA
Requested analyses 8260
Comments/observations TEDLAR BAG
0.222 ft³ = 6.3L @ 14/min

Well Casing Area (πr^2)

2" diameter = 0.02 ft³/ft 4" diameter = 0.09 ft³/ft 6" diameter = 0.19 ft³/ft



EA Engineering, Science, and Technology, Inc.
405 S. Highway 121, Suite C-100
Lewisville, TX 75067
Phone: (972) 315-3922

SOIL VAPOR WELL SAMPLING FIELD FORM

WELL VOLUME CALCULATION

Well ID SVE-4 Date gauged 12-14-22
Site WIRTCO Time gauged —
Depth to water — Feet Well volume 0.083 Cubic Feet
Total depth 15 Feet Pump rate 5 CFM
Well diameter 1 Inches INCH Removal of 1 well vol 0.017 Minutes
Volume = $\pi r^2 h$
(10 well volumes = 0.17 Minutes)

VAPOR SAMPLING PURGE/DEVELOPMENT DATA

Time/date purged 1001 12-14-22 Development/Purge Method VAN PUMP

Time	Minutes	PID Measurement (ppmv)	Time	Minutes	PID Measurement (ppmv)
<u>1001</u>	<u>2</u>	<u>77.4</u>			
<u>1003</u>	<u>4</u>	<u>76.9</u>			
<u>1005</u>	<u>6</u>	<u>77.5</u>			

Purged/sampled by L. ANDELMAN Field measurements stabilized within $\pm 10\%$? YES

SAMPLE METHOD

Time/date sampled 1005 12-14-22 Initial Pressure NA
Sample method PERI PUMP 1L/min Final Pressure NA
Requested analyses 8260
Comments/observations TEDLAR BAG
 $0.083 \text{ ft}^3 = 2.35 \text{ L VOA}$

Well Casing Area (πr^2)

2" diameter = 0.02 ft²/ft 4" diameter = 0.09 ft²/ft 6" diameter = 0.19 ft²/ft



BORING/WELL CONSTRUCTION LOG

Project:	1710 Llano Street	Project Number:	1632601.01	SVE-1: 80'-100' Screen
Drilling Company:	EDI	Start Time/Date:	1100 / 11-21-22	SVE-2: 50'-70' Screen
Drilling Rig/Bit:	CME 75	Completion Time/Date:	1600 / 11-22-22	SVE-3: 20'-40' Screen
Driller:	R. Martinez	Final Depth:	100 ft bgs	SVE-4: 5'-15' Screen
Boring/Well ID:	SVE 1-4	Logged By:	E. Andelman	Page 1 of 2

Sample Type	Recovery (inches)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Linear Feet	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details						
SS	NA	NA	NA	ML	1	0.5'-10' Top 6" asphalt. Sandy clayey silt, strong brown (7.5YR 5/6), slightly moist, cohesive, slightly plastic, sand is very fine grained.	10/20 Silica Sand	1" SCH 40 PVC Screen 0.010"	10/20 Silica Sand				
					2								
					3								
					4								
					5								
	12"	5'-7'	0.8		6								
					7								
					8								
					9								
					10								
	12"	10'-12'	0.8	11	10'-15' Sandy clayey silt, strong brown (7.5YR 5/6), slightly moist, cohesive, slightly plastic, sand is fine grained, increased sand content than above.								
				12									
				13									
				14									
				15									
	6"	15'-17'	0.8	SW	16	15'-20' Well graded sand, brown (7.5YR 5/4), loose, dry, fine to coarse grained, trace fine gravel, multicolored (reds and browns), sub-round.	10/20 Silica Sand	1" SCH 40 PVC Screen 0.010"	10/20 Silica Sand				
					17								
					18								
					19								
					20								
					12"					20'-22'	0.8	21	15'-20' Well graded sand, brown (7.5YR 5/4), loose, dry, primarily fine grained, some medium/coarse grains, trace fine gravel, multicolored (reds and browns), sub-round.
												22	
												23	
												24	
												25	
	9"	25'-27'	0.8	26	25'-30' Well graded sand, brown (10YR 5/4), loose to moderately cemented, dry, fine to coarse grained, few well cemented gravel pieces, 1.5" diameter, sub-round to sub-angular.								
				27									
				28									
				29									
				30									
	24"	30'-32'	2.1	31	30'-35' Well graded sand, strong brown (7.5YR 5/6), loose to moderately cemented, fine to coarse grained, trace gravel up to 1" diameter, some clay, minor discoloration 1" thick at 31', greenish-black, no odor.								
				32									
				33									
				34									
				35									
	0"	35'-37'	NA	36	35'-40' No Recovery								
				37									
				38									
				39									
				40									
	18"	40'-42'	0.2	41	40'-45' Well graded sand, strong brown (7.5YR 5/6), loose to moderately cemented, fine to coarse grained, trace gravel up to 1" diameter, some clay, gravel lense 2" thick at 41', possible schist.								
				42									
				43									
				44									
				45									
	22"	45'-47'	2.0	SC	46	45'-50' Clayey sand, strong brown (7.5YR 5/8), loose, slightly moist, mostly fine grained, some medium to coarse grains, cohesive, trace gravel, sub-angular, up to 1" diameter.							
					47								
					48								
					49								
					50								

SS = Split Spoon CUT = Drill Cuttings



BORING/WELL CONSTRUCTION LOG

Project:	1710 Llano Street	Project Number:	1632601.01	SVE-1: 80'-100' Screen
Drilling Company:	EDI	Start Time/Date:	1100 / 11-21-22	SVE-2: 50'-70' Screen
Drilling Rig/Bit:	CME 75	Completion Time/Date:	1600 / 11-22-22	SVE-3: 20'-40' Screen
Driller:	R. Martinez	Final Depth:	100 ft bgs	SVE-4: 5'-15' Screen
Boring/Well ID:	SVE 1-4	Logged By:	E. Andelman	Page 2 of 2

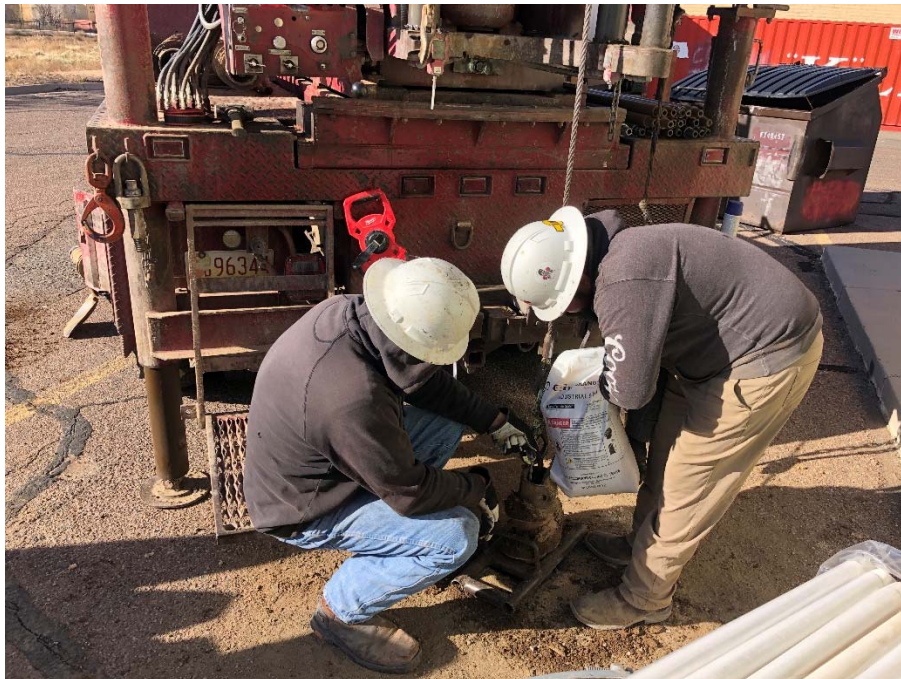
Sample Type	Recovery (inches)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Linear Feet	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details		
SS	22"	50'-52'		SW	51	50'-55' Well graded sand, multicolored (reds and browns), loose,	10/20 Silica Sand	1" SCH 40 PVC Screen 0.010"	10/20 Silica Sand
					52	slightly moist, fine to coarse grained, some clay and fine gravel.			
					53				
			4.9		54				
					55	55'-60' Poorly graded sand, reddish yellow (7.5YR 8/5), loose, slightly			
	24"	55'-57'	6.9	SP	56	moist, finen to coarse grained, some clay and fine gravel.			
					57				
			4.6		58				
					59				
			5.9		60	60'-65' Poorly graded sand, reddish yellow (7.5YR 8/5), loose, slightly			
	24"	60'-62'			61	moist, finen to coarse grained, some clay and fine gravel, 1" quartz			
			3.9		62	lense near top.			
					63				
			3.2		64				
	24"	65'-67'	4.3		65	60'-65' Poorly graded sand, reddish yellow (7.5YR 8/5), loose, slightly			
					66	moist, finen to coarse grained, some clay and fine gravel, 1" lightly			
			4.0		67	cemented sand at 66'.			
					68				
	24"	70'-72'	8.0	SM	69				
					70	70'-75' Silty sand, reddish yellow (7.5YR 8/6), loose, slightly moist,			
			4.7		71	fine grained, somewhat cohesive.			
					72				
	24"	75'-77'	6.0		73				
					74				
			3.1		75	75'-85' Silty sand, reddish yellow (5YR 6/8), loose, slightly moist,			
					76	fine to medium grained, somewhat cohesive.			
	24"	80'-82'	8.9		77				
					78				
			7.8		79				
					80				
	20"	85'-87'			81		10/20 Silica Sand	1" SCH 40 PVC Screen 0.010"	10/20 Silica Sand
					82				
					83				
					84				
	24"	90'-92'			85	85'-90' Silty sand, reddish yellow (5YR 6/8), loose, slightly moist,			
					86	fine to medium grained, somewhat cohesive, coarser grains than			
					87	above.			
					88				
	24"	95'-97'			89				
					90	90'-95' Silty sand, reddish yellow (5YR 7/6), loose, slightly moist,			
					91	fine grained, some cohesion.			
					92				
	100'-102'				93				
					94				
					95	95'-100' Silty sand, reddish yellow (5YR 7/6), loose, slightly moist,			
					96	fine grained, some cohesion, coarser than above with fine gravel.			
					97				
					98	100'-102' Silty sand, reddish yellow (5YR 7/6), loose, slightly moist,			
					99	fine grained, grayish color 3" thick at 101.5', no odor, weathered			
					100	dolomite.			

SS = Split Spoon CUT = Drill Cuttings

ATTACHMENT 2
PHOTOGRAPHIC DOCUMENTATION



Description: Set up to drill SB-1 where SVE-1 through SVE-4 will be installed.
Direction: West



Description: Setting SVE wells with silica sand inside of the hollow stem augers.
Direction: West



Description: 1-inch diameter wells, SVE-1 through SVE-4, set with surface completion in progress.

Direction: Down



Description: Completed surface completion of nested SVE wells, SVE-1 through SVE-4.

Direction: Down

ATTACHMENT 3
ANALYTICAL LABORATORY REPORTS



Beacon Environmental
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA
1.410.838.8780

CERTIFICATE OF ANALYSIS

Beacon Proposal No.: 230206R01

Laboratory Work Order: 0006841

Project Description:

1710 Llano Street
Santa Fe, NM

Client PO No.: 24655

Prepared for:

Elliott Andelman

EA Engineering, Science, and Technology, Inc.

320 Gold Avenue SW, Suite 1300

Albuquerque, NM 87102

Ryan W. Schneider
Senior Project Manager

March 08, 2023

All data meet requirements as specified in the Beacon Environmental Quality Assurance Project Plan and the results relate only to the samples reported. The work performed was in accordance with ISO/IEC 17025:2017, except compounds reported with € are not included in Beacon's scope of accreditation. This report shall not be reproduced, except in full, without written approval of the laboratory. Release of the data contained in this data package has been authorized by the Laboratory Director or his signee, as verified by the following signatures:

Steven C. Thornley
Laboratory Director

Peter B. Kelly
Quality Manager

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EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Summary

Lab Sample ID	Client Sample ID	Received	Analysis	Matrix
0006841-01	Trip 1	02/27/2023	EPA 8260C	Air
Sampler Type:	Beacon Passive Sampler			
0006841-02	PSG-1	02/27/2023	EPA 8260C	Soil Gas
Sampler Type:	Beacon Passive Sampler			
0006841-03	PSG-2	02/27/2023	EPA 8260C	Soil Gas
Sampler Type:	Beacon Passive Sampler			
0006841-04	PSG-3	02/27/2023	EPA 8260C	Soil Gas
Sampler Type:	Beacon Passive Sampler			

Project Completeness

Samples Received: 4
Samples Analyzed: 4

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Case Narrative

U.S. EPA Method 8260C

All samples were analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation following U.S. EPA Method 8260C, with laboratory results provided in nanograms (ng) and micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were under BEACON's Quality Assurance Project Plan.

Passive Soil-Gas Survey Notes

If sample locations are covered with or near the edge of an impervious surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are higher than if the surfacing was not present. Therefore, the sample location conditions should be considered when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times).

Reporting Limits

The RLs represent a baseline above which results meet laboratory-determined limits of precision and accuracy. All reported results are within the calibration range. The project method quantitation limit (MQL) is the limit of quantitation (LOQ) as noted in the data tables. Beacon determined uptake rates for a suite of compounds with the Beacon sampler for sampling in air. Beacon calculated the uptake rates for the remaining compounds using Graham's Law of Diffusion. The reported data includes LOQ limits.

Project Details

Samples were received in proper condition and laboratory control parameters were met unless otherwise noted below. The work performed was in accordance with ISO/IEC 17025:2017, except compounds reported with $\notin$ are not included in Beacon's scope of accreditation.

