SITE INFORMATION Report Type: Closure Report General Site Information: Site: **BKU Central Tank Battery COG Operating LLC** Company: Section, Township and Range Sec 24 T 17S R 29E Lease Number: API-30-015-27764 County: **Eddy County** 32.80546° N GPS: 104.06604° W Surface Owner: Federal Mineral Owner: In Loco Hills, from the intersection of Haggerman Cutoff and 82, travel west on 82 (2.2 miles), Directions: turn South onto lease road for 400 ft., turn West for 600 ft to location. Release Data: NM OIL CONSERVATION 11/30/2013 Date Released: ARTESIA DISTRICT Type Release: Produced Water Source of Contamination: Hose Failure AUG 2 9 2014 Fluid Released: 12 bbls 10 bbls Fluids Recovered: Official Communication: Name: Robert McNeil lke Tavarez Company: COG Operating, LLC Tetra Tech Address: One Concho Center 4000 N. Big Spring 600 W. Illinois Ave. Ste 401 City: Midland Texas, 79701 Midland, Texas Phone number: (432) 686-3023 (432) 687-8110 Fax: (432) 684-7137 Email: rmcneil@conchoresources.com Ike.Tavarez@tetratech.com

| Depth to Groundwater: | Ranking Score | Site Data |
|---|---------------|-----------|
| <50 ft | 20 | |
| 50-99 ft | 10 | |
| >100 ft. | 0 | |
| WellHead Protection: | Ranking Score | Site Data |
| Water Source <1,000 ft., Private <200 ft. | 20 | |
| Water Source >1,000 ft., Private >200 ft. | 0 | 0 |
| Surface Body of Water: | Ranking Score | Site Data |
| <200 ft. | 20 | |
| 200 ft - 1,000 ft. | 10 | |
| >1,000 ft. | 0 | n n |

Total BTEX

50

TPH

5,000

Benzene

10



June 27, 2014

Mr. Mike Bratcher Environmental Engineer Specialist Oil Conservation Division, District 2 811 S. First Street Artesia, New Mexico 88210

Re: Closure Report for the COG Operating LLC., BKU Central Tank Battery, Unit J, Section 24, Township 17 South, Range 29 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from BKU Central Tank Battery, Unit J, Section 24, Township 17 South, Range 29 East, Eddy County, New Mexico (site). The spill site coordinates are N 32.80546°, W 104.06604°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on November 30, 2013, and released approximately twelve (12) barrels of produced water from a hose. To alleviate the problem, COG personnel replaced the hose. Ten (10) barrels of standing fluids were recovered. The spill was contained within the bermed area of the pad, affecting an area measuring approximately 30' x 10'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 24. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 150' below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-



based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On December 16, 2013, Tetra Tech personnel inspected and sampled the spill area. Two (2) auger holes (AH-1 and AH-2) were installed using a stainless steel hand auger to assess the impacted soils. Select soil samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples exceeded the TPH or BTEX RRAL. Elevated chloride concentrations were detected in auger holes (AH-1 and AH-2), with a chloride high of 5,800 mg/kg at 0'-1' and 2,870 mg/kg at 0'-1' below surface, respectively. The chloride impact at auger hole (AH-1) declined with depth and was vertically defined. The area of auger hole (AH-2) showed a chloride spike of 1,230 mg/kg at 3'-3.5' below surface. Deeper samples were not collected due to a dense formation.

Remediation Activities

On February 24, 2014, Tetra Tech supervised the removal impacted material as highlighted (green) in Table 1 and shown on Figure 4. Initial, approximately 1.0' of material was excavated from the areas of AH-1 and AH-2. As proposed in the work plan, Tetra Tech installed a backhoe trench (T-1) in the areas of AH-1 to define extents and confirm the detected chloride concentrations in the soils. Referring to Table 1, the area of T-1 showed chloride concentrations of 2,040 mg/kg at 12.0' below surface and the area was not vertically defined.

Based on the field data, the area of auger hole (AH-1) was excavated 3.0' below surface and placed a clay material to cap area and prevent further migration of contaminates left in place. Once the areas were excavated to the appropriate depths, the excavations were backfilled with clean soil to grade.

