From:
 Gonzales, Clair

 To:
 Yu, Olivia, EMNRD

 Cc:
 Kory Morgan; Tayarez, Ike

Subject: Forge Energy Schubert 18-4 - Remediation Notification - 1RP-4478 & 1RP-4479

Date: Monday, June 12, 2017 1:57:22 PM

Attachments: RE Forge Energy - Schubert 18-4H Work Plan - Approval Request - 1 RP 4478 and 1 RP 4479.msg

2017-05-25_Scubert 18-4H_Report-554078_ver_1_000.pdf

Schubert 18-4H_Analysis Table 1.pdf

Good Afternoon,

Forge Energy is scheduled to implement the soil remediation for the site listed below, as is detailed in the submitted work plan, on Wednesday, June 14, 2017.

Forge Energy – Schubert 18-4H

1RP-4478 and 1RP-4479

Unit O, Section 18, Township 19S, Range 39E

Lea County, New Mexico

As was requested by the NMOCD, the areas of auger holes (AH-2, AH-5, AH-10, AH-11, and AH-15) were sampled using a backhoe to attain deeper depths for vertical delineation. Samples were collected at 5.0' and 8.0' below surface and were submitted to Xenco Laboratories for chloride analysis. I have attached the laboratory report, as well as an analysis table summarizing the results. Referring to the table, none of the samples collected at 5.0' and 8.0' below surface in the areas of auger holes (AH-2, AH-5, AH-10, AH-11, and AH-15) showed chloride concentrations above the recommended 250 mg/kg threshold.

Once the remediation activities are completed a closure report will be prepared and submitted. Let me know if you have any questions or concerns.

Thank you,

Clair Gonzales

Clair Gonzales | Geologist III

Phone: 432.687.8123 | Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

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4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com

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Table 1
Forge Energy
Schubert 18-4H
Lea County, New Mexico

| | | Sample | BEB | Soil | Status | | TPH (mg/l | (g) | Benzene | Toluene | Ethlybenzene | Xylene | Total | Chloride |
|-----------|-------------|------------|----------------------|---------|---------|-------|-----------|-------|----------|----------|--------------|----------|-----------------|----------|
| Sample ID | Sample Date | Depth (ft) | Sample Depth (ft) | In-Situ | Removed | GRO | DRO | Total | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | BTEX (mg/kg) | (mg/kg) |
| AH-1 | 10/27/2016 | 0-1 | - | Χ | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 158 |
| | п | 1-1.5 | | Χ | | - | - | - | - | - | - | - | - | 5.83 |
| | " | 2-2.5 | - | Χ | | - | - | - | - | - | - | - | - | 8.18 |
| AH-2 | 10/27/2016 | 0-1 | - | Х | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00198 | <0.00198 | <0.00198 | <0.00149 | 1,730 |
| | " | 1-1.5 | - | Χ | | - | - | - | - | - | - | - | - | 9.88 |
| | " | 2-2.5 | - | Χ | | - | - | - | - | - | - | - | - | 14.7 |
| | 11/14/2016 | 0-1 | - | Х | | - | - | - | - | - | - | - | - | 2,520 |
| | 5/25/2017 | 5 | - | Х | | - | - | - | - | - | - | - | - | <9.60 |
| | " | 8 | - | Χ | | - | - | - | - | - | - | - | - | <9.45 |
| AH-3 | 10/27/2016 | 0-1 | - | Х | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 655 |
| | " | 1-1.5 | - | Χ | | - | - | - | - | - | - | - | - | 8.36 |
| | II | 2-2.5 | - | Х | | - | - | - | - | - | - | - | - | 6.78 |
| AH-4 | 10/27/2016 | 0-1 | - | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 215 |
| | " | 1-1.5 | - | Χ | | - | - | - | - | - | - | - | - | 13.8 |
| | II | 2-2.5 | - | Χ | | - | - | - | - | - | - | - | - | 16.0 |
| AH-5 | 10/27/2016 | 0-1 | - | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 617 |
| | " | 1-1.5 | - | Χ | | - | - | - | - | - | - | - | - | 436 |
| | " | 2-2.5 | - | Х | | - | - | 1 | - | - | - | - | - | 5.88 |
| | 5/25/2017 | 5 | - | Х | | - | - | - | - | - | - | _ | - | 83.0 |
| | " | 8 | - | Х | | - | - | 1 | - | - | - | - | - | 141 |