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Site Name: 1710 Llano Street
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Lab Work Order: 0006841
Reported: 03/08/2023

Analytical Results

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Summary of Compound Detections- Mass

Lab Sample ID: 0006841-04		PSG-3			Method: EPA 8260C	
		Soil Gas				
Analyte	CAS#	Result (ng)	Q	RT	LOQ (ng)	File ID
Tetrachloroethene	127-18-4	60		5.011	10	S23022723.D

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Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Summary of Compound Detections- Concentration

Lab Sample ID: 0006841-04		PSG-3			Method: EPA 8260C	
		Soil Gas				
Analyte	CAS#	Result ($\mu\text{g}/\text{m}^3$)	Q	RT	LOQ ($\mu\text{g}/\text{m}^3$)	File ID
Tetrachloroethene	127-18-4	14.5		5.011	2.40	S23022723.D

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Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Data Summary Table- Mass

Compound	Frequency	LOQ (ng)	Max Value (ng)
Tetrachloroethene	1	10	60

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Lab Work Order: 0006841
Reported: 03/08/2023

Data Summary Table- Concentration

Compound	Frequency	LOQ ($\mu\text{g}/\text{m}^3$)	Max Value ($\mu\text{g}/\text{m}^3$)
Tetrachloroethene	1	2.40	14.5

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Lab Work Order: 0006841
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Detailed Analytical Results

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
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Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Detailed Analytical Results- Mass

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-01

Trip 1

Method: EPA 8260C

Air

Analyte	CAS#	Result (ng)	Q	LOQ (ng)	Analyzed	File ID
Vinyl Chloride	75-01-4	<10		10	02/27/2023 20:33	S23022720.D
1,1-Dichloroethene	75-35-4	<10		10	02/27/2023 20:33	S23022720.D
Methylene Chloride	75-09-2	<10		10	02/27/2023 20:33	S23022720.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<10		10	02/27/2023 20:33	S23022720.D
trans-1,2-Dichloroethene	156-60-5	<10		10	02/27/2023 20:33	S23022720.D
Methyl-t-butyl ether	1634-04-4	<25		25	02/27/2023 20:33	S23022720.D
1,1-Dichloroethane	75-34-3	<10		10	02/27/2023 20:33	S23022720.D
cis-1,2-Dichloroethene	156-59-2	<10		10	02/27/2023 20:33	S23022720.D
Chloroform	67-66-3	<10		10	02/27/2023 20:33	S23022720.D
1,2-Dichloroethane	107-06-2	<10		10	02/27/2023 20:33	S23022720.D
1,1,1-Trichloroethane	71-55-6	<10		10	02/27/2023 20:33	S23022720.D
Carbon Tetrachloride	56-23-5	<10		10	02/27/2023 20:33	S23022720.D
Benzene	71-43-2	<25		25	02/27/2023 20:33	S23022720.D
Trichloroethene	79-01-6	<10		10	02/27/2023 20:33	S23022720.D
1,4-Dioxane	123-91-1	<10		10	02/27/2023 20:33	S23022720.D
1,1,2-Trichloroethane	79-00-5	<10		10	02/27/2023 20:33	S23022720.D
Toluene	108-88-3	<25		25	02/27/2023 20:33	S23022720.D
1,2-Dibromoethane (EDB)	106-93-4	<10		10	02/27/2023 20:33	S23022720.D
Tetrachloroethene	127-18-4	<10		10	02/27/2023 20:33	S23022720.D
1,1,1,2-Tetrachloroethane	630-20-6	<10		10	02/27/2023 20:33	S23022720.D
Chlorobenzene	108-90-7	<10		10	02/27/2023 20:33	S23022720.D
Ethylbenzene	100-41-4	<25		25	02/27/2023 20:33	S23022720.D
p & m-Xylene	179601-23-1	<25		25	02/27/2023 20:33	S23022720.D
o-Xylene	95-47-6	<25		25	02/27/2023 20:33	S23022720.D
1,2,3-Trichloropropane	96-18-4	<10		10	02/27/2023 20:33	S23022720.D
Isopropylbenzene	98-82-8	<25		25	02/27/2023 20:33	S23022720.D
1,3,5-Trimethylbenzene	108-67-8	<25		25	02/27/2023 20:33	S23022720.D
1,2,4-Trimethylbenzene	95-63-6	<25		25	02/27/2023 20:33	S23022720.D
1,3-Dichlorobenzene	541-73-1	<10		10	02/27/2023 20:33	S23022720.D
1,4-Dichlorobenzene	106-46-7	<10		10	02/27/2023 20:33	S23022720.D
1,2-Dichlorobenzene	95-50-1	<10		10	02/27/2023 20:33	S23022720.D
1,2,4-Trichlorobenzene	120-82-1	<10		10	02/27/2023 20:33	S23022720.D
Naphthalene	91-20-3	<25		25	02/27/2023 20:33	S23022720.D
1,2,3-Trichlorobenzene	87-61-6	<10		10	02/27/2023 20:33	S23022720.D
2-Methylnaphthalene	91-57-6	<25		25	02/27/2023 20:33	S23022720.D
TPH C4-C9		<5,000		5,000	02/27/2023 20:33	S23022720.D
TPH C10-C15		<5,000		5,000	02/27/2023 20:33	S23022720.D

EA Engineering, Science, and Technology, Inc.
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Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-02

PSG-1

Method: EPA 8260C

Soil Gas

Analyte	CAS#	Result (ng)	Q	LOQ (ng)	Analyzed	File ID
Vinyl Chloride	75-01-4	<10		10	02/27/2023 21:00	S23022721.D
1,1-Dichloroethene	75-35-4	<10		10	02/27/2023 21:00	S23022721.D
Methylene Chloride	75-09-2	<10		10	02/27/2023 21:00	S23022721.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<10		10	02/27/2023 21:00	S23022721.D
trans-1,2-Dichloroethene	156-60-5	<10		10	02/27/2023 21:00	S23022721.D
Methyl-t-butyl ether	1634-04-4	<25		25	02/27/2023 21:00	S23022721.D
1,1-Dichloroethane	75-34-3	<10		10	02/27/2023 21:00	S23022721.D
cis-1,2-Dichloroethene	156-59-2	<10		10	02/27/2023 21:00	S23022721.D
Chloroform	67-66-3	<10		10	02/27/2023 21:00	S23022721.D
1,2-Dichloroethane	107-06-2	<10		10	02/27/2023 21:00	S23022721.D
1,1,1-Trichloroethane	71-55-6	<10		10	02/27/2023 21:00	S23022721.D
Carbon Tetrachloride	56-23-5	<10		10	02/27/2023 21:00	S23022721.D
Benzene	71-43-2	<25		25	02/27/2023 21:00	S23022721.D
Trichloroethene	79-01-6	<10		10	02/27/2023 21:00	S23022721.D
1,4-Dioxane	123-91-1	<10		10	02/27/2023 21:00	S23022721.D
1,1,2-Trichloroethane	79-00-5	<10		10	02/27/2023 21:00	S23022721.D
Toluene	108-88-3	<25		25	02/27/2023 21:00	S23022721.D
1,2-Dibromoethane (EDB)	106-93-4	<10		10	02/27/2023 21:00	S23022721.D
Tetrachloroethene	127-18-4	<10		10	02/27/2023 21:00	S23022721.D
1,1,1,2-Tetrachloroethane	630-20-6	<10		10	02/27/2023 21:00	S23022721.D
Chlorobenzene	108-90-7	<10		10	02/27/2023 21:00	S23022721.D
Ethylbenzene	100-41-4	<25		25	02/27/2023 21:00	S23022721.D
p & m-Xylene	179601-23-1	<25		25	02/27/2023 21:00	S23022721.D
o-Xylene	95-47-6	<25		25	02/27/2023 21:00	S23022721.D
1,2,3-Trichloropropane	96-18-4	<10		10	02/27/2023 21:00	S23022721.D
Isopropylbenzene	98-82-8	<25		25	02/27/2023 21:00	S23022721.D
1,3,5-Trimethylbenzene	108-67-8	<25		25	02/27/2023 21:00	S23022721.D
1,2,4-Trimethylbenzene	95-63-6	<25		25	02/27/2023 21:00	S23022721.D
1,3-Dichlorobenzene	541-73-1	<10		10	02/27/2023 21:00	S23022721.D
1,4-Dichlorobenzene	106-46-7	<10		10	02/27/2023 21:00	S23022721.D
1,2-Dichlorobenzene	95-50-1	<10		10	02/27/2023 21:00	S23022721.D
1,2,4-Trichlorobenzene	120-82-1	<10		10	02/27/2023 21:00	S23022721.D
Naphthalene	91-20-3	<25		25	02/27/2023 21:00	S23022721.D
1,2,3-Trichlorobenzene	87-61-6	<10		10	02/27/2023 21:00	S23022721.D
2-Methylnaphthalene	91-57-6	<25		25	02/27/2023 21:00	S23022721.D
TPH C4-C9		<5,000		5,000	02/27/2023 21:00	S23022721.D
TPH C10-C15		<5,000		5,000	02/27/2023 21:00	S23022721.D

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Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-03

PSG-2

Method:

EPA 8260C

Soil Gas

Analyte	CAS#	Result (ng)	Q	LOQ (ng)	Analyzed	File ID
Vinyl Chloride	75-01-4	<10		10	02/27/2023 21:28	S23022722.D
1,1-Dichloroethene	75-35-4	<10		10	02/27/2023 21:28	S23022722.D
Methylene Chloride	75-09-2	<10		10	02/27/2023 21:28	S23022722.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<10		10	02/27/2023 21:28	S23022722.D
trans-1,2-Dichloroethene	156-60-5	<10		10	02/27/2023 21:28	S23022722.D
Methyl-t-butyl ether	1634-04-4	<25		25	02/27/2023 21:28	S23022722.D
1,1-Dichloroethane	75-34-3	<10		10	02/27/2023 21:28	S23022722.D
cis-1,2-Dichloroethene	156-59-2	<10		10	02/27/2023 21:28	S23022722.D
Chloroform	67-66-3	<10		10	02/27/2023 21:28	S23022722.D
1,2-Dichloroethane	107-06-2	<10		10	02/27/2023 21:28	S23022722.D
1,1,1-Trichloroethane	71-55-6	<10		10	02/27/2023 21:28	S23022722.D
Carbon Tetrachloride	56-23-5	<10		10	02/27/2023 21:28	S23022722.D
Benzene	71-43-2	<25		25	02/27/2023 21:28	S23022722.D
Trichloroethene	79-01-6	<10		10	02/27/2023 21:28	S23022722.D
1,4-Dioxane	123-91-1	<10		10	02/27/2023 21:28	S23022722.D
1,1,2-Trichloroethane	79-00-5	<10		10	02/27/2023 21:28	S23022722.D
Toluene	108-88-3	<25		25	02/27/2023 21:28	S23022722.D
1,2-Dibromoethane (EDB)	106-93-4	<10		10	02/27/2023 21:28	S23022722.D
Tetrachloroethene	127-18-4	<10		10	02/27/2023 21:28	S23022722.D
1,1,1,2-Tetrachloroethane	630-20-6	<10		10	02/27/2023 21:28	S23022722.D
Chlorobenzene	108-90-7	<10		10	02/27/2023 21:28	S23022722.D
Ethylbenzene	100-41-4	<25		25	02/27/2023 21:28	S23022722.D
p & m-Xylene	179601-23-1	<25		25	02/27/2023 21:28	S23022722.D
o-Xylene	95-47-6	<25		25	02/27/2023 21:28	S23022722.D
1,2,3-Trichloropropane	96-18-4	<10		10	02/27/2023 21:28	S23022722.D
Isopropylbenzene	98-82-8	<25		25	02/27/2023 21:28	S23022722.D
1,3,5-Trimethylbenzene	108-67-8	<25		25	02/27/2023 21:28	S23022722.D
1,2,4-Trimethylbenzene	95-63-6	<25		25	02/27/2023 21:28	S23022722.D
1,3-Dichlorobenzene	541-73-1	<10		10	02/27/2023 21:28	S23022722.D
1,4-Dichlorobenzene	106-46-7	<10		10	02/27/2023 21:28	S23022722.D
1,2-Dichlorobenzene	95-50-1	<10		10	02/27/2023 21:28	S23022722.D
1,2,4-Trichlorobenzene	120-82-1	<10		10	02/27/2023 21:28	S23022722.D
Naphthalene	91-20-3	<25		25	02/27/2023 21:28	S23022722.D
1,2,3-Trichlorobenzene	87-61-6	<10		10	02/27/2023 21:28	S23022722.D
2-Methylnaphthalene	91-57-6	<25		25	02/27/2023 21:28	S23022722.D
TPH C4-C9		<5,000		5,000	02/27/2023 21:28	S23022722.D
TPH C10-C15		<5,000		5,000	02/27/2023 21:28	S23022722.D

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Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-04

PSG-3

Method: EPA 8260C

Soil Gas

Analyte	CAS#	Result (ng)	Q	LOQ (ng)	Analyzed	File ID
Vinyl Chloride	75-01-4	<10		10	02/27/2023 21:55	S23022723.D
1,1-Dichloroethene	75-35-4	<10		10	02/27/2023 21:55	S23022723.D
Methylene Chloride	75-09-2	<10		10	02/27/2023 21:55	S23022723.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<10		10	02/27/2023 21:55	S23022723.D
trans-1,2-Dichloroethene	156-60-5	<10		10	02/27/2023 21:55	S23022723.D
Methyl-t-butyl ether	1634-04-4	<25		25	02/27/2023 21:55	S23022723.D
1,1-Dichloroethane	75-34-3	<10		10	02/27/2023 21:55	S23022723.D
cis-1,2-Dichloroethene	156-59-2	<10		10	02/27/2023 21:55	S23022723.D
Chloroform	67-66-3	<10		10	02/27/2023 21:55	S23022723.D
1,2-Dichloroethane	107-06-2	<10		10	02/27/2023 21:55	S23022723.D
1,1,1-Trichloroethane	71-55-6	<10		10	02/27/2023 21:55	S23022723.D
Carbon Tetrachloride	56-23-5	<10		10	02/27/2023 21:55	S23022723.D
Benzene	71-43-2	<25		25	02/27/2023 21:55	S23022723.D
Trichloroethene	79-01-6	<10		10	02/27/2023 21:55	S23022723.D
1,4-Dioxane	123-91-1	<10		10	02/27/2023 21:55	S23022723.D
1,1,2-Trichloroethane	79-00-5	<10		10	02/27/2023 21:55	S23022723.D
Toluene	108-88-3	<25		25	02/27/2023 21:55	S23022723.D
1,2-Dibromoethane (EDB)	106-93-4	<10		10	02/27/2023 21:55	S23022723.D
Tetrachloroethene	127-18-4	60		10	02/27/2023 21:55	S23022723.D
1,1,1,2-Tetrachloroethane	630-20-6	<10		10	02/27/2023 21:55	S23022723.D
Chlorobenzene	108-90-7	<10		10	02/27/2023 21:55	S23022723.D
Ethylbenzene	100-41-4	<25		25	02/27/2023 21:55	S23022723.D
p & m-Xylene	179601-23-1	<25		25	02/27/2023 21:55	S23022723.D
o-Xylene	95-47-6	<25		25	02/27/2023 21:55	S23022723.D
1,2,3-Trichloropropane	96-18-4	<10		10	02/27/2023 21:55	S23022723.D
Isopropylbenzene	98-82-8	<25		25	02/27/2023 21:55	S23022723.D
1,3,5-Trimethylbenzene	108-67-8	<25		25	02/27/2023 21:55	S23022723.D
1,2,4-Trimethylbenzene	95-63-6	<25		25	02/27/2023 21:55	S23022723.D
1,3-Dichlorobenzene	541-73-1	<10		10	02/27/2023 21:55	S23022723.D
1,4-Dichlorobenzene	106-46-7	<10		10	02/27/2023 21:55	S23022723.D
1,2-Dichlorobenzene	95-50-1	<10		10	02/27/2023 21:55	S23022723.D
1,2,4-Trichlorobenzene	120-82-1	<10		10	02/27/2023 21:55	S23022723.D
Naphthalene	91-20-3	<25		25	02/27/2023 21:55	S23022723.D
1,2,3-Trichlorobenzene	87-61-6	<10		10	02/27/2023 21:55	S23022723.D
2-Methylnaphthalene	91-57-6	<25		25	02/27/2023 21:55	S23022723.D
TPH C4-C9		<5,000		5,000	02/27/2023 21:55	S23022723.D
TPH C10-C15		<5,000		5,000	02/27/2023 21:55	S23022723.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Detailed Analytical Results- Concentration