On June 17, 2014, Tetra Tech installed one (1) borehole (BH-1) in order to vertically define the chloride impact in the areas of AH-1. Referring to Table 1, BH-1 showed elevated chloride from 6'-7' to approximately 40.0 below surface, but significantly declined at approximately 60.0' below surface. The area was vertically defined.



Conclusion

Based on the assessment and remediation work performed at this site, COG requests closure of this spill issue. A final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,

TETRA TECH

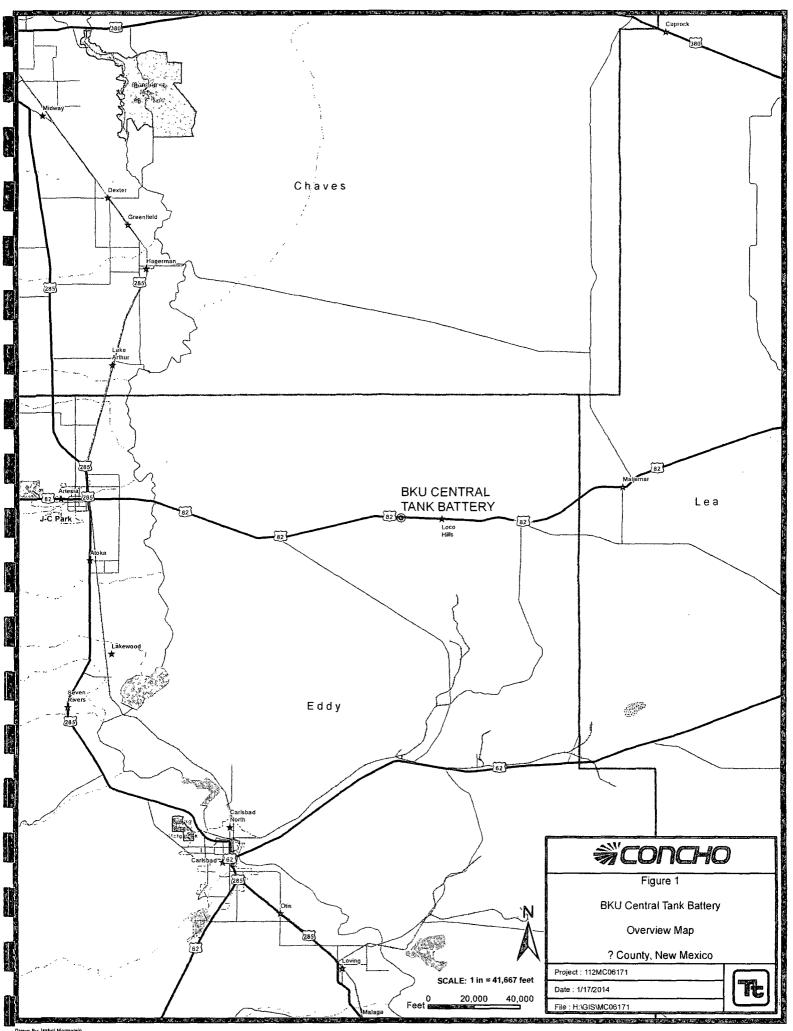
Clair Gonzales,

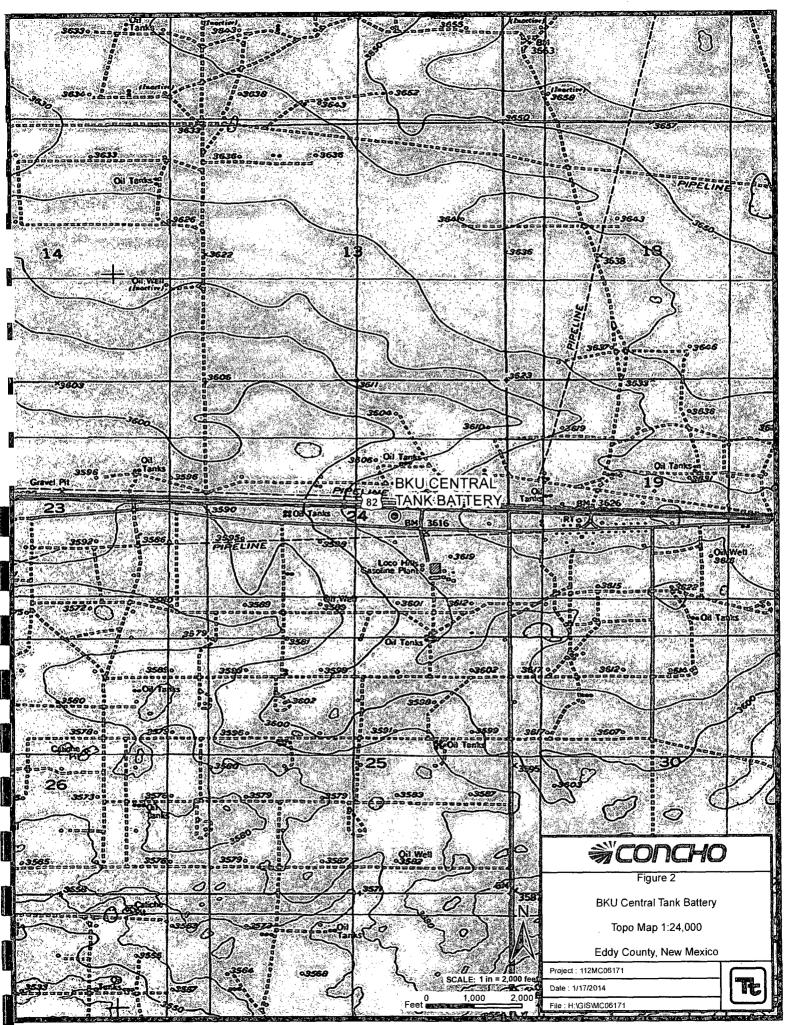
Geologist

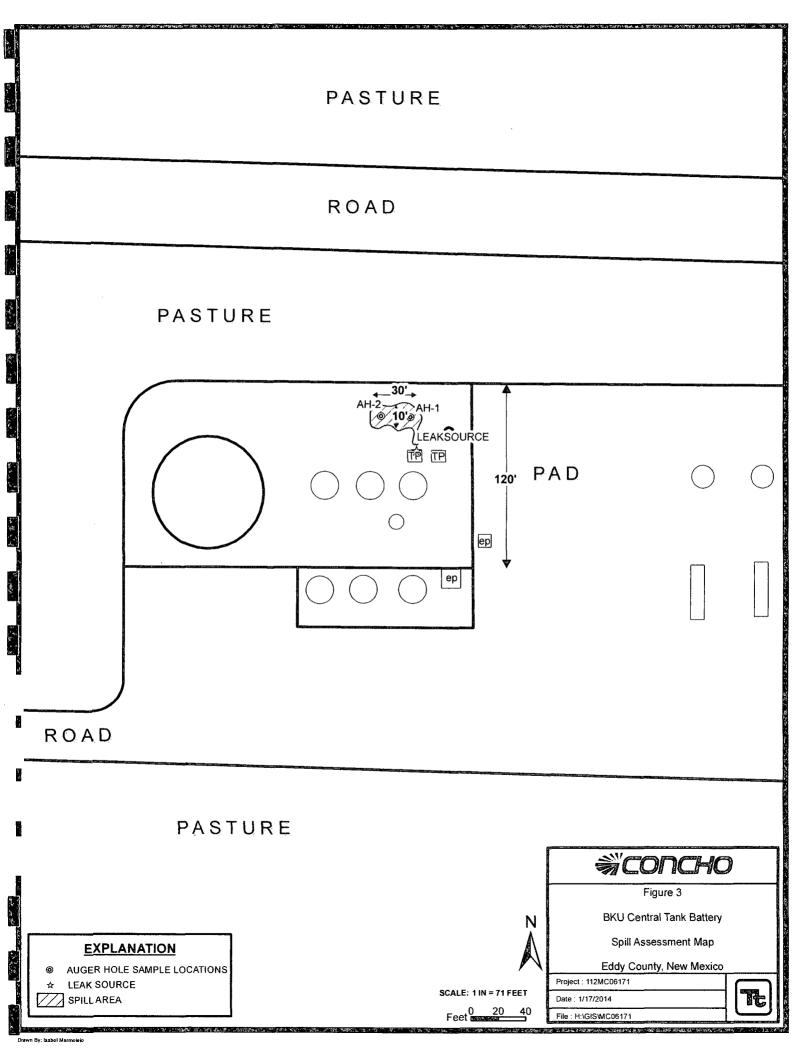
cc:

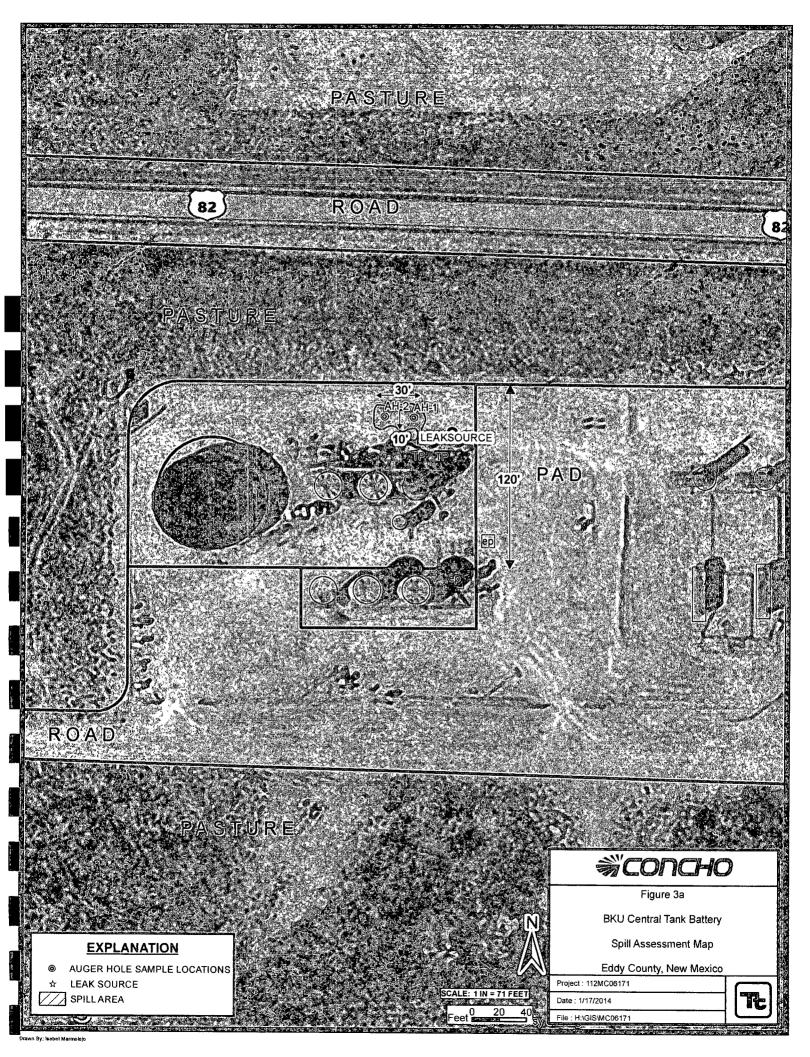
Robert McNeil – COG Mike Burton – BLM Jeff Robertson - BLM