Table 1
Forge Energy
Schubert 18-4H
Lea County, New Mexico

| 0 1 15 | 0 1 0 1 | Sample | BEB | Soil | Status | | TPH (mg/l | kg) | Benzene | Toluene | Ethlybenzene | Xylene | Total | Chloride |
|-----------|-------------|------------|----------------------|---------|---------|-------|-----------|-------|----------|----------|--------------|----------|-----------------|----------|
| Sample ID | Sample Date | Depth (ft) | Sample Depth (ft) | In-Situ | Removed | GRO | DRO | Total | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | BTEX (mg/kg) | (mg/kg) |
| AH-6 | 10/27/2016 | 0-1 | - | Χ | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00198 | <0.00198 | <0.00198 | <0.00149 | 234 |
| | " | 1-1.5 | - | Х | | - | - | - | - | - | - | - | - | 27.1 |
| | " | 2-2.5 | - | Х | | - | - | - | - | - | - | - | - | 17.7 |
| AH-7 | 10/27/2016 | 0-1 | - | Х | | <14.9 | <14.9 | <14.9 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 258 |
| | " | 1-1.5 | - | Χ | | - | - | - | - | - | - | - | - | 9.31 |
| | " | 2-2.5 | - | Х | | - | - | - | - | - | - | - | - | 11.5 |
| AH-8 | 10/27/2016 | 0-1 | 1 | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 7.39 |
| | " | 1-1.5 | 1 | Х | | - | - | - | - | - | - | - | - | 5.86 |
| AH-9 | 10/27/2016 | 0-1 | 1 | Х | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 159 |
| | " | 1-1.5 | 1 | X | | - | - | - | - | - | - | - | - | 7.1 |
| AH-10 | 10/27/2016 | 0-1 | 0.5 | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 849 |
| | " | 1-1.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 280 |
| | " | 2-2.5 | 0.5 | Χ | | - | - | - | - | - | - | - | - | 42.1 |
| | 11 | 3-3.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 15.4 |
| | 5/25/2017 | 5 | - | Х | | - | - | - | - | - | - | - | - | 72.9 |
| | " | 8 | - | Х | | - | - | - | - | - | - | - | - | <9.82 |
| AH-11 | 10/27/2016 | 0-1 | 0.5 | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 1,470 |
| | " | 1-1.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 37.8 |
| | " | 2-2.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 24.8 |
| | 11 | 3-3.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 11.8 |
| | 11/14/2016 | 0-1 | 0.5 | Х | | - | - | - | - | - | - | - | - | <5.00 |
| | 5/25/2017 | 5 | - | Х | | - | - | - | - | - | - | - | - | 10.1 |
| | " | 8 | - | Х | | - | - | - | - | - | - | - | - | 68.6 |