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-01

Trip 1

Method: EPA 8260C

Air

Analyte	CAS#	Result (µg/m³)	Q	LOQ (µg/m³)	Analyzed	File ID
Vinyl Chloride	75-01-4	<1.21		1.21	02/27/2023 20:33	S23022720.D
1,1-Dichloroethene	75-35-4	<2.98		2.98	02/27/2023 20:33	S23022720.D
Methylene Chloride	75-09-2	<2.81		2.81	02/27/2023 20:33	S23022720.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<1.10		1.10	02/27/2023 20:33	S23022720.D
trans-1,2-Dichloroethene	156-60-5	<2.23		2.23	02/27/2023 20:33	S23022720.D
Methyl-t-butyl ether	1634-04-4	<4.91		4.91	02/27/2023 20:33	S23022720.D
1,1-Dichloroethane	75-34-3	<1.16		1.16	02/27/2023 20:33	S23022720.D
cis-1,2-Dichloroethene	156-59-2	<1.85		1.85	02/27/2023 20:33	S23022720.D
Chloroform	67-66-3	<2.81		2.81	02/27/2023 20:33	S23022720.D
1,2-Dichloroethane	107-06-2	<1.75		1.75	02/27/2023 20:33	S23022720.D
1,1,1-Trichloroethane	71-55-6	<0.94		0.94	02/27/2023 20:33	S23022720.D
Carbon Tetrachloride	56-23-5	<2.28		2.28	02/27/2023 20:33	S23022720.D
Benzene	71-43-2	<4.63		4.63	02/27/2023 20:33	S23022720.D
Trichloroethene	79-01-6	<2.98		2.98	02/27/2023 20:33	S23022720.D
1,4-Dioxane	123-91-1	<2.39		2.39	02/27/2023 20:33	S23022720.D
1,1,2-Trichloroethane	79-00-5	<2.98		2.98	02/27/2023 20:33	S23022720.D
Toluene	108-88-3	<6.14		6.14	02/27/2023 20:33	S23022720.D
1,2-Dibromoethane (EDB)	106-93-4	<2.52		2.52	02/27/2023 20:33	S23022720.D
Tetrachloroethene	127-18-4	<2.39		2.39	02/27/2023 20:33	S23022720.D
1,1,1,2-Tetrachloroethane	630-20-6	<2.39		2.39	02/27/2023 20:33	S23022720.D
Chlorobenzene	108-90-7	<1.16		1.16	02/27/2023 20:33	S23022720.D
Ethylbenzene	100-41-4	<2.89		2.89	02/27/2023 20:33	S23022720.D
p & m-Xylene	179601-23-1	<2.79		2.79	02/27/2023 20:33	S23022720.D
o-Xylene	95-47-6	<2.79		2.79	02/27/2023 20:33	S23022720.D
1,2,3-Trichloropropane	96-18-4	<1.31		1.31	02/27/2023 20:33	S23022720.D
Isopropylbenzene	98-82-8	<2.96		2.96	02/27/2023 20:33	S23022720.D
1,3,5-Trimethylbenzene	108-67-8	<2.96		2.96	02/27/2023 20:33	S23022720.D
1,2,4-Trimethylbenzene	95-63-6	<2.96		2.96	02/27/2023 20:33	S23022720.D
1,3-Dichlorobenzene	541-73-1	<1.31		1.31	02/27/2023 20:33	S23022720.D
1,4-Dichlorobenzene	106-46-7	<1.31		1.31	02/27/2023 20:33	S23022720.D
1,2-Dichlorobenzene	95-50-1	<1.31		1.31	02/27/2023 20:33	S23022720.D
1,2,4-Trichlorobenzene	120-82-1	<2.52		2.52	02/27/2023 20:33	S23022720.D
Naphthalene	91-20-3	<3.07		3.07	02/27/2023 20:33	S23022720.D
1,2,3-Trichlorobenzene	87-61-6	<2.52		2.52	02/27/2023 20:33	S23022720.D
2-Methylnaphthalene	91-57-6	<3.23		3.23	02/27/2023 20:33	S23022720.D
TPH C4-C9		<982		982	02/27/2023 20:33	S23022720.D
TPH C10-C15		<982		982	02/27/2023 20:33	S23022720.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-02

PSG-1

Method: EPA 8260C

Soil Gas

Analyte	CAS#	Result (µg/m³)	Q	LOQ (µg/m³)	Analyzed	File ID
Vinyl Chloride	75-01-4	<1.21		1.21	02/27/2023 21:00	S23022721.D
1,1-Dichloroethene	75-35-4	<2.98		2.98	02/27/2023 21:00	S23022721.D
Methylene Chloride	75-09-2	<2.81		2.81	02/27/2023 21:00	S23022721.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<1.10		1.10	02/27/2023 21:00	S23022721.D
trans-1,2-Dichloroethene	156-60-5	<2.23		2.23	02/27/2023 21:00	S23022721.D
Methyl-t-butyl ether	1634-04-4	<4.91		4.91	02/27/2023 21:00	S23022721.D
1,1-Dichloroethane	75-34-3	<1.16		1.16	02/27/2023 21:00	S23022721.D
cis-1,2-Dichloroethene	156-59-2	<1.85		1.85	02/27/2023 21:00	S23022721.D
Chloroform	67-66-3	<2.81		2.81	02/27/2023 21:00	S23022721.D
1,2-Dichloroethane	107-06-2	<1.75		1.75	02/27/2023 21:00	S23022721.D
1,1,1-Trichloroethane	71-55-6	<0.94		0.94	02/27/2023 21:00	S23022721.D
Carbon Tetrachloride	56-23-5	<2.28		2.28	02/27/2023 21:00	S23022721.D
Benzene	71-43-2	<4.63		4.63	02/27/2023 21:00	S23022721.D
Trichloroethene	79-01-6	<2.98		2.98	02/27/2023 21:00	S23022721.D
1,4-Dioxane	123-91-1	<2.39		2.39	02/27/2023 21:00	S23022721.D
1,1,2-Trichloroethane	79-00-5	<2.98		2.98	02/27/2023 21:00	S23022721.D
Toluene	108-88-3	<6.14		6.14	02/27/2023 21:00	S23022721.D
1,2-Dibromoethane (EDB)	106-93-4	<2.52		2.52	02/27/2023 21:00	S23022721.D
Tetrachloroethene	127-18-4	<2.39		2.39	02/27/2023 21:00	S23022721.D
1,1,1,2-Tetrachloroethane	630-20-6	<2.39		2.39	02/27/2023 21:00	S23022721.D
Chlorobenzene	108-90-7	<1.16		1.16	02/27/2023 21:00	S23022721.D
Ethylbenzene	100-41-4	<2.89		2.89	02/27/2023 21:00	S23022721.D
p & m-Xylene	179601-23-1	<2.79		2.79	02/27/2023 21:00	S23022721.D
o-Xylene	95-47-6	<2.79		2.79	02/27/2023 21:00	S23022721.D
1,2,3-Trichloropropane	96-18-4	<1.31		1.31	02/27/2023 21:00	S23022721.D
Isopropylbenzene	98-82-8	<2.96		2.96	02/27/2023 21:00	S23022721.D
1,3,5-Trimethylbenzene	108-67-8	<2.96		2.96	02/27/2023 21:00	S23022721.D
1,2,4-Trimethylbenzene	95-63-6	<2.96		2.96	02/27/2023 21:00	S23022721.D
1,3-Dichlorobenzene	541-73-1	<1.31		1.31	02/27/2023 21:00	S23022721.D
1,4-Dichlorobenzene	106-46-7	<1.31		1.31	02/27/2023 21:00	S23022721.D
1,2-Dichlorobenzene	95-50-1	<1.31		1.31	02/27/2023 21:00	S23022721.D
1,2,4-Trichlorobenzene	120-82-1	<2.52		2.52	02/27/2023 21:00	S23022721.D
Naphthalene	91-20-3	<3.07		3.07	02/27/2023 21:00	S23022721.D
1,2,3-Trichlorobenzene	87-61-6	<2.52		2.52	02/27/2023 21:00	S23022721.D
2-Methylnaphthalene	91-57-6	<3.23		3.23	02/27/2023 21:00	S23022721.D
± TPH C4-C9		<982		982	02/27/2023 21:00	S23022721.D
± TPH C10-C15		<982		982	02/27/2023 21:00	S23022721.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-03

PSG-2

Method: EPA 8260C

Soil Gas

Analyte	CAS#	Result (µg/m³)	Q	LOQ (µg/m³)	Analyzed	File ID
Vinyl Chloride	75-01-4	<1.22		1.22	02/27/2023 21:28	S23022722.D
1,1-Dichloroethene	75-35-4	<2.98		2.98	02/27/2023 21:28	S23022722.D
Methylene Chloride	75-09-2	<2.81		2.81	02/27/2023 21:28	S23022722.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<1.11		1.11	02/27/2023 21:28	S23022722.D
trans-1,2-Dichloroethene	156-60-5	<2.24		2.24	02/27/2023 21:28	S23022722.D
Methyl-t-butyl ether	1634-04-4	<4.92		4.92	02/27/2023 21:28	S23022722.D
1,1-Dichloroethane	75-34-3	<1.16		1.16	02/27/2023 21:28	S23022722.D
cis-1,2-Dichloroethene	156-59-2	<1.86		1.86	02/27/2023 21:28	S23022722.D
Chloroform	67-66-3	<2.81		2.81	02/27/2023 21:28	S23022722.D
1,2-Dichloroethane	107-06-2	<1.76		1.76	02/27/2023 21:28	S23022722.D
1,1,1-Trichloroethane	71-55-6	<0.94		0.94	02/27/2023 21:28	S23022722.D
Carbon Tetrachloride	56-23-5	<2.29		2.29	02/27/2023 21:28	S23022722.D
Benzene	71-43-2	<4.64		4.64	02/27/2023 21:28	S23022722.D
Trichloroethene	79-01-6	<2.98		2.98	02/27/2023 21:28	S23022722.D
1,4-Dioxane	123-91-1	<2.40		2.40	02/27/2023 21:28	S23022722.D
1,1,2-Trichloroethane	79-00-5	<2.98		2.98	02/27/2023 21:28	S23022722.D
Toluene	108-88-3	<6.15		6.15	02/27/2023 21:28	S23022722.D
1,2-Dibromoethane (EDB)	106-93-4	<2.52		2.52	02/27/2023 21:28	S23022722.D
Tetrachloroethene	127-18-4	<2.40		2.40	02/27/2023 21:28	S23022722.D
1,1,1,2-Tetrachloroethane	630-20-6	<2.40		2.40	02/27/2023 21:28	S23022722.D
Chlorobenzene	108-90-7	<1.16		1.16	02/27/2023 21:28	S23022722.D
Ethylbenzene	100-41-4	<2.89		2.89	02/27/2023 21:28	S23022722.D
p & m-Xylene	179601-23-1	<2.80		2.80	02/27/2023 21:28	S23022722.D
o-Xylene	95-47-6	<2.80		2.80	02/27/2023 21:28	S23022722.D
1,2,3-Trichloropropane	96-18-4	<1.31		1.31	02/27/2023 21:28	S23022722.D
Isopropylbenzene	98-82-8	<2.96		2.96	02/27/2023 21:28	S23022722.D
1,3,5-Trimethylbenzene	108-67-8	<2.96		2.96	02/27/2023 21:28	S23022722.D
1,2,4-Trimethylbenzene	95-63-6	<2.96		2.96	02/27/2023 21:28	S23022722.D
1,3-Dichlorobenzene	541-73-1	<1.31		1.31	02/27/2023 21:28	S23022722.D
1,4-Dichlorobenzene	106-46-7	<1.31		1.31	02/27/2023 21:28	S23022722.D
1,2-Dichlorobenzene	95-50-1	<1.31		1.31	02/27/2023 21:28	S23022722.D
1,2,4-Trichlorobenzene	120-82-1	<2.52		2.52	02/27/2023 21:28	S23022722.D
Naphthalene	91-20-3	<3.08		3.08	02/27/2023 21:28	S23022722.D
1,2,3-Trichlorobenzene	87-61-6	<2.52		2.52	02/27/2023 21:28	S23022722.D
2-Methylnaphthalene	91-57-6	<3.24		3.24	02/27/2023 21:28	S23022722.D
TPH C4-C9		<984		984	02/27/2023 21:28	S23022722.D
TPH C10-C15		<984		984	02/27/2023 21:28	S23022722.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Lab Sample ID: 0006841-04

PSG-3

Method: EPA 8260C

Soil Gas

Analyte	CAS#	Result (µg/m³)	Q	LOQ (µg/m³)	Analyzed	File ID
Vinyl Chloride	75-01-4	<1.22		1.22	02/27/2023 21:55	S23022723.D
1,1-Dichloroethene	75-35-4	<2.98		2.98	02/27/2023 21:55	S23022723.D
Methylene Chloride	75-09-2	<2.81		2.81	02/27/2023 21:55	S23022723.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<1.11		1.11	02/27/2023 21:55	S23022723.D
trans-1,2-Dichloroethene	156-60-5	<2.24		2.24	02/27/2023 21:55	S23022723.D
Methyl-t-butyl ether	1634-04-4	<4.92		4.92	02/27/2023 21:55	S23022723.D
1,1-Dichloroethane	75-34-3	<1.16		1.16	02/27/2023 21:55	S23022723.D
cis-1,2-Dichloroethene	156-59-2	<1.86		1.86	02/27/2023 21:55	S23022723.D
Chloroform	67-66-3	<2.81		2.81	02/27/2023 21:55	S23022723.D
1,2-Dichloroethane	107-06-2	<1.76		1.76	02/27/2023 21:55	S23022723.D
1,1,1-Trichloroethane	71-55-6	<0.94		0.94	02/27/2023 21:55	S23022723.D
Carbon Tetrachloride	56-23-5	<2.29		2.29	02/27/2023 21:55	S23022723.D
Benzene	71-43-2	<4.64		4.64	02/27/2023 21:55	S23022723.D
Trichloroethene	79-01-6	<2.98		2.98	02/27/2023 21:55	S23022723.D
1,4-Dioxane	123-91-1	<2.40		2.40	02/27/2023 21:55	S23022723.D
1,1,2-Trichloroethane	79-00-5	<2.98		2.98	02/27/2023 21:55	S23022723.D
Toluene	108-88-3	<6.15		6.15	02/27/2023 21:55	S23022723.D
1,2-Dibromoethane (EDB)	106-93-4	<2.52		2.52	02/27/2023 21:55	S23022723.D
Tetrachloroethene	127-18-4	14.5		2.40	02/27/2023 21:55	S23022723.D
1,1,1,2-Tetrachloroethane	630-20-6	<2.40		2.40	02/27/2023 21:55	S23022723.D
Chlorobenzene	108-90-7	<1.16		1.16	02/27/2023 21:55	S23022723.D
Ethylbenzene	100-41-4	<2.90		2.90	02/27/2023 21:55	S23022723.D
p & m-Xylene	179601-23-1	<2.80		2.80	02/27/2023 21:55	S23022723.D
o-Xylene	95-47-6	<2.80		2.80	02/27/2023 21:55	S23022723.D
1,2,3-Trichloropropane	96-18-4	<1.31		1.31	02/27/2023 21:55	S23022723.D
Isopropylbenzene	98-82-8	<2.97		2.97	02/27/2023 21:55	S23022723.D
1,3,5-Trimethylbenzene	108-67-8	<2.97		2.97	02/27/2023 21:55	S23022723.D
1,2,4-Trimethylbenzene	95-63-6	<2.97		2.97	02/27/2023 21:55	S23022723.D
1,3-Dichlorobenzene	541-73-1	<1.31		1.31	02/27/2023 21:55	S23022723.D
1,4-Dichlorobenzene	106-46-7	<1.31		1.31	02/27/2023 21:55	S23022723.D
1,2-Dichlorobenzene	95-50-1	<1.31		1.31	02/27/2023 21:55	S23022723.D
1,2,4-Trichlorobenzene	120-82-1	<2.52		2.52	02/27/2023 21:55	S23022723.D
Naphthalene	91-20-3	<3.08		3.08	02/27/2023 21:55	S23022723.D
1,2,3-Trichlorobenzene	87-61-6	<2.52		2.52	02/27/2023 21:55	S23022723.D
2-Methylnaphthalene	91-57-6	<3.24		3.24	02/27/2023 21:55	S23022723.D
TPH C4-C9		<985		985	02/27/2023 21:55	S23022723.D
TPH C10-C15		<985		985	02/27/2023 21:55	S23022723.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