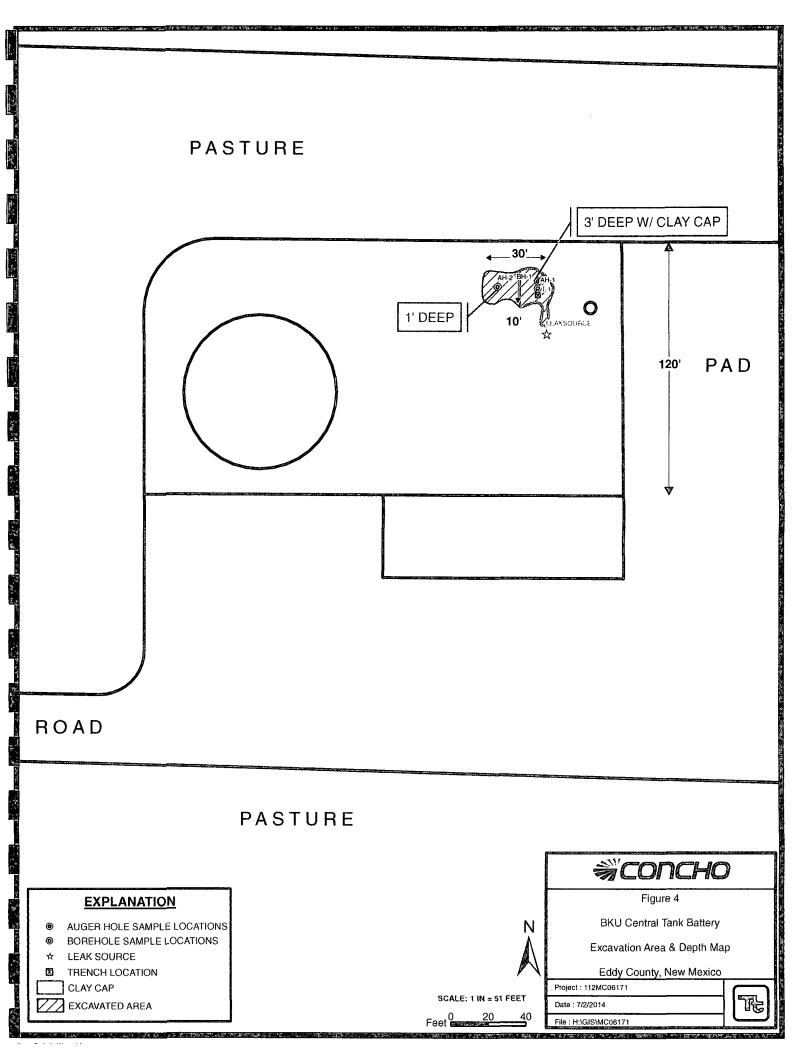
Figures











Tables

Table 1 COG Operating LLC. Birch Keely Unit Central Tank Battery Eddy County, New Mexico

| | | Sample | Soil | Status | 7 | PH (mg/k | g) | Benzene | Toluene | Ethlybenzene | Xylene | Total | Chloride |
|---------------------|-------------|------------|---------|---------|--------|--------------------|------------|--------------------|--------------|--------------|---------|-----------------|----------|
| Sample ID | Sample Date | Depth (ft) | In-Situ | Removed | GRO | DRO | Total | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | BTEX (mg/kg) | (mg/kg) |
| AH-1 | 12/16/2013 | 0-1 | | X-E | √<4.00 | 1<50.0 ≥ | r. <50.0 ⊊ | <0.0200 | <0.0200 | | <0.0200 | <0.0200 | 5,800 |
| | U | 1.1.5 | TES | X 04. | 6. 133 | | | 京, 全有意 | S. 43 | AKE SE | | | <u> </u> |
| | " | 2.2.5 | | X | 35.75 | | | | Marin. | | | No. | 841 |
| | " | 3-3.5 | 256 | . X | N.Z | 飞起 外 | | 75343A | 100 AV | | 問題的 | 4 | 1,230 |
| T-1 | 5/2/2014 | . 0 | | X 2. | | | | | W. 5.40 | 600 F | - Au | 12.12.0 | 7,200 |
| | lı . | . 2 | | X | 激性或引 | | W.E. | | | | | 性/海沟 | 240 |
| | II. | 4 | Х | | - | - | - | - | - | - | - | - | 2,320 |
| | u | 6 | Х | | - | - | - | - | - | - | - | - | 3,480 |
| | " | 8 | Х | | - | - | - | - | - | - | - | - | 3,000 |
| | U | 10 | Х | | - | - | - | - | - | - | - | - | 2,760 |
| | H | 12 | Х | | - | - | - | - | - | - | - | - | 2,040 |