Table 1 Forge Energy Schubert 18-4H Lea County, New Mexico

| O-marks ID | OI- D-(- | Sample | BEB | Soil | Status | | TPH (mg/l | (g) | Benzene | Toluene | Ethlybenzene | Xylene | Total | Chloride |
|------------|-------------|------------|----------------------|---------|---------|-------|-----------|-------|----------|----------|--------------|----------|-----------------|----------|
| Sample ID | Sample Date | Depth (ft) | Sample Depth (ft) | In-Situ | Removed | GRO | DRO | Total | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | BTEX (mg/kg) | (mg/kg) |
| AH-12 | 10/27/2016 | 0-1 | 0.5 | Χ | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 102 |
| | " | 1-1.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 60.6 |
| | " | 2-2.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 32.5 |
| | 11 | 3-3.5 | 0.5 | Χ | | - | - | - | - | - | - | - | - | 11.5 |
| AH-13 | 10/27/2016 | 0-1 | 0.5 | Х | | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 155 |
| | 11 | 1-1.5 | 0.5 | Х | | - | - | ı | - | - | - | - | - | 19.7 |
| | " | 2-2.5 | 0.5 | Χ | | - | - | - | - | - | - | - | - | 25.4 |
| | II . | 3-3.5 | 0.5 | X | | - | - | - | - | - | - | - | - | 19.8 |
| AH-14 | 10/27/2016 | 0-1 | 0.5 | Х | | <15.0 | <15.0 | <15.0 | <0.00150 | <0.00200 | <0.00200 | <0.00200 | <0.00150 | 75.8 |
| | 11 | 1-1.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 77.1 |
| | II . | 2-2.5 | 0.5 | Χ | | - | - | - | - | - | - | - | - | 23.0 |
| | " | 3-3.5 | 0.5 | Х | | - | - | - | - | - | - | - | - | 18.6 |
| AH-15 | 10/27/2016 | 0-1 | - | | Х | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 3,150 |
| | 11 | 1-1.5 | - | Х | | - | - | - | - | - | - | - | - | 46.0 |
| | II . | 2-2.5 | - | Χ | | - | - | - | - | - | - | - | - | 91.0 |
| | | 3-3.5 | - | Х | | - | - | - | - | - | - | - | - | 37.0 |
| | II | 4-4.5 | - | Χ | | - | - | - | - | - | - | - | - | 28.5 |
| | 5/25/2017 | 5 | - | Х | | - | - | - | - | - | - | - | - | 61.8 |
| | " | 8 | - | Х | | - | - | 1 | - | - | - | - | - | 16.5 |
| AH-16 | 10/27/2016 | 0-1 | - | | Х | <15.0 | <15.0 | <15.0 | <0.00149 | <0.00199 | <0.00199 | <0.00199 | <0.00149 | 179 |
| | ıı . | 1-1.5 | - | Х | | - | - | - | - | - | - | - | - | 58.6 |
| | п | 2-2.5 | - | Х | | - | - | - | - | - | - | - | - | 22.2 |
| | | 3-3.5 | - | Х | | - | - | - | - | - | - | - | - | 13.9 |
| | | | | | | | | | | | • | | | |

(-) Not Analyzed

(BEB) Below Excavation Bottom

Areas Excavated to a depth of 0.5' to 1.0', after sampling

Proposed Excavation Depths

Analytical Report 554078

for Tetra Tech- Midland

Project Manager: Ike Tavarez
Forge Energy- Forge Schubert 18-4H
212C-MD-00653
05-JUN-17

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054) Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)

Xenco-San Antonio: Texas (T104704534)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)





05-JUN-17

Project Manager: **Ike Tavarez Tetra Tech- Midland**4000 N. Big Spring Suite 401
Midland, TX 79705

Reference: XENCO Report No(s): 554078

Forge Energy- Forge Schubert 18-4H Project Address: Lea CO New Mexico

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 554078. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 554078 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks

Knus Hoah

Project Manager

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Sample Cross Reference 554078



Tetra Tech- Midland, Midland, TX

Forge Energy- Forge Schubert 18-4H

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|--------------------|--------|-----------------------|--------------|---------------|
| AH #2 (5') Sample | S | 05-25-17 00:00 | | 554078-001 |
| AH #2 (8') Sample | S | 05-25-17 00:00 | | 554078-002 |
| AH #5 (5') Sample | S | 05-25-17 00:00 | | 554078-003 |
| AH #5 (8') Sample | S | 05-25-17 00:00 | | 554078-004 |
| AH #10 (5') Sample | S | 05-25-17 00:00 | | 554078-005 |
| AH #10 (8') Sample | S | 05-25-17 00:00 | | 554078-006 |
| AH #11 (5') Sample | S | 05-25-17 00:00 | | 554078-007 |
| AH #11 (8') Sample | S | 05-25-17 00:00 | | 554078-008 |
| AH #15 (5') Sample | S | 05-25-17 00:00 | | 554078-009 |
| AH #15 (8') Sample | S | 05-25-17 00:00 | | 554078-010 |



None

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Forge Energy- Forge Schubert 18-4H

 Project ID:
 212C-MD-00653
 Report Date:
 05-JUN-17

 Work Order Number(s):
 554078
 Date Received:
 05/26/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:



212C-MD-00653

Lea CO New Mexico

Ike Tavarez

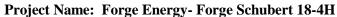
Project Id:

Project Location:

Contact:

Certificate of Analysis Summary 554078

Tetra Tech- Midland, Midland, TX



Date Received in Lab: Fri May-26-17 10:49 am

Project Manager: Kelsey Brooks

Report Date: 05-JUN-17

| | Lab Id: | 554078-00 | 01 | 554078-00 | 02 | 554078-0 | 03 | 554078-0 | 04 | 554078-0 | 05 | 554078-00 | 06 |
|-----------------------------------|------------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|----------------|-------|
| Analysis Paguastad | Field Id: | AH #2 (5') Sa | mple | AH #2 (8') Sa | mple | AH #5 (5') Sa | mple | AH #5 (8') Sa | mple | AH #10 (5') S | ample | AH #10 (8') Sa | ample |
| Analysis Requested | Depth: | | | | | | | | | | | | |
| | Matrix: | SOIL | | SOIL | |
| | Sampled: | May-25-17 (| 00:00 | May-25-17 0 | 00:00 |
| Inorganic Anions by EPA 300/300.1 | Extracted: | Jun-03-17 2 | 1:54 | Jun-03-17 2 | 21:54 | Jun-03-17 2 | 1:54 |
| SUB: TX104704215 | Analyzed: | Jun-03-17 2 | 2:22 | Jun-03-17 2 | 2:31 | Jun-03-17 2 | 2:40 | Jun-03-17 2 | 2:50 | Jun-03-17 2 | 3:18 | Jun-03-17 23 | 3:46 |
| | Units/RL: | mg/kg | RL | mg/kg | RL |
| Chloride | | < 9.60 | 9.60 | < 9.45 | 9.45 | 83.0 | 9.38 | 141 | 9.73 | 72.9 | 9.94 | < 9.82 | 9.82 |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Knis Roah Kelsey Brooks



212C-MD-00653

Lea CO New Mexico

Ike Tavarez

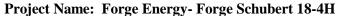
Project Id:

Project Location:

Contact:

Certificate of Analysis Summary 554078

Tetra Tech- Midland, Midland, TX



Date Received in Lab: Fri May-26-17 10:49 am

Report Date: 05-JUN-17 **Project Manager:** Kelsey Brooks

Report Date: 05-JUN-17

| | Lab Id: | 554078-00 |)7 | 554078-00 | 08 | 554078-0 | 09 | 554078-0 | 10 | | |
|-----------------------------------|------------|----------------|------|----------------|-------|----------------|-------|----------------|-------|--|--|
| Analysis Requested | Field Id: | AH #11 (5') Sa | mple | AH #11 (8') Sa | ımple | AH #15 (5') Sa | ample | AH #15 (8') Sa | ample | | |
| Anaiysis Kequesiea | Depth: | | | | | | | | | | |
| | Matrix: | SOIL | | SOIL | | SOIL | | SOIL | | | |
| | Sampled: | May-25-17 0 | 0:00 | May-25-17 (| 00:00 | May-25-17 (| 00:00 | May-25-17 (| 00:00 | | |
| Inorganic Anions by EPA 300/300.1 | Extracted: | Jun-03-17 2 | 1:54 | Jun-03-17 2 | 1:54 | Jun-03-17 2 | 1:54 | Jun-03-17 2 | 1:54 | | |
| SUB: TX104704215 | Analyzed: | Jun-03-17 23 | 3:55 | Jun-04-17 0 | 0:04 | Jun-04-17 0 | 0:14 | Jun-04-17 0 | 0:23 | | |
| | Units/RL: | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | | |
| Chloride | | 10.1 | 9.86 | 68.6 | 10.0 | 61.8 | 10.0 | 16.5 | 9.92 | | |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks
Project Manager