QC Information/Summary

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Soil-Gas Sample Analysis by EPA Method 8260C - Quality Control Summary

23B0052-BLK1 (Lab Blank) File ID: S23022705.D

Analyzed: 2/27/23 14:14

Sampler: Beacon Passive Sampler		Result	LOQ	
Analyte	CAS#	(ng)	(ng)	Q
Vinyl Chloride	75-01-4	<10	10	U
1,1-Dichloroethene	75-35-4	<10	10	U
Methylene Chloride	75-09-2	<10	10	U
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<10	10	U
trans-1,2-Dichloroethene	156-60-5	<10	10	U
Methyl-t-butyl ether	1634-04-4	<25	25	U
1,1-Dichloroethane	75-34-3	<10	10	U
cis-1,2-Dichloroethene	156-59-2	<10	10	U
Chloroform	67-66-3	<10	10	U
1,2-Dichloroethane	107-06-2	<10	10	U
1,1,1-Trichloroethane	71-55-6	<10	10	U
Carbon Tetrachloride	56-23-5	<10	10	U
Benzene	71-43-2	<25	25	U
Trichloroethene	79-01-6	<10	10	U
1,4-Dioxane	123-91-1	<10	10	U
1,1,2-Trichloroethane	79-00-5	<10	10	U
Toluene	108-88-3	<25	25	U
1,2-Dibromoethane (EDB)	106-93-4	<10	10	U
Tetrachloroethene	127-18-4	<10	10	U
1,1,1,2-Tetrachloroethane	630-20-6	<10	10	U
Chlorobenzene	108-90-7	<10	10	U
Ethylbenzene	100-41-4	<25	25	U
p & m-Xylene	179601-23-1	<25	25	U
o-Xylene	95-47-6	<25	25	U
1,2,3-Trichloropropane	96-18-4	<10	10	U
Isopropylbenzene	98-82-8	<25	25	U
1,3,5-Trimethylbenzene	108-67-8	<25	25	U
1,2,4-Trimethylbenzene	95-63-6	<25	25	U
1,3-Dichlorobenzene	541-73-1	<10	10	U
1,4-Dichlorobenzene	106-46-7	<10	10	U
1,2-Dichlorobenzene	95-50-1	<10	10	U
1,2,4-Trichlorobenzene	120-82-1	<10	10	U
Naphthalene	91-20-3	<25	25	U
1,2,3-Trichlorobenzene	87-61-6	<10	10	U
2-Methylnaphthalene	91-57-6	<25	25	U
TPH C4-C9		<5000	5000	U
TPH C10-C15		<5000	5000	U

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Soil-Gas Analysis by EPA 8260 - Data in Concentration - Quality Control Summary

23B0052-BLK1 (Lab Blank) File ID: S23022705.D

Analyzed: 2/27/23 14:14

Sampler: Beacon Passive Sampler		Result	LOQ	
Analyte	CAS#	(µg/m³)	(µg/m³)	Q
Vinyl Chloride	75-01-4	<1.21	1.21	U
1,1-Dichloroethene	75-35-4	<2.98	2.98	U
Methylene Chloride	75-09-2	<2.81	2.81	U
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	<1.10	1.10	U
trans-1,2-Dichloroethene	156-60-5	<2.23	2.23	U
Methyl-t-butyl ether	1634-04-4	<4.91	4.91	U
1,1-Dichloroethane	75-34-3	<1.16	1.16	U
cis-1,2-Dichloroethene	156-59-2	<1.85	1.85	U
Chloroform	67-66-3	<2.81	2.81	U
1,2-Dichloroethane	107-06-2	<1.75	1.75	U
1,1,1-Trichloroethane	71-55-6	<0.935	0.935	U
Carbon Tetrachloride	56-23-5	<2.28	2.28	U
Benzene	71-43-2	<4.63	4.63	U
Trichloroethene	79-01-6	<2.98	2.98	U
1,4-Dioxane	123-91-1	<2.39	2.39	U
1,1,2-Trichloroethane	79-00-5	<2.98	2.98	U
Toluene	108-88-3	<6.14	6.14	U
1,2-Dibromoethane (EDB)	106-93-4	<2.52	2.52	U
Tetrachloroethene	127-18-4	<2.39	2.39	U
1,1,1,2-Tetrachloroethane	630-20-6	<2.39	2.39	U
Chlorobenzene	108-90-7	<1.16	1.16	U
Ethylbenzene	100-41-4	<2.89	2.89	U
p & m-Xylene	179601-23-1	<2.79	2.79	U
o-Xylene	95-47-6	<2.79	2.79	U
1,2,3-Trichloropropane	96-18-4	<1.31	1.31	U
Isopropylbenzene	98-82-8	<2.96	2.96	U
1,3,5-Trimethylbenzene	108-67-8	<2.96	2.96	U
1,2,4-Trimethylbenzene	95-63-6	<2.96	2.96	U
1,3-Dichlorobenzene	541-73-1	<1.31	1.31	U
1,4-Dichlorobenzene	106-46-7	<1.31	1.31	U
1,2-Dichlorobenzene	95-50-1	<1.31	1.31	U
1,2,4-Trichlorobenzene	120-82-1	<2.52	2.52	U
Naphthalene	91-20-3	<3.07	3.07	U
1,2,3-Trichlorobenzene	87-61-6	<2.52	2.52	U
2-Methylnaphthalene	91-57-6	<3.23	3.23	U
TPH C4-C9		<832	832	U
TPH C10-C15		<711	711	U

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Site Name: 1710 Llano Street
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Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Additional QC Information

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Result Calculation Summary (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial Result ng	C Calculated Result µg/m ³	File ID
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Lab ID: 0006841-01

Sample Name: Trip 1

Vinyl Chloride	10,185	1.00	0.810	U	U	S23022720.D
1,1-Dichloroethene	10,185	1.00	0.330	U	U	S23022720.D
Methylene Chloride	10,185	1.00	0.350 ^g	U	U	S23022720.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,185	1.00	0.890 ^g	U	U	S23022720.D
trans-1,2-Dichloroethene	10,185	1.00	0.440	U	U	S23022720.D
Methyl-t-butyl ether	10,185	1.00	0.500 ^g	U	U	S23022720.D
1,1-Dichloroethane	10,185	1.00	0.850	U	U	S23022720.D
cis-1,2-Dichloroethene	10,185	1.00	0.530	U	U	S23022720.D
Chloroform	10,185	1.00	0.350 ^g	U	U	S23022720.D
1,2-Dichloroethane	10,185	1.00	0.560	U	U	S23022720.D
1,1,1-Trichloroethane	10,185	1.00	1.050	U	U	S23022720.D
Carbon Tetrachloride	10,185	1.00	0.430 ^g	U	U	S23022720.D
Benzene	10,185	1.00	0.530	U	U	S23022720.D
Trichloroethene	10,185	1.00	0.330	U	U	S23022720.D
1,4-Dioxane	10,185	1.00	0.410 ^g	U	U	S23022720.D
1,1,2-Trichloroethane	10,185	1.00	0.330 ^g	U	U	S23022720.D
Toluene	10,185	1.00	0.400	U	U	S23022720.D
1,2-Dibromoethane (EDB)	10,185	1.00	0.390 ^g	U	U	S23022720.D
Tetrachloroethene	10,185	1.00	0.410	U	U	S23022720.D
1,1,1,2-Tetrachloroethane	10,185	1.00	0.410 ^g	U	U	S23022720.D
Chlorobenzene	10,185	1.00	0.850 ^g	U	U	S23022720.D
Ethylbenzene	10,185	1.00	0.850	U	U	S23022720.D
p & m-Xylene	10,185	1.00	0.880	U	U	S23022720.D
o-Xylene	10,185	1.00	0.880	U	U	S23022720.D
1,2,3-Trichloropropane	10,185	1.00	0.750 ^g	U	U	S23022720.D
Isopropylbenzene	10,185	1.00	0.830 ^g	U	U	S23022720.D
1,3,5-Trimethylbenzene	10,185	1.00	0.830 ^g	U	U	S23022720.D
1,2,4-Trimethylbenzene	10,185	1.00	0.830 ^g	U	U	S23022720.D
1,3-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022720.D
1,4-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022720.D
1,2-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022720.D
1,2,4-Trichlorobenzene	10,185	1.00	0.390 ^g	U	U	S23022720.D
Naphthalene	10,185	1.00	0.800 ^g	U	U	S23022720.D
1,2,3-Trichlorobenzene	10,185	1.00	0.390 ^g	U	U	S23022720.D
2-Methylnaphthalene	10,185	1.00	0.760 ^g	U	U	S23022720.D
TPH C4-C9	10,185	1.00	0.590 ^g	U	U	S23022720.D
TPH C10-C15	10,185	1.00	0.690 ^g	U	U	S23022720.D

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320 Gold Avenue SW, Suite 1300
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Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Result Calculation Summary (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial Result ng	C Calculated Result µg/m ³	File ID
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Lab ID: 0006841-02

Sample Name: PSG-1

Vinyl Chloride	10,185	1.00	0.810	U	U	S23022721.D
1,1-Dichloroethene	10,185	1.00	0.330	U	U	S23022721.D
Methylene Chloride	10,185	1.00	0.350 ^g	U	U	S23022721.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,185	1.00	0.890 ^g	U	U	S23022721.D
trans-1,2-Dichloroethene	10,185	1.00	0.440	U	U	S23022721.D
Methyl-t-butyl ether	10,185	1.00	0.500 ^g	U	U	S23022721.D
1,1-Dichloroethane	10,185	1.00	0.850	U	U	S23022721.D
cis-1,2-Dichloroethene	10,185	1.00	0.530	U	U	S23022721.D
Chloroform	10,185	1.00	0.350 ^g	U	U	S23022721.D
1,2-Dichloroethane	10,185	1.00	0.560	U	U	S23022721.D
1,1,1-Trichloroethane	10,185	1.00	1.050	U	U	S23022721.D
Carbon Tetrachloride	10,185	1.00	0.430 ^g	U	U	S23022721.D
Benzene	10,185	1.00	0.530	U	U	S23022721.D
Trichloroethene	10,185	1.00	0.330	U	U	S23022721.D
1,4-Dioxane	10,185	1.00	0.410 ^g	U	U	S23022721.D
1,1,2-Trichloroethane	10,185	1.00	0.330 ^g	U	U	S23022721.D
Toluene	10,185	1.00	0.400	U	U	S23022721.D
1,2-Dibromoethane (EDB)	10,185	1.00	0.390 ^g	U	U	S23022721.D
Tetrachloroethene	10,185	1.00	0.410	U	U	S23022721.D
1,1,1,2-Tetrachloroethane	10,185	1.00	0.410 ^g	U	U	S23022721.D
Chlorobenzene	10,185	1.00	0.850 ^g	U	U	S23022721.D
Ethylbenzene	10,185	1.00	0.850	U	U	S23022721.D
p & m-Xylene	10,185	1.00	0.880	U	U	S23022721.D
o-Xylene	10,185	1.00	0.880	U	U	S23022721.D
1,2,3-Trichloropropane	10,185	1.00	0.750 ^g	U	U	S23022721.D
Isopropylbenzene	10,185	1.00	0.830 ^g	U	U	S23022721.D
1,3,5-Trimethylbenzene	10,185	1.00	0.830 ^g	U	U	S23022721.D
1,2,4-Trimethylbenzene	10,185	1.00	0.830 ^g	U	U	S23022721.D
1,3-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022721.D
1,4-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022721.D
1,2-Dichlorobenzene	10,185	1.00	0.750 ^g	U	U	S23022721.D
1,2,4-Trichlorobenzene	10,185	1.00	0.390 ^g	U	U	S23022721.D
Naphthalene	10,185	1.00	0.800 ^g	U	U	S23022721.D
1,2,3-Trichlorobenzene	10,185	1.00	0.390 ^g	U	U	S23022721.D
2-Methylnaphthalene	10,185	1.00	0.760 ^g	U	U	S23022721.D
TPH C4-C9	10,185	1.00	0.590 ^g	U	U	S23022721.D
TPH C10-C15	10,185	1.00	0.690 ^g	U	U	S23022721.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Result Calculation Summary (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial Result ng	C Calculated Result µg/m ³	File ID
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Lab ID: 0006841-03

Sample Name: PSG-2

Vinyl Chloride	10,160	1.00	0.810	U	U	S23022722.D
1,1-Dichloroethene	10,160	1.00	0.330	U	U	S23022722.D
Methylene Chloride	10,160	1.00	0.350 ^g	U	U	S23022722.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,160	1.00	0.890 ^g	U	U	S23022722.D
trans-1,2-Dichloroethene	10,160	1.00	0.440	U	U	S23022722.D
Methyl-t-butyl ether	10,160	1.00	0.500 ^g	U	U	S23022722.D
1,1-Dichloroethane	10,160	1.00	0.850	U	U	S23022722.D
cis-1,2-Dichloroethene	10,160	1.00	0.530	U	U	S23022722.D
Chloroform	10,160	1.00	0.350 ^g	U	U	S23022722.D
1,2-Dichloroethane	10,160	1.00	0.560	U	U	S23022722.D
1,1,1-Trichloroethane	10,160	1.00	1.050	U	U	S23022722.D
Carbon Tetrachloride	10,160	1.00	0.430 ^g	U	U	S23022722.D
Benzene	10,160	1.00	0.530	U	U	S23022722.D
Trichloroethene	10,160	1.00	0.330	U	U	S23022722.D
1,4-Dioxane	10,160	1.00	0.410 ^g	U	U	S23022722.D
1,1,2-Trichloroethane	10,160	1.00	0.330 ^g	U	U	S23022722.D
Toluene	10,160	1.00	0.400	U	U	S23022722.D
1,2-Dibromoethane (EDB)	10,160	1.00	0.390 ^g	U	U	S23022722.D
Tetrachloroethene	10,160	1.00	0.410	U	U	S23022722.D
1,1,1,2-Tetrachloroethane	10,160	1.00	0.410 ^g	U	U	S23022722.D
Chlorobenzene	10,160	1.00	0.850 ^g	U	U	S23022722.D
Ethylbenzene	10,160	1.00	0.850	U	U	S23022722.D
p & m-Xylene	10,160	1.00	0.880	U	U	S23022722.D
o-Xylene	10,160	1.00	0.880	U	U	S23022722.D
1,2,3-Trichloropropane	10,160	1.00	0.750 ^g	U	U	S23022722.D
Isopropylbenzene	10,160	1.00	0.830 ^g	U	U	S23022722.D
1,3,5-Trimethylbenzene	10,160	1.00	0.830 ^g	U	U	S23022722.D
1,2,4-Trimethylbenzene	10,160	1.00	0.830 ^g	U	U	S23022722.D
1,3-Dichlorobenzene	10,160	1.00	0.750 ^g	U	U	S23022722.D
1,4-Dichlorobenzene	10,160	1.00	0.750 ^g	U	U	S23022722.D
1,2-Dichlorobenzene	10,160	1.00	0.750 ^g	U	U	S23022722.D
1,2,4-Trichlorobenzene	10,160	1.00	0.390 ^g	U	U	S23022722.D
Naphthalene	10,160	1.00	0.800 ^g	U	U	S23022722.D
1,2,3-Trichlorobenzene	10,160	1.00	0.390 ^g	U	U	S23022722.D
2-Methylnaphthalene	10,160	1.00	0.760 ^g	U	U	S23022722.D
TPH C4-C9	10,160	1.00	0.590 ^g	U	U	S23022722.D
TPH C10-C15	10,160	1.00	0.690 ^g	U	U	S23022722.D