| AH-1 North Sidewall | 5/5/2014 | - | Х | | - | | - | - | - | - | • | - | 800 |
| AH-1 South Sidewall | 11 | - | Х | | - | _ | - | - | - | - | - | - | 964 |
| AH-1 East Sidewall | ıı | - | Х | | - | - | - | - | - | - | - | - | 768 |
| AH-1 West Sidewall | lt | - | Х | | - | - | - | - | - | - | - | | 272 |
| BH-1 | 6/17/2014 | 4-5 | Х | | - | - | - | - | - | - | | - | 690 |
| | " | 6-7 | Х | | - | - | - | - | - | - | - | - | 2,160 |
| | " | 9-10 | Х | | - | ~ | - | - | - | - | _ | - | 2,880 |
| | " | 14-15 | Х | | - | - | - | - | - | - | - | - | 2,020 |
| | " | 19-20 | Х | | - | - | - | - | - | - | • | - | 2,980 |
| | " | 24-25 | Х | | - | - | - | - | - | - | - | - | 3,990 |
| | " | 29-30 | Х | | - | - | - | - | - | - | - | - | 3,080 |
| | " | 39-40 | Х | | - | - | - | - | - | - | - | - | 1,250 |
| * | " | 49-50 | Х | | - | - | - | - | - | - | - | - | 1,110 |
| | " | 59-60 | Х | | - | - | - | - | - | - | - | - | 673 |
| | н | 64-65 | Х | | - | - | - | - | - | - | - | - | 385 |
| | н | 69-70 | Х | | - | - | - | - | - | - | - | | 386 |
| AH-2 | 12/16/2013 | 少0-1-99 | | Xe | <4.00 | <50.0 ₂ | ి<50.0∵ | < 0.0200 | ≤0:0200 | √<0.02003°; | <0.0200 | <0.0200 | 2,870 |
| | " | 1-1.5 | Х | | - | - | - | - | - | - | - | - | 442 |
| | " | 2-2.5 | Х | | - | - | - | - | - | - | - | - | 543 |
| | 11 | 3-3.5 | X | | - | - | - | - | - | - | - | - | 889 |