Flagging Criteria



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 (281) 240-4280

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 (214) 351-9139

 5332 Blackberry Drive, San Antonio TX 78238
 (210) 509-3334
 (210) 509-3335

 1211 W Florida Ave, Midland, TX 79701
 (432) 563-1800
 (432) 563-1713

 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282
 (602) 437-0330



BS / BSD Recoveries



Project Name: Forge Energy-Forge Schubert 18-4H

Work Order #: 554078 Project ID: 212C-MD-00653

Analyst: DHE Date Prepared: 06/03/2017 Date Analyzed: 06/03/2017

Lab Batch ID: 3018900 **Sample:** 725601-1-BKS **Batch #:** 1 **Matrix:** Solid

| Units: mg/kg | | BLAN | K/BLANK | SPIKE / 1 | BLANK S | SPIKE DUPI | LICATE | RECOVI | ERY STUD | ΟY | |
|-----------------------------------|-------------------------------|----------------|--------------------------|----------------------|----------------|-----------------------------|------------------------|----------|-------------------------|---------------------------|------|
| Inorganic Anions by EPA 300/300.1 | Blank Sample Result [A] | Spike Added | Blank Spike Result | Blank Spike %R | Spike Added | Blank Spike Duplicate | Blk. Spk Dup. %R | RPD % | Control Limits %R | Control Limits %RPD | Flag |
| Analytes | | [B] | [C] | [D] | [E] | Result [F] | [G] | | | | |
| Chloride | <1.00 | 10.0 | 10.1 | 101 | 10.0 | 10.0 | 100 | 1 | 80-120 | 20 | |

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100*(C)/[B]Blank Spike Duplicate Recovery [G] = 100*(F)/[E]All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Forge Energy-Forge Schubert 18-4H

Work Order #: 554078 Project ID: 212C-MD-00653

Lab Batch ID: 3018900 **QC- Sample ID:** 554078-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/03/2017 Date Prepared: 06/03/2017 Analyst: DHE

Reporting Units: mg/kg MATRIX SPIKE DUPLICATE RECOVERY STUDY

| Inorganic Anions by EPA 300/300.1 Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | Spiked Sample %R [D] | Spike Added [E] | Duplicate Spiked Sample Result [F] | Spiked Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
|---|-----------------------------------|-----------------------|--------------------------------|-------------------------------|-----------------------|--|-----------------------------|----------|-------------------------|---------------------------|------|
| Chloride | 141 | 97.3 | 235 | 97 | 97.3 | 248 | 110 | 5 | 80-120 | 20 | |

Lab Batch ID: 3018900 **QC- Sample ID:** 554518-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/04/2017 Date Prepared: 06/03/2017 Analyst: DHE

Reporting Units: mg/kg MATRIX SPIKE DUPLICATE RECOVERY STUDY

| Inorganic Anions by EPA 300/300.1 Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | Spiked Sample %R [D] | Spike Added [E] | Duplicate Spiked Sample Result [F] | Spiked Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
|---|-----------------------------------|-----------------------|--------------------------------|-------------------------------|-----------------------|--|-----------------------------|----------|-------------------------|---------------------------|------|
| Chloride | 76.3 | 98.0 | 165 | 91 | 98.0 | 167 | 93 | 1 | 80-120 | 20 | |

| Please fill out all copies - Lal | CITY: WADCAY O STATE: PHONE: | ADDRESS: X CVCO | ure) | | | < | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | 70 | P | P | P | | 5/25/17 S X (| NUMBER DATE TIME MATRIX COMP. GRAB | 3 PROJECT | Emay | G | - 1 | Analysis Request |
|--|------------------------------|--------------------------|--------------------------------|----------------|-------------------------------|------------|---------------------------------------|---------------|--------------------|--------|--------------------|--|-------------|--------------------------------------|------------------|---|---|-------------------------------------|---|---|------------------|
| Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - | ZIP: DATE: | RECEIVED BY: (Signature) | Date: RECEIVED BY: (Signature) | | 5-16-17 | #15 (8') 5 | AH#15 (S') Sumple | | PH# 11 (S') Sample | 10 (8) | AH# 10 (5') Sample | AH#S (8') Sumple | (5') | AH#2 (8') Sample | AH#2 (5') Sample | SAMPLE IDENTIFICATION | e Schubert 18- | SITE MANAGER: | 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946 | | of Chain of |
| to Tetra Tech - Project Manager | TIME: | | Date: | Date: | Time: 5/24 | - 2 | ~ | - ~ ~ > | 7 | | | - - 2 - - - - - - - - - - - - - - - - - | ~ ~ ~ | - - - - - - - - | 12 | NUMBER OF FILTERED (HCL HNO3 ICE NONE | F CONT/ (Y/N) | PRESERVATIVE METHOD | 554078 | | Custody Record |
| Temp: (Q . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | , | The Taxour ? | TETRA TECH CONTACT PERSON: | . . | SAMPLED BY: (Print & Initial) | | | | ~ | | × | | <i>x</i> | * | | PAH 8270 RCRA Meta | als Ag // als Ag // als Ag // iles Volatile 8240/8 ni. Vol. 3 | As Ba C As Ba C es 260/624 | Cd Cr Pb Hg Se | ANALYSIS REQUEST (Circle or Specify Method No.) | PAGE: |
| × | Authorized: Yes No | RUSH Charges | Results by: | AIRBILL #: | Date: \$3577 Time: | | × | × | × | | | | | | X | Gamma Sp Alpha Beta PLM (Asbe: Major Anior | (Air) stos) | ons, pH, | TDS | hod No.) |) OF: / |