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Result Calculation Summary (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial Result ng	C Calculated Result µg/m ³	File ID
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Lab ID: 0006841-04

Sample Name: PSG-3

Vinyl Chloride	10,155	1.00	0.810	U	U	S23022723.D
1,1-Dichloroethene	10,155	1.00	0.330	U	U	S23022723.D
Methylene Chloride	10,155	1.00	0.350 ^g	U	U	S23022723.D
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,155	1.00	0.890 ^g	U	U	S23022723.D
trans-1,2-Dichloroethene	10,155	1.00	0.440	U	U	S23022723.D
Methyl-t-butyl ether	10,155	1.00	0.500 ^g	U	U	S23022723.D
1,1-Dichloroethane	10,155	1.00	0.850	U	U	S23022723.D
cis-1,2-Dichloroethene	10,155	1.00	0.530	U	U	S23022723.D
Chloroform	10,155	1.00	0.350 ^g	U	U	S23022723.D
1,2-Dichloroethane	10,155	1.00	0.560	U	U	S23022723.D
1,1,1-Trichloroethane	10,155	1.00	1.050	U	U	S23022723.D
Carbon Tetrachloride	10,155	1.00	0.430 ^g	U	U	S23022723.D
Benzene	10,155	1.00	0.530	U	U	S23022723.D
Trichloroethene	10,155	1.00	0.330	U	U	S23022723.D
1,4-Dioxane	10,155	1.00	0.410 ^g	U	U	S23022723.D
1,1,2-Trichloroethane	10,155	1.00	0.330 ^g	U	U	S23022723.D
Toluene	10,155	1.00	0.400	U	U	S23022723.D
1,2-Dibromoethane (EDB)	10,155	1.00	0.390 ^g	U	U	S23022723.D
Tetrachloroethene	10,155	1.00	0.410	60.42	14.5	S23022723.D
1,1,1,2-Tetrachloroethane	10,155	1.00	0.410 ^g	U	U	S23022723.D
Chlorobenzene	10,155	1.00	0.850 ^g	U	U	S23022723.D
Ethylbenzene	10,155	1.00	0.850	U	U	S23022723.D
p & m-Xylene	10,155	1.00	0.880	U	U	S23022723.D
o-Xylene	10,155	1.00	0.880	U	U	S23022723.D
1,2,3-Trichloropropane	10,155	1.00	0.750 ^g	U	U	S23022723.D
Isopropylbenzene	10,155	1.00	0.830 ^g	U	U	S23022723.D
1,3,5-Trimethylbenzene	10,155	1.00	0.830 ^g	U	U	S23022723.D
1,2,4-Trimethylbenzene	10,155	1.00	0.830 ^g	U	U	S23022723.D
1,3-Dichlorobenzene	10,155	1.00	0.750 ^g	U	U	S23022723.D
1,4-Dichlorobenzene	10,155	1.00	0.750 ^g	U	U	S23022723.D
1,2-Dichlorobenzene	10,155	1.00	0.750 ^g	U	U	S23022723.D
1,2,4-Trichlorobenzene	10,155	1.00	0.390 ^g	U	U	S23022723.D
Naphthalene	10,155	1.00	0.800 ^g	U	U	S23022723.D
1,2,3-Trichlorobenzene	10,155	1.00	0.390 ^g	U	U	S23022723.D
2-Methylnaphthalene	10,155	1.00	0.760 ^g	U	U	S23022723.D
TPH C4-C9	10,155	1.00	0.590 ^g	U	U	S23022723.D
TPH C10-C15	10,155	1.00	0.690 ^g	U	U	S23022723.D

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Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Calculations:

$$C = \frac{1000 \times M \times DF}{U \times t}$$

where: C = concentration ($\mu\text{g}/\text{m}^3$)
M = mass (ng)
DF = dilution factor
t = sampling time (minutes)
U = compound specific uptake rate

^g = Uptake rate determined using Graham's Law of Diffusion.

Reference: Federal Register/Vol. 79, No. 125/June 30, 2014

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Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Method Detection and Reporting Limit Calculations (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial LOQ ng	C Calculated LOQ µg/m ³
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Lab ID: 0006841-01

Sample Name: Trip 1

Vinyl Chloride	10,185	1.00	0.810	10.0	1.21
1,1-Dichloroethene	10,185	1.00	0.330	10.0	2.98
Methylene Chloride	10,185	1.00	0.350 ^g	10.0	2.81
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,185	1.00	0.890 ^g	10.0	1.10
trans-1,2-Dichloroethene	10,185	1.00	0.440	10.0	2.23
Methyl-t-butyl ether	10,185	1.00	0.500 ^g	25.0	4.91
1,1-Dichloroethane	10,185	1.00	0.850	10.0	1.16
cis-1,2-Dichloroethene	10,185	1.00	0.530	10.0	1.85
Chloroform	10,185	1.00	0.350 ^g	10.0	2.81
1,2-Dichloroethane	10,185	1.00	0.560	10.0	1.75
1,1,1-Trichloroethane	10,185	1.00	1.050	10.0	0.94
Carbon Tetrachloride	10,185	1.00	0.430 ^g	10.0	2.28
Benzene	10,185	1.00	0.530	25.0	4.63
Trichloroethene	10,185	1.00	0.330	10.0	2.98
1,4-Dioxane	10,185	1.00	0.410 ^g	10.0	2.39
1,1,2-Trichloroethane	10,185	1.00	0.330 ^g	10.0	2.98
Toluene	10,185	1.00	0.400	25.0	6.14
1,2-Dibromoethane (EDB)	10,185	1.00	0.390 ^g	10.0	2.52
Tetrachloroethene	10,185	1.00	0.410	10.0	2.39
1,1,1,2-Tetrachloroethane	10,185	1.00	0.410 ^g	10.0	2.39
Chlorobenzene	10,185	1.00	0.850 ^g	10.0	1.16
Ethylbenzene	10,185	1.00	0.850	25.0	2.89
p & m-Xylene	10,185	1.00	0.880	25.0	2.79
o-Xylene	10,185	1.00	0.880	25.0	2.79
1,2,3-Trichloropropane	10,185	1.00	0.750 ^g	10.0	1.31
Isopropylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,3,5-Trimethylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,2,4-Trimethylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,3-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,4-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,2-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,2,4-Trichlorobenzene	10,185	1.00	0.390 ^g	10.0	2.52
Naphthalene	10,185	1.00	0.800 ^g	25.0	3.07
1,2,3-Trichlorobenzene	10,185	1.00	0.390 ^g	10.0	2.52
2-Methylnaphthalene	10,185	1.00	0.760 ^g	25.0	3.23
TPH C4-C9	10,185	1.00	0.590 ^g	5,000.0	982
TPH C10-C15	10,185	1.00	0.690 ^g	5,000.0	982

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Method Detection and Reporting Limit Calculations (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial LOQ ng	C Calculated LOQ µg/m ³
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Lab ID: 0006841-02

Sample Name: PSG-1

Vinyl Chloride	10,185	1.00	0.810	10.0	1.21
1,1-Dichloroethene	10,185	1.00	0.330	10.0	2.98
Methylene Chloride	10,185	1.00	0.350 ^g	10.0	2.81
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,185	1.00	0.890 ^g	10.0	1.10
trans-1,2-Dichloroethene	10,185	1.00	0.440	10.0	2.23
Methyl-t-butyl ether	10,185	1.00	0.500 ^g	25.0	4.91
1,1-Dichloroethane	10,185	1.00	0.850	10.0	1.16
cis-1,2-Dichloroethene	10,185	1.00	0.530	10.0	1.85
Chloroform	10,185	1.00	0.350 ^g	10.0	2.81
1,2-Dichloroethane	10,185	1.00	0.560	10.0	1.75
1,1,1-Trichloroethane	10,185	1.00	1.050	10.0	0.94
Carbon Tetrachloride	10,185	1.00	0.430 ^g	10.0	2.28
Benzene	10,185	1.00	0.530	25.0	4.63
Trichloroethene	10,185	1.00	0.330	10.0	2.98
1,4-Dioxane	10,185	1.00	0.410 ^g	10.0	2.39
1,1,2-Trichloroethane	10,185	1.00	0.330 ^g	10.0	2.98
Toluene	10,185	1.00	0.400	25.0	6.14
1,2-Dibromoethane (EDB)	10,185	1.00	0.390 ^g	10.0	2.52
Tetrachloroethene	10,185	1.00	0.410	10.0	2.39
1,1,1,2-Tetrachloroethane	10,185	1.00	0.410 ^g	10.0	2.39
Chlorobenzene	10,185	1.00	0.850 ^g	10.0	1.16
Ethylbenzene	10,185	1.00	0.850	25.0	2.89
p & m-Xylene	10,185	1.00	0.880	25.0	2.79
o-Xylene	10,185	1.00	0.880	25.0	2.79
1,2,3-Trichloropropane	10,185	1.00	0.750 ^g	10.0	1.31
Isopropylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,3,5-Trimethylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,2,4-Trimethylbenzene	10,185	1.00	0.830 ^g	25.0	2.96
1,3-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,4-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,2-Dichlorobenzene	10,185	1.00	0.750 ^g	10.0	1.31
1,2,4-Trichlorobenzene	10,185	1.00	0.390 ^g	10.0	2.52
Naphthalene	10,185	1.00	0.800 ^g	25.0	3.07
1,2,3-Trichlorobenzene	10,185	1.00	0.390 ^g	10.0	2.52
2-Methylnaphthalene	10,185	1.00	0.760 ^g	25.0	3.23
TPH C4-C9	10,185	1.00	0.590 ^g	5,000.0	982
TPH C10-C15	10,185	1.00	0.690 ^g	5,000.0	982

EA Engineering, Science, and Technology, Inc.
 320 Gold Avenue SW, Suite 1300
 Albuquerque, NM 87102

Site Name: 1710 Llano Street
 Site Location: Santa Fe, NM
 Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
 Lab Work Order: 0006841
 Reported: 03/08/2023

Method Detection and Reporting Limit Calculations (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial LOQ ng	C Calculated LOQ µg/m ³
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Lab ID: 0006841-03

Sample Name: PSG-2

Vinyl Chloride	10,160	1.00	0.810	10.0	1.22
1,1-Dichloroethene	10,160	1.00	0.330	10.0	2.98
Methylene Chloride	10,160	1.00	0.350 ^g	10.0	2.81
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,160	1.00	0.890 ^g	10.0	1.11
trans-1,2-Dichloroethene	10,160	1.00	0.440	10.0	2.24
Methyl-t-butyl ether	10,160	1.00	0.500 ^g	25.0	4.92
1,1-Dichloroethane	10,160	1.00	0.850	10.0	1.16
cis-1,2-Dichloroethene	10,160	1.00	0.530	10.0	1.86
Chloroform	10,160	1.00	0.350 ^g	10.0	2.81
1,2-Dichloroethane	10,160	1.00	0.560	10.0	1.76
1,1,1-Trichloroethane	10,160	1.00	1.050	10.0	0.94
Carbon Tetrachloride	10,160	1.00	0.430 ^g	10.0	2.29
Benzene	10,160	1.00	0.530	25.0	4.64
Trichloroethene	10,160	1.00	0.330	10.0	2.98
1,4-Dioxane	10,160	1.00	0.410 ^g	10.0	2.40
1,1,2-Trichloroethane	10,160	1.00	0.330 ^g	10.0	2.98
Toluene	10,160	1.00	0.400	25.0	6.15
1,2-Dibromoethane (EDB)	10,160	1.00	0.390 ^g	10.0	2.52
Tetrachloroethene	10,160	1.00	0.410	10.0	2.40
1,1,1,2-Tetrachloroethane	10,160	1.00	0.410 ^g	10.0	2.40
Chlorobenzene	10,160	1.00	0.850 ^g	10.0	1.16
Ethylbenzene	10,160	1.00	0.850	25.0	2.89
p & m-Xylene	10,160	1.00	0.880	25.0	2.80
o-Xylene	10,160	1.00	0.880	25.0	2.80
1,2,3-Trichloropropane	10,160	1.00	0.750 ^g	10.0	1.31
Isopropylbenzene	10,160	1.00	0.830 ^g	25.0	2.96
1,3,5-Trimethylbenzene	10,160	1.00	0.830 ^g	25.0	2.96
1,2,4-Trimethylbenzene	10,160	1.00	0.830 ^g	25.0	2.96
1,3-Dichlorobenzene	10,160	1.00	0.750 ^g	10.0	1.31
1,4-Dichlorobenzene	10,160	1.00	0.750 ^g	10.0	1.31
1,2-Dichlorobenzene	10,160	1.00	0.750 ^g	10.0	1.31
1,2,4-Trichlorobenzene	10,160	1.00	0.390 ^g	10.0	2.52
Naphthalene	10,160	1.00	0.800 ^g	25.0	3.08
1,2,3-Trichlorobenzene	10,160	1.00	0.390 ^g	10.0	2.52
2-Methylnaphthalene	10,160	1.00	0.760 ^g	25.0	3.24
TPH C4-C9	10,160	1.00	0.590 ^g	5,000.0	984
TPH C10-C15	10,160	1.00	0.690 ^g	5,000.0	984

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Method Detection and Reporting Limit Calculations (Concentration)

EPA 8260C

Analyte	t Sampling Time minutes	DF Dilution Factor	U Uptake Rate	M Initial LOQ ng	C Calculated LOQ µg/m ³
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Lab ID: 0006841-04

Sample Name: PSG-3

Vinyl Chloride	10,155	1.00	0.810	10.0	1.22
1,1-Dichloroethene	10,155	1.00	0.330	10.0	2.98
Methylene Chloride	10,155	1.00	0.350 ^g	10.0	2.81
1,1,2-Trichlorotrifluoroethane (Fr.113)	10,155	1.00	0.890 ^g	10.0	1.11
trans-1,2-Dichloroethene	10,155	1.00	0.440	10.0	2.24
Methyl-t-butyl ether	10,155	1.00	0.500 ^g	25.0	4.92
1,1-Dichloroethane	10,155	1.00	0.850	10.0	1.16
cis-1,2-Dichloroethene	10,155	1.00	0.530	10.0	1.86
Chloroform	10,155	1.00	0.350 ^g	10.0	2.81
1,2-Dichloroethane	10,155	1.00	0.560	10.0	1.76
1,1,1-Trichloroethane	10,155	1.00	1.050	10.0	0.94
Carbon Tetrachloride	10,155	1.00	0.430 ^g	10.0	2.29
Benzene	10,155	1.00	0.530	25.0	4.64
Trichloroethene	10,155	1.00	0.330	10.0	2.98
1,4-Dioxane	10,155	1.00	0.410 ^g	10.0	2.40
1,1,2-Trichloroethane	10,155	1.00	0.330 ^g	10.0	2.98
Toluene	10,155	1.00	0.400	25.0	6.15
1,2-Dibromoethane (EDB)	10,155	1.00	0.390 ^g	10.0	2.52
Tetrachloroethene	10,155	1.00	0.410	10.0	2.40
1,1,1,2-Tetrachloroethane	10,155	1.00	0.410 ^g	10.0	2.40
Chlorobenzene	10,155	1.00	0.850 ^g	10.0	1.16
Ethylbenzene	10,155	1.00	0.850	25.0	2.90
p & m-Xylene	10,155	1.00	0.880	25.0	2.80
o-Xylene	10,155	1.00	0.880	25.0	2.80
1,2,3-Trichloropropane	10,155	1.00	0.750 ^g	10.0	1.31
Isopropylbenzene	10,155	1.00	0.830 ^g	25.0	2.97
1,3,5-Trimethylbenzene	10,155	1.00	0.830 ^g	25.0	2.97
1,2,4-Trimethylbenzene	10,155	1.00	0.830 ^g	25.0	2.97
1,3-Dichlorobenzene	10,155	1.00	0.750 ^g	10.0	1.31
1,4-Dichlorobenzene	10,155	1.00	0.750 ^g	10.0	1.31
1,2-Dichlorobenzene	10,155	1.00	0.750 ^g	10.0	1.31
1,2,4-Trichlorobenzene	10,155	1.00	0.390 ^g	10.0	2.52
Naphthalene	10,155	1.00	0.800 ^g	25.0	3.08
1,2,3-Trichlorobenzene	10,155	1.00	0.390 ^g	10.0	2.52
2-Methylnaphthalene	10,155	1.00	0.760 ^g	25.0	3.24
TPH C4-C9	10,155	1.00	0.590 ^g	5,000.0	985
TPH C10-C15	10,155	1.00	0.690 ^g	5,000.0	985

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Laboratory Certification List

Certification ID	Certification No.	Description	Expires	Project Required
Alaska CS-LAP	19-002	Alaska Department of Environmental Conservation	12/30/2024	
DoD-ELAP	72690/L22-563	United States Department of Defense Environmental Laboratory Accreditation	11/30/2024	
ISO/IEC 17025:2017	72690/L22-563	General Requirements for the Competence of Testing and Calibration Laboratories	11/30/2024	
NEFAP	72690/L22-564	TNI National Environmental Field Activities Program (NEFAP)	11/30/2024	
NY-NELAC	12097	New York Department of Health	04/01/2023	
Utah-NELAC	MD010912022-12	Utah Department of Health	12/31/2023	

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
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Site Name: 1710 Llano Street
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Lab Work Order: 0006841
Reported: 03/08/2023

Qualifiers/Notes and Definitions

General Definitions:

DF	Dilution Factor
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
NA	Not Applicable
Q	Qualifier
RPD	Relative Percent Difference
RT	Retention Times in Minutes
RRT	Evaluation of Relative Retention Times in RRT Units (qualified if outside ± 0.06 control limits)
3σ	Uncertainty
∉	Compound not on scope of accreditation
+	values are outside method/contract required QC limits
Ø	Compound not on scope of accreditation and analyzed with a one-point calibration

EA Engineering, Science, and Technology, Inc.
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Site Name: 1710 Llano Street
Site Location: Santa Fe, NM
Project Manager: Elliott Andelman

Beacon Proposal: 230206R01
Lab Work Order: 0006841
Reported: 03/08/2023

Sample Management Records



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

December 05, 2022

E Andelman

EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL: (505) 224-9013
FAX:

RE: WIRTCO

OrderNo.: 2211D02

Dear E Andelman:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/22/2022 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 light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 84'-85'

Project: WIRTCO

Collection Date: 11/21/2022 3:00:00 PM

Lab ID: 2211D02-001

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Toluene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Ethylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Methyl tert-butyl ether (MTBE)	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2,4-Trimethylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,3,5-Trimethylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2-Dichloroethane (EDC)	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2-Dibromoethane (EDB)	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Naphthalene	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1-Methylnaphthalene	ND	0.16		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
2-Methylnaphthalene	ND	0.16		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Acetone	ND	0.58		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Bromobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Bromodichloromethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Bromoform	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Bromomethane	ND	0.12		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
2-Butanone	ND	0.39		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Carbon disulfide	ND	0.39		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Carbon tetrachloride	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Chlorobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Chloroethane	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Chloroform	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Chloromethane	ND	0.12		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
2-Chlorotoluene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
4-Chlorotoluene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
cis-1,2-DCE	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
cis-1,3-Dichloropropene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2-Dibromo-3-chloropropane	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Dibromochloromethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Dibromomethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2-Dichlorobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,3-Dichlorobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,4-Dichlorobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Dichlorodifluoromethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1-Dichloroethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1-Dichloroethene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2-Dichloropropane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,3-Dichloropropane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
2,2-Dichloropropane	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 84'-85'

Project: WIRTCO

Collection Date: 11/21/2022 3:00:00 PM

Lab ID: 2211D02-001

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Hexachlorobutadiene	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
2-Hexanone	ND	0.39		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Isopropylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
4-Isopropyltoluene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
4-Methyl-2-pentanone	ND	0.39		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Methylene chloride	ND	0.12		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
n-Butylbenzene	ND	0.12		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
n-Propylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
sec-Butylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Styrene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
tert-Butylbenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1,1,2-Tetrachloroethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1,2,2-Tetrachloroethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Tetrachloroethene (PCE)	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
trans-1,2-DCE	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
trans-1,3-Dichloropropene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2,3-Trichlorobenzene	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2,4-Trichlorobenzene	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1,1-Trichloroethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,1,2-Trichloroethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Trichloroethene (TCE)	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Trichlorofluoromethane	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
1,2,3-Trichloropropane	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Vinyl chloride	ND	0.039		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Xylenes, Total	ND	0.078		mg/Kg	1	11/30/2022 3:20:34 PM	S92928
Surr: Dibromofluoromethane	115	70-130		%Rec	1	11/30/2022 3:20:34 PM	S92928
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%Rec	1	11/30/2022 3:20:34 PM	S92928
Surr: Toluene-d8	114	70-130		%Rec	1	11/30/2022 3:20:34 PM	S92928
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	11/30/2022 3:20:34 PM	S92928

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 99'-100'

Project: WIRTCO

Collection Date: 11/21/2022 3:05:00 PM

Lab ID: 2211D02-002

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Toluene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Ethylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Methyl tert-butyl ether (MTBE)	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2,4-Trimethylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,3,5-Trimethylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2-Dichloroethane (EDC)	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2-Dibromoethane (EDB)	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Naphthalene	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1-Methylnaphthalene	ND	0.14		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
2-Methylnaphthalene	ND	0.14		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Acetone	ND	0.54		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Bromobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Bromodichloromethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Bromoform	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Bromomethane	ND	0.11		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
2-Butanone	ND	0.36		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Carbon disulfide	ND	0.36		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Carbon tetrachloride	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Chlorobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Chloroethane	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Chloroform	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Chloromethane	ND	0.11		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
2-Chlorotoluene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
4-Chlorotoluene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
cis-1,2-DCE	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
cis-1,3-Dichloropropene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2-Dibromo-3-chloropropane	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Dibromochloromethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Dibromomethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2-Dichlorobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,3-Dichlorobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,4-Dichlorobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Dichlorodifluoromethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1-Dichloroethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1-Dichloroethene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2-Dichloropropane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,3-Dichloropropane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
2,2-Dichloropropane	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 99'-100'

Project: WIRTCO

Collection Date: 11/21/2022 3:05:00 PM

Lab ID: 2211D02-002

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Hexachlorobutadiene	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
2-Hexanone	ND	0.36		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Isopropylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
4-Isopropyltoluene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
4-Methyl-2-pentanone	ND	0.36		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Methylene chloride	ND	0.11		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
n-Butylbenzene	ND	0.11		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
n-Propylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
sec-Butylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Styrene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
tert-Butylbenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1,1,2-Tetrachloroethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1,2,2-Tetrachloroethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Tetrachloroethene (PCE)	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
trans-1,2-DCE	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
trans-1,3-Dichloropropene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2,3-Trichlorobenzene	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2,4-Trichlorobenzene	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1,1-Trichloroethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,1,2-Trichloroethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Trichloroethene (TCE)	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Trichlorofluoromethane	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
1,2,3-Trichloropropane	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Vinyl chloride	ND	0.036		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Xylenes, Total	ND	0.072		mg/Kg	1	11/28/2022 7:02:48 PM	R92865
Surr: Dibromofluoromethane	119	70-130		%Rec	1	11/28/2022 7:02:48 PM	R92865
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	11/28/2022 7:02:48 PM	R92865
Surr: Toluene-d8	107	70-130		%Rec	1	11/28/2022 7:02:48 PM	R92865
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/28/2022 7:02:48 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 IDW

Project: WIRTCO

Collection Date: 11/21/2022 3:10:00 PM

Lab ID: 2211D02-003

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	0.017		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Toluene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Ethylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Methyl tert-butyl ether (MTBE)	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2,4-Trimethylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,3,5-Trimethylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2-Dichloroethane (EDC)	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2-Dibromoethane (EDB)	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Naphthalene	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1-Methylnaphthalene	ND	0.14		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
2-Methylnaphthalene	ND	0.14		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Acetone	ND	0.52		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Bromobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Bromodichloromethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Bromoform	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Bromomethane	ND	0.10		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
2-Butanone	ND	0.35		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Carbon disulfide	ND	0.35		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Carbon tetrachloride	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Chlorobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Chloroethane	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Chloroform	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Chloromethane	ND	0.10		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
2-Chlorotoluene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
4-Chlorotoluene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
cis-1,2-DCE	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
cis-1,3-Dichloropropene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2-Dibromo-3-chloropropane	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Dibromochloromethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Dibromomethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2-Dichlorobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,3-Dichlorobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,4-Dichlorobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Dichlorodifluoromethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1-Dichloroethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1-Dichloroethene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2-Dichloropropane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,3-Dichloropropane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
2,2-Dichloropropane	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: SB-1 IDW

Project: WIRTCO

Collection Date: 11/21/2022 3:10:00 PM

Lab ID: 2211D02-003

Matrix: MEOH (SOIL)

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Hexachlorobutadiene	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
2-Hexanone	ND	0.35		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Isopropylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
4-Isopropyltoluene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
4-Methyl-2-pentanone	ND	0.35		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Methylene chloride	ND	0.10		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
n-Butylbenzene	ND	0.10		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
n-Propylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
sec-Butylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Styrene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
tert-Butylbenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1,1,2-Tetrachloroethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1,2,2-Tetrachloroethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Tetrachloroethene (PCE)	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
trans-1,2-DCE	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
trans-1,3-Dichloropropene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2,3-Trichlorobenzene	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2,4-Trichlorobenzene	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1,1-Trichloroethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,1,2-Trichloroethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Trichloroethene (TCE)	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Trichlorofluoromethane	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
1,2,3-Trichloropropane	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Vinyl chloride	ND	0.035		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Xylenes, Total	ND	0.070		mg/Kg	1	11/28/2022 7:29:52 PM	R92865
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/28/2022 7:29:52 PM	R92865
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/28/2022 7:29:52 PM	R92865
Surr: Toluene-d8	110	70-130		%Rec	1	11/28/2022 7:29:52 PM	R92865
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	11/28/2022 7:29:52 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: MeOH Blank

Project: WIRTCO

Collection Date:

Lab ID: 2211D02-004

Matrix: MEOH BLAN

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Toluene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Ethylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Naphthalene	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1-Methylnaphthalene	ND	0.20		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
2-Methylnaphthalene	ND	0.20		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Acetone	ND	0.75		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Bromobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Bromodichloromethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Bromoform	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Bromomethane	ND	0.15		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
2-Butanone	ND	0.50		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Carbon disulfide	ND	0.50		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Carbon tetrachloride	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Chlorobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Chloroethane	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Chloroform	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Chloromethane	ND	0.15		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
2-Chlorotoluene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
4-Chlorotoluene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
cis-1,2-DCE	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Dibromochloromethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Dibromomethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1-Dichloroethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1-Dichloroethene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2-Dichloropropane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,3-Dichloropropane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
2,2-Dichloropropane	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2211D02

Date Reported: 12/5/2022

CLIENT: EA Engineering

Client Sample ID: MeOH Blank

Project: WIRTCO

Collection Date:

Lab ID: 2211D02-004

Matrix: MEOH BLAN

Received Date: 11/22/2022 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Hexachlorobutadiene	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
2-Hexanone	ND	0.50		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Isopropylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
4-Isopropyltoluene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Methylene chloride	ND	0.15		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
n-Butylbenzene	ND	0.15		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
n-Propylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
sec-Butylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Styrene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
tert-Butylbenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
trans-1,2-DCE	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Trichlorofluoromethane	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Vinyl chloride	ND	0.050		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Xylenes, Total	ND	0.10		mg/Kg	1	11/28/2022 7:56:57 PM	R92865
Surr: Dibromofluoromethane	122	70-130		%Rec	1	11/28/2022 7:56:57 PM	R92865
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	11/28/2022 7:56:57 PM	R92865
Surr: Toluene-d8	106	70-130		%Rec	1	11/28/2022 7:56:57 PM	R92865
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	11/28/2022 7:56:57 PM	R92865

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles							
Client ID: LCSS	Batch ID: R92865		RunNo: 92865							
Prep Date:	Analysis Date: 11/28/2022		SeqNo: 3343131		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	70	130			
Toluene	1.0	0.050	1.000	0	101	70	130			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.87	0.050	1.000	0	87.2	70	130			
Trichloroethene (TCE)	0.98	0.050	1.000	0	97.8	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.9	70	130			
Surr: Toluene-d8	0.49		0.5000		97.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.9	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles							
Client ID: PBS	Batch ID: R92865		RunNo: 92865							
Prep Date:	Analysis Date: 11/28/2022		SeqNo: 3343147		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles						
Client ID: PBS	Batch ID: R92865			RunNo: 92865						
Prep Date:	Analysis Date: 11/28/2022			SeqNo: 3343147		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles						
Client ID: PBS	Batch ID: R92865			RunNo: 92865						
Prep Date:	Analysis Date: 11/28/2022			SeqNo: 3343147		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.8	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			