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston **IOS #:** 1044255

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

| Sent By: | Marithza Anaya | Date Sent: | 05/26/2017 02:36 P | M |
|--------------|-----------------|----------------|--------------------|---|
| Received By: | Santiago Ortega | Date Received: | 05/27/2017 09:30 A | M |

| Received By: Santiago Ortega | Date Received: 05/27/201 | 7 09:30 AM | |
|--|-------------------------------|-----------------------------|----------|
| | Sample Receipt Che | cklist | Comments |
| #1 *Temperature of cooler(s)? | | 3.4 | |
| #2 *Shipping container in good condition | on? | Yes | |
| #3 *Samples received with appropriate | temperature? | Yes | |
| #4 *Custody Seals intact on shipping c | ontainer/ cooler? | Yes | |
| #5 *Custody Seals Signed and dated for | or Containers/coolers | Yes | |
| #6 *IOS present? | | Yes | |
| #7 Any missing/extra samples? | | No | |
| #8 IOS agrees with sample label(s)/ma | atrix? | Yes | |
| #9 Sample matrix/ properties agree wit | h IOS? | Yes | |
| #10 Samples in proper container/ bottle | e? | Yes | |
| #11 Samples properly preserved? | | Yes | |
| #12 Sample container(s) intact? | | N/A | |
| #13 Sufficient sample amount for indic | ated test(s)? | Yes | |
| #14 All samples received within hold til | me? | Yes | |
| * Must be completed for after-hours d | elivery of samples prior to p | placing in the refrigerator | |
| NonConformance: | | | |
| Corrective Action Taken: | | | |
| | Nonconformance Do | cumentation | |
| Contact: | Contacted by : | Date | |
| Checklist reviewed by: | Santiago Ortega | Date: <u>05/27/2017</u> | |



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: Tetra Tech- Midland

Date/ Time Received: 05/26/2017 10:49:00 AM

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 554078

Temperature Measuring device used: r8

| Work Order #. 00 1070 | | |
|--|----------------------------------|------------------------------------|
| Sample Receipt Checklist | | Comments |
| #1 *Temperature of cooler(s)? | | 7 |
| #2 *Shipping container in good condition? | | Yes |
| #3 *Samples received on ice? | | Yes |
| #4 *Custody Seal present on shipping container/ cooler? | | N/A |
| #5 *Custody Seals intact on shipping container/ cooler? | | N/A |
| #6 Custody Seals intact on sample bottles? | | N/A |
| #7 *Custody Seals Signed and dated? | | N/A |
| #8 *Chain of Custody present? | | Yes |
| #9 Sample instructions complete on Chain of Custody? | | Yes |
| #10 Any missing/extra samples? | | No |
| #11 Chain of Custody signed when relinquished/ received? | | Yes |
| #12 Chain of Custody agrees with sample label(s)? | | Yes |
| #13 Container label(s) legible and intact? | | Yes |
| #14 Sample matrix/ properties agree with Chain of Custody? | | Yes |
| #15 Samples in proper container/ bottle? | | Yes |
| #16 Samples properly preserved? | | Yes |
| #17 Sample container(s) intact? | | Yes |
| #18 Sufficient sample amount for indicated test(s)? | | Yes |
| #19 All samples received within hold time? | | Yes |
| #20 Subcontract of sample(s)? | | N/A |
| #21 VOC samples have zero headspace? | | N/A |
| * Must be completed for after-hours delivery of samples prior to placing in the refrigerator Analyst: PH Device/Lot#: | | |
| Checklist completed by: Checklist reviewed by: | Marithza Anaya Marithza Anaya | Date: 05/26/2017 Date: 05/26/2017 |
| | Kelsey Brooks | Dato. 00/20/2011 |