Sample ID: 100ng lcs4	SampType: LCS4			TestCode: EPA Method 8260B: Volatiles						
Client ID: BatchQC	Batch ID: S92928			RunNo: 92928						
Prep Date:	Analysis Date: 11/30/2022			SeqNo: 3346156		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	117	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.0	0.050	1.000	0	103	70	130			
Methyl tert-butyl ether (MTBE)	2.2	0.050	2.000	0	111	70	130			
1,2,4-Trimethylbenzene	1.1	0.050	1.000	0	107	70	130			
1,3,5-Trimethylbenzene	1.0	0.050	1.000	0	104	70	130			
1,2-Dichloroethane (EDC)	1.0	0.050	1.000	0	101	70	130			
1,2-Dibromoethane (EDB)	0.99	0.050	1.000	0	98.6	70	130			
Naphthalene	0.96	0.10	1.000	0	95.7	70	130			
1-Methylnaphthalene	1.1	0.20	1.000	0	106	70	130			
2-Methylnaphthalene	1.0	0.20	1.000	0	101	70	130			
Acetone	2.0	0.75	2.000	0	101	70	130			
Bromobenzene	1.1	0.050	1.000	0	114	70	130			
Bromodichloromethane	1.0	0.050	1.000	0	103	70	130			
Bromoform	1.2	0.050	1.000	0	122	70	130			
Bromomethane	0.99	0.15	1.000	0	98.7	70	130			
2-Butanone	2.5	0.50	2.000	0	126	70	130			
Carbon disulfide	1.8	0.50	2.000	0	88.2	70	130			
Carbon tetrachloride	1.1	0.050	1.000	0	114	70	130			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
Chloroethane	1.0	0.10	1.000	0	103	70	130			
Chloroform	1.2	0.050	1.000	0	117	70	130			
Chloromethane	0.73	0.15	1.000	0	73.5	70	130			
2-Chlorotoluene	1.0	0.050	1.000	0	103	70	130			
4-Chlorotoluene	1.0	0.050	1.000	0	103	70	130			
cis-1,2-DCE	0.98	0.050	1.000	0	98.3	70	130			
cis-1,3-Dichloropropene	1.0	0.050	1.000	0	100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: 100ng lcs4	SampType: LCS4			TestCode: EPA Method 8260B: Volatiles						
Client ID: BatchQC	Batch ID: S92928			RunNo: 92928						
Prep Date:	Analysis Date: 11/30/2022			SeqNo: 3346156		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	1.1	0.10	1.000	0	108	70	130			
Dibromochloromethane	1.1	0.050	1.000	0	106	70	130			
Dibromomethane	0.98	0.050	1.000	0	98.4	70	130			
1,2-Dichlorobenzene	1.0	0.050	1.000	0	103	70	130			
1,3-Dichlorobenzene	1.1	0.050	1.000	0	105	70	130			
1,4-Dichlorobenzene	0.98	0.050	1.000	0	98.2	70	130			
Dichlorodifluoromethane	1.2	0.050	1.000	0	119	70	130			
1,1-Dichloroethane	1.1	0.050	1.000	0	110	70	130			
1,1-Dichloroethene	1.0	0.050	1.000	0	105	70	130			
1,2-Dichloropropane	1.0	0.050	1.000	0	102	70	130			
1,3-Dichloropropane	1.1	0.050	1.000	0	105	70	130			
2,2-Dichloropropane	1.2	0.10	1.000	0	120	70	130			
1,1-Dichloropropene	1.1	0.10	1.000	0	111	70	130			
Hexachlorobutadiene	1.0	0.10	1.000	0	101	70	130			
2-Hexanone	2.2	0.50	2.000	0	109	70	130			
Isopropylbenzene	1.0	0.050	1.000	0	102	70	130			
4-Isopropyltoluene	1.0	0.050	1.000	0	104	70	130			
4-Methyl-2-pentanone	2.1	0.50	2.000	0	105	70	130			
Methylene chloride	1.1	0.15	1.000	0	112	70	130			
n-Butylbenzene	0.96	0.15	1.000	0	96.1	70	130			
n-Propylbenzene	1.0	0.050	1.000	0	104	70	130			
sec-Butylbenzene	1.0	0.050	1.000	0	103	70	130			
Styrene	0.96	0.050	1.000	0	96.1	70	130			
tert-Butylbenzene	1.0	0.050	1.000	0	104	70	130			
1,1,1,2-Tetrachloroethane	0.99	0.050	1.000	0	99.4	70	130			
1,1,2,2-Tetrachloroethane	1.1	0.050	1.000	0	113	70	130			
Tetrachloroethene (PCE)	1.1	0.050	1.000	0	106	70	130			
trans-1,2-DCE	1.1	0.050	1.000	0	114	70	130			
trans-1,3-Dichloropropene	1.1	0.050	1.000	0	105	70	130			
1,2,3-Trichlorobenzene	1.0	0.10	1.000	0	104	70	130			
1,2,4-Trichlorobenzene	1.0	0.050	1.000	0	101	70	130			
1,1,1-Trichloroethane	1.1	0.050	1.000	0	112	70	130			
1,1,2-Trichloroethane	1.0	0.050	1.000	0	105	70	130			
Trichloroethene (TCE)	1.1	0.050	1.000	0	115	70	130			
Trichlorofluoromethane	1.1	0.050	1.000	0	108	70	130			
1,2,3-Trichloropropane	1.2	0.10	1.000	0	116	70	130			
Vinyl chloride	1.0	0.050	1.000	0	102	70	130			
Xylenes, Total	3.0	0.10	3.000	0	98.7	70	130			
Surr: Dibromofluoromethane	0.58		0.5000		116	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: 100ng lcs4	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles								
Client ID: BatchQC	Batch ID: S92928	RunNo: 92928								
Prep Date:	Analysis Date: 11/30/2022	SeqNo: 3346156	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.5	70	130			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles								
Client ID: PBS	Batch ID: S92928	RunNo: 92928								
Prep Date:	Analysis Date: 11/30/2022	SeqNo: 3346163	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211D02

05-Dec-22

Client: EA Engineering

Project: WIRTCO

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles						
Client ID: PBS	Batch ID: S92928			RunNo: 92928						
Prep Date:	Analysis Date: 11/30/2022			SeqNo: 3346163	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.9	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		107	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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
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: EA Engineering

Work Order Number: 2211D02

RcptNo: 1

Received By: Juan Rojas

11/22/2022 3:15:00 PM

Juan Rojas

Completed By: Isaiah Ortiz

11/22/2022 4:30:16 PM

I-Ortiz

Reviewed By: *JR 11-23-22*

Chain of Custody

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

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. 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: *muh 3/22*

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	1.9	Good	Not Present			



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

December 30, 2022

E Andelman

EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL: (505) 224-9013
FAX:

RE: WIRTCO

OrderNo.: 2212852

Dear E Andelman:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/14/2022 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 light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-1

Project: WIRTCO

Collection Date: 12/14/2022 9:35:00 AM

Lab ID: 2212852-001

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Toluene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Ethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Naphthalene	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
1-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:05:00 PM	R93544
2-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:05:00 PM	R93544
Acetone	ND	1.0		µg/L	1	12/27/2022 3:05:00 PM	R93544
Bromobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Bromodichloromethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Bromoform	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Bromomethane	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
2-Butanone	ND	1.0		µg/L	1	12/27/2022 3:05:00 PM	R93544
Carbon disulfide	ND	1.0		µg/L	1	12/27/2022 3:05:00 PM	R93544
Carbon tetrachloride	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Chlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Chloroethane	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
Chloroform	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Chloromethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
2-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
4-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
cis-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
Dibromochloromethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Dibromomethane	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1-Dichloroethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1-Dichloroethene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,3-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
2,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-1

Project: WIRTCO

Collection Date: 12/14/2022 9:35:00 AM

Lab ID: 2212852-001

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,1-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Hexachlorobutadiene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
2-Hexanone	ND	1.0		µg/L	1	12/27/2022 3:05:00 PM	R93544
Isopropylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
4-Isopropyltoluene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/27/2022 3:05:00 PM	R93544
Methylene chloride	ND	0.30		µg/L	1	12/27/2022 3:05:00 PM	R93544
n-Butylbenzene	ND	0.30		µg/L	1	12/27/2022 3:05:00 PM	R93544
n-Propylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
sec-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Styrene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
tert-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Tetrachloroethene (PCE)	3.1	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
trans-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Trichlorofluoromethane	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/27/2022 3:05:00 PM	R93544
Vinyl chloride	ND	0.10		µg/L	1	12/27/2022 3:05:00 PM	R93544
Xylenes, Total	ND	0.15		µg/L	1	12/27/2022 3:05:00 PM	R93544
Surr: Dibromofluoromethane	108	70-130		%Rec	1	12/27/2022 3:05:00 PM	R93544
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	12/27/2022 3:05:00 PM	R93544
Surr: Toluene-d8	108	70-130		%Rec	1	12/27/2022 3:05:00 PM	R93544
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	12/27/2022 3:05:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-2

Project: WIRTCO

Collection Date: 12/14/2022 9:45:00 AM

Lab ID: 2212852-002

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Toluene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Ethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Naphthalene	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
1-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:28:00 PM	R93544
2-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:28:00 PM	R93544
Acetone	ND	1.0		µg/L	1	12/27/2022 3:28:00 PM	R93544
Bromobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Bromodichloromethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Bromoform	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Bromomethane	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
2-Butanone	ND	1.0		µg/L	1	12/27/2022 3:28:00 PM	R93544
Carbon disulfide	ND	1.0		µg/L	1	12/27/2022 3:28:00 PM	R93544
Carbon tetrachloride	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Chlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Chloroethane	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
Chloroform	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Chloromethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
2-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
4-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
cis-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
Dibromochloromethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Dibromomethane	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1-Dichloroethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1-Dichloroethene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,3-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
2,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-2

Project: WIRTCO

Collection Date: 12/14/2022 9:45:00 AM

Lab ID: 2212852-002

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,1-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Hexachlorobutadiene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
2-Hexanone	ND	1.0		µg/L	1	12/27/2022 3:28:00 PM	R93544
Isopropylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
4-Isopropyltoluene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/27/2022 3:28:00 PM	R93544
Methylene chloride	ND	0.30		µg/L	1	12/27/2022 3:28:00 PM	R93544
n-Butylbenzene	ND	0.30		µg/L	1	12/27/2022 3:28:00 PM	R93544
n-Propylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
sec-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Styrene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
tert-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Tetrachloroethene (PCE)	7.5	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
trans-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Trichlorofluoromethane	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/27/2022 3:28:00 PM	R93544
Vinyl chloride	ND	0.10		µg/L	1	12/27/2022 3:28:00 PM	R93544
Xylenes, Total	ND	0.15		µg/L	1	12/27/2022 3:28:00 PM	R93544
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/27/2022 3:28:00 PM	R93544
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	12/27/2022 3:28:00 PM	R93544
Surr: Toluene-d8	94.3	70-130		%Rec	1	12/27/2022 3:28:00 PM	R93544
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/27/2022 3:28:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-3

Project: WIRTCO

Collection Date: 12/14/2022 9:55:00 AM

Lab ID: 2212852-003

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Toluene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Ethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Naphthalene	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
1-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:51:00 PM	R93544
2-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 3:51:00 PM	R93544
Acetone	ND	1.0		µg/L	1	12/27/2022 3:51:00 PM	R93544
Bromobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Bromodichloromethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Bromoform	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Bromomethane	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
2-Butanone	ND	1.0		µg/L	1	12/27/2022 3:51:00 PM	R93544
Carbon disulfide	ND	1.0		µg/L	1	12/27/2022 3:51:00 PM	R93544
Carbon tetrachloride	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Chlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Chloroethane	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
Chloroform	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Chloromethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
2-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
4-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
cis-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
Dibromochloromethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Dibromomethane	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1-Dichloroethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1-Dichloroethene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,3-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
2,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-3

Project: WIRTCO

Collection Date: 12/14/2022 9:55:00 AM

Lab ID: 2212852-003

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,1-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Hexachlorobutadiene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
2-Hexanone	ND	1.0		µg/L	1	12/27/2022 3:51:00 PM	R93544
Isopropylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
4-Isopropyltoluene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/27/2022 3:51:00 PM	R93544
Methylene chloride	ND	0.30		µg/L	1	12/27/2022 3:51:00 PM	R93544
n-Butylbenzene	ND	0.30		µg/L	1	12/27/2022 3:51:00 PM	R93544
n-Propylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
sec-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Styrene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
tert-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Tetrachloroethene (PCE)	2.5	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
trans-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Trichlorofluoromethane	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/27/2022 3:51:00 PM	R93544
Vinyl chloride	ND	0.10		µg/L	1	12/27/2022 3:51:00 PM	R93544
Xylenes, Total	ND	0.15		µg/L	1	12/27/2022 3:51:00 PM	R93544
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	12/27/2022 3:51:00 PM	R93544
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%Rec	1	12/27/2022 3:51:00 PM	R93544
Surr: Toluene-d8	98.3	70-130		%Rec	1	12/27/2022 3:51:00 PM	R93544
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/27/2022 3:51:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-4

Project: WIRTCO

Collection Date: 12/14/2022 10:05:00 AM

Lab ID: 2212852-004

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Toluene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Ethylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Methyl tert-butyl ether (MTBE)	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2,4-Trimethylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,3,5-Trimethylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2-Dichloroethane (EDC)	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2-Dibromoethane (EDB)	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Naphthalene	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1-Methylnaphthalene	ND	2.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
2-Methylnaphthalene	ND	2.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Acetone	ND	5.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Bromobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Bromodichloromethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Bromoform	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Bromomethane	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
2-Butanone	ND	5.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Carbon disulfide	ND	5.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Carbon tetrachloride	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Chlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Chloroethane	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Chloroform	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Chloromethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
2-Chlorotoluene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
4-Chlorotoluene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
cis-1,2-DCE	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
cis-1,3-Dichloropropene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2-Dibromo-3-chloropropane	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Dibromochloromethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Dibromomethane	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2-Dichlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,3-Dichlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,4-Dichlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Dichlorodifluoromethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1-Dichloroethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1-Dichloroethene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2-Dichloropropane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,3-Dichloropropane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
2,2-Dichloropropane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2212852

Date Reported: 12/30/2022

CLIENT: EA Engineering

Client Sample ID: SVE-4

Project: WIRTCO

Collection Date: 12/14/2022 10:05:00 AM

Lab ID: 2212852-004

Matrix: AIR

Received Date: 12/14/2022 11:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
1,1-Dichloropropene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Hexachlorobutadiene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
2-Hexanone	ND	5.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Isopropylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
4-Isopropyltoluene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
4-Methyl-2-pentanone	ND	5.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Methylene chloride	ND	1.5	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
n-Butylbenzene	ND	1.5	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
n-Propylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
sec-Butylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Styrene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
tert-Butylbenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1,1,2-Tetrachloroethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1,2,2-Tetrachloroethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Tetrachloroethene (PCE)	1.3	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
trans-1,2-DCE	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
trans-1,3-Dichloropropene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2,3-Trichlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2,4-Trichlorobenzene	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1,1-Trichloroethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,1,2-Trichloroethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Trichloroethene (TCE)	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Trichlorofluoromethane	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
1,2,3-Trichloropropane	ND	1.0	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Vinyl chloride	ND	0.50	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Xylenes, Total	ND	0.75	D	µg/L	5	12/27/2022 4:14:00 PM	R93544
Surr: Dibromofluoromethane	99.4	70-130	D	%Rec	5	12/27/2022 4:14:00 PM	R93544
Surr: 1,2-Dichloroethane-d4	93.9	70-130	D	%Rec	5	12/27/2022 4:14:00 PM	R93544
Surr: Toluene-d8	101	70-130	D	%Rec	5	12/27/2022 4:14:00 PM	R93544
Surr: 4-Bromofluorobenzene	103	70-130	D	%Rec	5	12/27/2022 4:14:00 PM	R93544

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		



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: EA Engineering

Work Order Number: 2212852

RcptNo: 1

Received By: Kasandra Jimena Garcia 12/14/2022 11:24:00 AM

Completed By: Sean Livingston 12/14/2022 12:08:53 PM

Reviewed By: *cm* 12/14/22

HL
Sean Livingston

Chain of Custody

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

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. 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: *KPG 12-14-22*

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	NA	Good				

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

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

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

CALCULATION A

CALCULATION A

Calculation of Soil Concentration Derived from Soil Gas Concentration Through Pore Water

Partitioning

1710 Llano Street

Santa Fe, New Mexico

Reference:

New Mexico Environment Department. Risk Assessment Guidance for Site Investigations and Remediation, Volume I, Soil Screening Guidance for Human Health Risk Assessments. June 2022.

Calculation of Soil Gas Concentration Partitioned to Pore Water Concentration:

$$C_{pw} = \frac{C_{sg}}{HLC}$$

Input Data:

C_{pw} =	Concentration of pore water (µg/L)	10.3
C_{sg} =	Concentration soil gas (ug/L)	7.5
HLC =	Henry's Law Constant (unitless)	0.726

Calculations:

C_{sg}/HLC	=	10.3306 ug/L
C_{pw}	=	10.3 µg/L

Derivation of the Soil Concentration:

$$C_{soil} = C_{pw}/\rho_b [K_d \rho_b + \Theta_w + HLC \Theta_a]$$

Input Data:

C_{soil} =	Soil concentration (µg/kg)	
C_{pw} =	Concentration of pore water (mg/L)	10.3
ρ_b =	Dry bulk density (kg/L)	1.5
K_d =	Soil-water partition coefficient (L/kg; $K_{oc} \times f_{oc}$)	0.142
Θ_w =	Water-filled soil porosity (Lwater/Lsoil)	0.26
HLC =	Henry's Law Constant (unitless)	0.726
Θ_a =	Air-filled soil porosity (n- θ_w), (Lair/Lsoil)	0.17

Calculations:

C_{soil}	=	=(10.3/1.5)[(0.142*1.5)+0.26+(0.726*0.17)]
	=	4.1075758 µg/kg
	=	4.11E-03 mg/kg



EA Engineering, Science, & Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102
Phone: (505) 224-9013

September 13, 2023

Mr. Paul Chamberlain
NMED GWQB
1190 St. Francis Drive
Santa Fe, New Mexico 87502

VIA E-MAIL

**RE: SOIL VAPOR EXTRACTION SYSTEM INSTALLATION REPORT,
1710 LLANO STREET, SANTA FE, NEW MEXICO**

Dear Mr. Chamberlain:

On behalf of Wirtco, Inc., EA Engineering, Science, and Technology, Inc. (EA) is submitting this soil vapor extraction (SVE) system installation report for the facility located at 1710 Llano Street, Santa Fe, New Mexico (Figure 1). This report documents the SVE system installation and operation and maintenance (O&M) event in support of the Corrective Action as described in 20.6.2.1203.A.5. New Mexico Administrative Code (NMAC).

Corrective Actions Completed to Date

The scope of work for corrective actions has been completed follows:

- In January 2022, EA submitted the Vapor Intrusion Assessment Report, which documents the industrial/commercial vapor intrusion (VI) assessment conducted in response to the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) letter dated August 17, 2021.
- In November 2022, EA installed four nested SVE ports with screens completed throughout the vadose zone, just south of the building (SVE-1 through SVE-4). The installation is documented in the *SVE Well Installation and Sampling Report* dated March 21, 2023.
- In August 2023, EA installed a SVE system at the site with a blower plumbed to the newly installed, nested SVE ports, SVE-1 through SVE-4, and performed baseline O&M of the SVE system.

Soil Vapor Extraction System Installation

August 10 through August 18, 2023, EA installed an SVE system at the site. The system consisted of a blower plumbed to four system legs, SVE-1 through SVE-4. The system legs were plumbed to the blower through a manifold with sample ports and flow meters on each leg

(Figure 2). Photographic documentation of the SVE system installation is included in Appendix A.

Soil Vapor Extraction System Operation & Maintenance

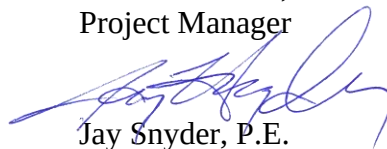
On August 14, 2023, the SVE system at the site was turned on, and on August 18, 2023, baseline O&M was conducted at the site. O&M activities include draining the moisture knockout pot and collecting photoionization detector (PID) measurements and flow measurements from each system leg, including the total system influent. Also, an influent soil vapor sample was collected during the August 25th O&M utilizing a Tedlar bag and analyzed for chlorinated solvents by EPA Method 8260B to establish a correlation between PID measurements and tetrachloroethene (PCE) and trichloroethene (TCE) concentrations. PCE was the only detected compound at a concentration of 8.6 µg/L. The system O&M forms are included in Appendix B, and the laboratory report is included as Appendix C.

Please let us know if you have any questions regarding the information provided in this addendum.

Sincerely,



David L. Werth, P.G.
Project Manager



Jay Snyder, P.E.
Senior Hydrogeologist

Figure
Appendices

Cc: Jana M. Janssen, Wirtco, Inc.
Forrest R. Thomas, Thomas Properties-NM LLC
File

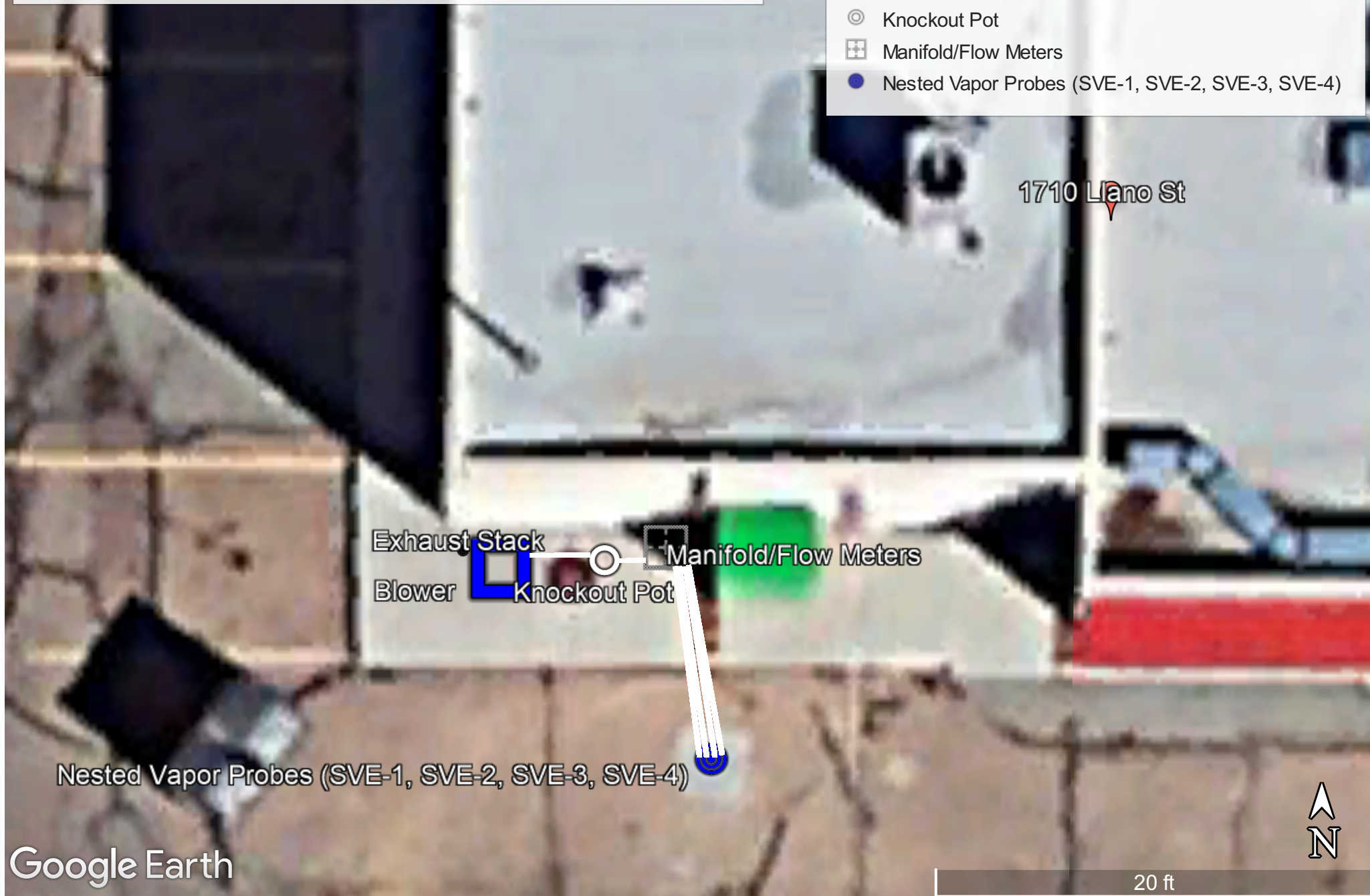
FIGURE

Soil Vapor Extraction System As Built Diagram

Figure 1
1710 Llano Street
Santa Fe, New Mexico

Legend

- 1710 Llano St
- Blower
- Exhaust Stack
- Knockout Pot
- Manifold/Flow Meters
- Nested Vapor Probes (SVE-1, SVE-2, SVE-3, SVE-4)



APPENDIX A PHOTOGRAPHIC DOCUMENTATION



Description: SVE wells plumbed to manifold, knockout pot, and blower.

Direction: NNW



Description: Inside blower box.

Direction: N



Description: SVE system enclosed in fence.

Direction: NW



Description: Completed surface completion of nested SVE wells, SVE-1 through SVE-4.

Direction: Down

APPENDIX B O&M FORMS

LLANO STREET SVE O&M FIELD DATA COLLECTION FORM

Date: 8-16-2023 Personnel: D. O'Brien

SVE Chemical & Physical Data:

Sample ID	Time:	PID:	Flowrate (scfm):	Well Head Pressure (IWC):	Lab Sample Collected (Y/N):	Notes:
SVE-1 (Deep)	0948	2.8	6	9.7	N	
SVE-2 (Intermediate Deep)	0950	18.7	6	9.7		
SVE-3 (Intermediate Shallow)	0952	129.1	0	9.6		
SVE-4 (Shallow)	0954	43.9	3	9.7		
SVE Influent			✓		✓	

Knock Out Water Level: ☒ E 1/4 1/2 3/4 F

Knock Out Drained (Y/N): ☒ N

Notes: Casings Labeled after wells gauged

LLANO STREET SVE O&M FIELD DATA COLLECTION FORM

Date: 8-22-2023

Personnel: D. OBrien

SVE Chemical & Physical Data:

Sample ID	Time:	PID:	Flowrate (scfm):	Well Head Pressure (IWC):	Lab Sample Collected (Y/N):	Notes:
SVE-1 (Deep)	1203	1.0	5.5	8.1	Y	
SVE-2 (Intermediate Deep)	1205	5.3	5	8.0		
SVE-3 (Intermediate Shallow)	1207	3.8	0	8.0		
SVE-4 (Shallow)	1210	2.6	5.5	7.9		
SVE Influent	1213	0.5	-	8.7	Y	

Knock Out Water Level: (E) 1/4 1/2 3/4 F

Knock Out Drained (Y/N) (Y)

Notes: System running on arrival

LLANO STREET SVE O&M FIELD DATA COLLECTION FORM

Date: 8-25-2023

Personnel: D. Ortiz

SVE Chemical & Physical Data:

Sample ID	Time:	PID:	Flowrate (scfm):	Well Head Pressure (IWC):	Lab Sample Collected (Y/N):	Notes:
SVE-1 (Deep)	0945	2.0	5	8.3	Y	reduced to 1 cfm
SVE-2 (Intermediate Deep)	0947	2.1	5	8.3		reduced to 1 cfm
SVE-3 (Intermediate Shallow)	0950	1.1	0	8.1		Gauge is functional no flow
SVE-4 (Shallow)	0952	0.0	5	8.2		
SVE Influent	0954	2.8	—	6.3	↓	

Knock Out Water Level: ☒ E 1/4 1/2 3/4 F Knock Out Drained (Y/N): ☒ Y

Notes: effluent sample collected

LLANO STREET SVE O&M FIELD DATA COLLECTION FORM

Date: 9-7-2023 Personnel: D. Oberer

SVE Chemical & Physical Data:

Sample ID	Time:	PID:	Flowrate (scfm):	Well Head Pressure (IWC):	Lab Sample Collected (Y/N):	Notes:
SVE-1 (Deep)	0934	1.2	2	16.4	N	
SVE-2 (Intermediate Deep)	0937	1.3	2	16.2		
SVE-3 (Intermediate Shallow)	0940	1.6	0	16.1		
SVE-4 (Shallow)	0944	1.0	8	15.9		
SVE Influent	0950	0.6	-	16.7	✓	

Knock Out Water Level: (E) 1/4 1/2 3/4 F Knock Out Drained (Y/N) (N)

Notes: System running on arrival - No issues

APPENDIX C LABORATORY REPORT



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

September 02, 2023

David Werth

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL: (505) 224-9013

FAX:

RE: Llano St

OrderNo.: 2308E31

Dear David Werth:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/25/2023 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 light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2308E31

Date Reported: 9/2/2023

CLIENT: EA Engineering

Client Sample ID: Llano St Effluent

Project: Llano St

Collection Date: 8/25/2023 9:44:00 AM

Lab ID: 2308E31-001

Matrix: AIR

Received Date: 8/25/2023 10:44:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: CCM	
Benzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Toluene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Ethylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Naphthalene	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
1-Methylnaphthalene	ND	0.40		µg/L	1	8/30/2023 5:27:00 PM	R99345
2-Methylnaphthalene	ND	0.40		µg/L	1	8/30/2023 5:27:00 PM	R99345
Acetone	ND	1.0		µg/L	1	8/30/2023 5:27:00 PM	R99345
Bromobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Bromodichloromethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Bromoform	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Bromomethane	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
2-Butanone	ND	1.0		µg/L	1	8/30/2023 5:27:00 PM	R99345
Carbon disulfide	ND	1.0		µg/L	1	8/30/2023 5:27:00 PM	R99345
Carbon tetrachloride	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Chlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Chloroethane	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
Chloroform	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Chloromethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
2-Chlorotoluene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
4-Chlorotoluene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
cis-1,2-DCE	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
Dibromochloromethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Dibromomethane	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2-Dichlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,3-Dichlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,4-Dichlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Dichlorodifluoromethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1-Dichloroethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1-Dichloroethene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2-Dichloropropane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,3-Dichloropropane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
2,2-Dichloropropane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2308E31

Date Reported: 9/2/2023

CLIENT: EA Engineering

Client Sample ID: Llano St Effluent

Project: Llano St

Collection Date: 8/25/2023 9:44:00 AM

Lab ID: 2308E31-001

Matrix: AIR

Received Date: 8/25/2023 10:44:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: CCM	
1,1-Dichloropropene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Hexachlorobutadiene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
2-Hexanone	ND	1.0		µg/L	1	8/30/2023 5:27:00 PM	R99345
Isopropylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
4-Isopropyltoluene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
4-Methyl-2-pentanone	ND	1.0		µg/L	1	8/30/2023 5:27:00 PM	R99345
Methylene chloride	ND	0.30		µg/L	1	8/30/2023 5:27:00 PM	R99345
n-Butylbenzene	ND	0.30		µg/L	1	8/30/2023 5:27:00 PM	R99345
n-Propylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
sec-Butylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Styrene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
tert-Butylbenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Tetrachloroethene (PCE)	8.6	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
trans-1,2-DCE	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1,1-Trichloroethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,1,2-Trichloroethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Trichloroethene (TCE)	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Trichlorofluoromethane	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
1,2,3-Trichloropropane	ND	0.20		µg/L	1	8/30/2023 5:27:00 PM	R99345
Vinyl chloride	ND	0.10		µg/L	1	8/30/2023 5:27:00 PM	R99345
Xylenes, Total	ND	0.15		µg/L	1	8/30/2023 5:27:00 PM	R99345
Surr: Dibromofluoromethane	114	70-130		%Rec	1	8/30/2023 5:27:00 PM	R99345
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	8/30/2023 5:27:00 PM	R99345
Surr: Toluene-d8	96.0	70-130		%Rec	1	8/30/2023 5:27:00 PM	R99345
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	8/30/2023 5:27:00 PM	R99345

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

Sample Log-In Check List

Client Name: EA Engineering

Work Order Number: 2308E31

RcptNo: 1

Received By: Joseph Alderette 8/25/2023 10:44:00 AM

Completed By: Desiree Dominguez 8/25/2023 11:54:22 AM

Reviewed By: *JD* 8-25-23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☒
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☒
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly 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? 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: *JD 8/25/23*

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Not Present	NA		

ATTACHMENT 3
PHASE I ENVIRONMENTAL SITE ASSESSMENT
REPORT