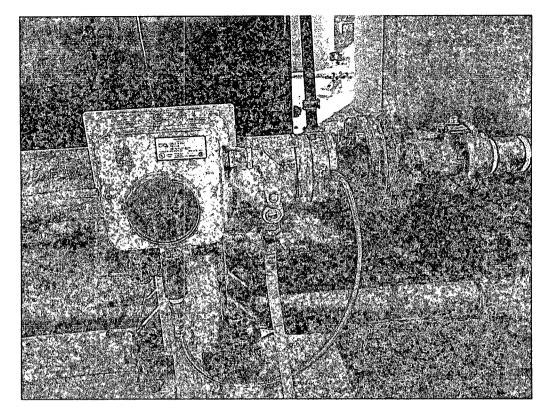
(-) Not Analyzed

Excavation Depth
Clay Cap

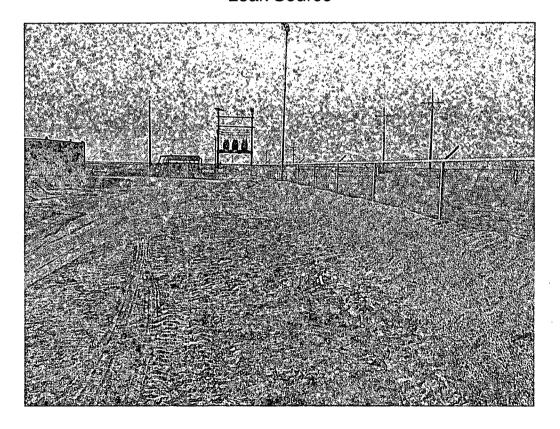
Photos

COG Operating LLC BKU Central Tank Battery Eddy County, New Mexico



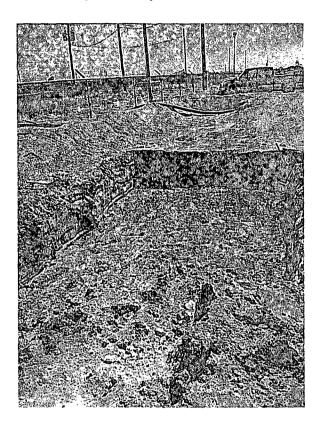


Leak Source

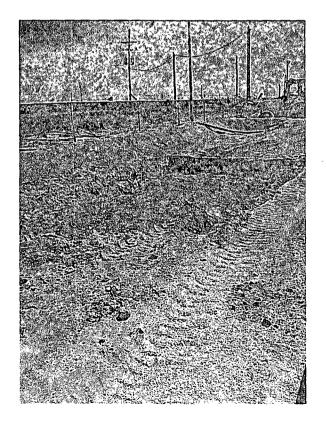


View West – Area of AH-1 and AH-2

COG Operating LLC BKU Central Tank Battery Eddy County, New Mexico

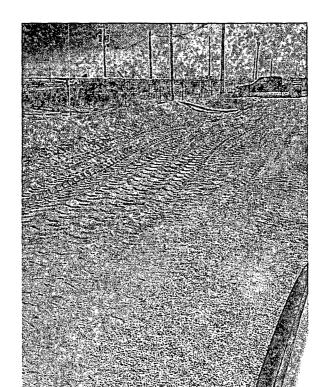


View East - Excavated area of AH-1

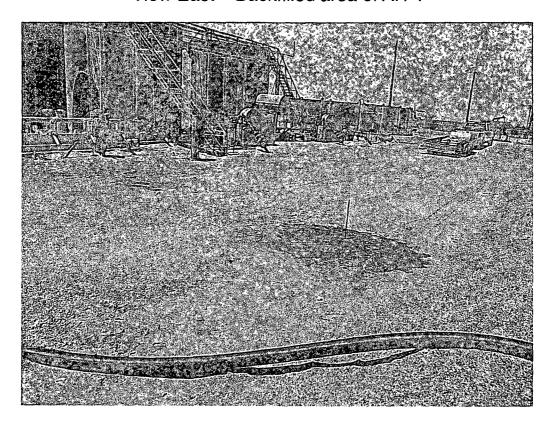


View East - Lined area of AH-1

COG Operating LLC BKU Central Tank Battery Eddy County, New Mexico



View East - Backfilled area of AH-1



View West - Area of BH-1

Appendix A

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Río Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141

Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Attached

Release Notification and Corrective Action **OPERATOR** ✓ Initial Report **Final Report** Name of Company **COG OPERATING LLC** Contact Robert McNeill 600 West Illinois Avenue, Midland, TX 79701 432-230-0077 Address Telephone No. Facility Name Facility Type Central Battery Tank Battery Surface Owner Federal Mineral Owner Lease No. (API#) 30-015-27764 LOCATION OF RELEASE Feet from the North/South Line Unit Letter Section Township Range Feet from the East/West Line County 24 175 29E Eddy Latitude 32.819 Longitude 104.025 NATURE OF RELEASE Type of Release Produced water Volume of Release 12bbls Volume Recovered 10bbls Source of Release Steal breaded hose Date and Hour of Occurrence Date and Hour of Discovery 11-30-2013 11-30-2013 07:00am Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☒ No ☒ Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Steal breaded hose failed on discharged pressure on murphy. Replace hose. Describe Area Affected and Cleanup Action Taken.* Initially 12bbls of produced water were released due to a failed breaded hose on murphy. We were able to recover 10bbls of produced water with a vacuum truck. All free fluid has been recovered. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a work plan to the BLM/NMOCD for approval prior to any significant remediation work I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by District Supervisor: Robert Grubbs Jr. Printed Name: Title: Senior Environmental Coordinator Approval Date: **Expiration Date:**

Conditions of Approval:

12-11-2013

rgrubbs@concho.com

Phone:

432-661-6601

E-mail Address:

Attach Additional Sheets If Necessary

District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

☐ Initial Report

Release Notification and Corrective Action

OPERATOR

| Name of Co | | | | | | Contact Robert McNeil | | | | | |
|-------------------------------|----------------------|-----------------|-------------|---------------------|------------|-----------------------|---------------------|----------------------|---|--|--|
| | | | | nd, Texas 7970 | | | To. (432) 230-0 | | | | |
| Facility Nan | ne BKU C | Central Tank | Battery | | F | acility Typ | e Tank Batter | <u>y</u> | | | |
| Surface Owi | ner: Federa | al | | Mineral O | wner | | | Lease I | No. (API#) 30-015-27764 | | |
| | | | | LOCA | TION | TOE DEI | EASE | | | | |
| Unit Letter | Section | Township | Range | Feet from the | | OF REI | Feet from the | East/West Line | County | | |
| J | 24 | 17S | 29E | rect from the | 1401111 | South Line | rece from the | Last West Line | Eddy | | |
| | | | | | | | | | | | |
| | | | | Latitude N 3 | 2.819° | Longitud | e W 104.025° | | | | |
| | | | | | | OF RELI | | | | | |
| Type of Relea | ise: Produc | ed Water | | | | | Release 12 bbls | Volume I | Recovered 10 bbls | | |
| Source of Rel | | | | | | | our of Occurrence | | Hour of Discovery | | |
| Was Immadia | ta Nation C | Variant 1 | | | | 11-30-2013 | | 11-30-20 | 13 7:00 a.m. | | |
| Was Immedia | ite Notice G | | Yes 🛛 | No 🛛 Not Re | equired | If YES, To | wnom? | | | | |
| By Whom? | | | | | | Date and H | | | | | |
| Was a Water | ourse Reac | | v 152 | Lat | | 1 | lume Impacting th | he Watercourse. | | | |
| | | | Yes 🛚 | | | N/A | | | | | |
| If a Watercou | rse was Imp | pacted, Descri | be Fully.* | | | | | | M OIL CONSERVATION | | |
| | | | | | | | | 14 | ARTESIA DISTRICT | | |
| Describe Cau | se of Proble | m and Remed | tial Action | Taken * | | | | | AUG 2 9 2014 | | |
| Describe Cau | sc of 1 foole | and Remov | nai Actioi | raken. | | | | | | | |
| Steel breaded | jose failed | on discharged | l pressure | on murphy. Repl | aced hos | se. | | | RECEIVED | | |
| | | | | | | | | | | | |
| Describe Are | a Affected a | ind Cleanup A | Action Tak | en.* | | | | | | | |
| Initially 12 bb | ols of produc | ced water was | released | due to a failed bre | aded ho | se on murphy | y. We were able | to recover 10 bbls | of produced water with a | | |
| vacuum truck | . All free fl | uids were rec | overed. T | etra Tech inspect | ed site ar | nd collected | samples to define | spills extent. Soil | that exceeded RRAL was | | |
| removed and and and submitted | | | isposal. Si | te was then broug | ght up to | surface grad | e with clean back | fill material. Tetra | Tech prepared closure report | | |
| and submittee | i to ivivioci | D tot teview. | | | | | | | | | |
| | | | | | | | | | suant to NMOCD rules and | | |
| | | | | | | | | | eases which may endanger leve the operator of liability | | |
| should their o | perations ha | ave failed to a | dequately | investigate and re | emediate | contaminati | on that pose a thre | eat to ground water | surface water, human health | | |
| or the enviror | ment. In ac | ddition, NMO | CD accept | | | | | | ompliance with any other | | |
| federal, state, | or local law | s and/or regu | lations. | | | | OH CONG | NEDALA TRIONI | DIVIGION | | |
| | / // | 11/1/ | \geq | | | | OIL CONS | SERVATION | DIVISION | | |
| Signature: | 1/1/ | | | | | | | | | | |
| Printed Name | ** : Ike Tavare | | Agent | A fu Co | / (ے) | Approved by | District Superviso | or: | | | |
| Title: Senior | | | 7 | | | Approval Dat | e: | Expiration | Date: | | |
| | | | | | | | | | | | |
| E-mail Addre | ss: <u>ike.tavar</u> | rez@tetratech | .com | | (| Conditions of | Approval: | | Attached | | |
| Date: | 7/14 | | Phone: | (432) 682-4559 | | | | | | | |
| Attach Addit | ional Shee | ts If Necess | | \ | | | | | | | |

Appendix B

Water Well Data Average Depth to Groundwater (ft) COG - BKU Central Tank Battery Eddy County, New Mexico

| | 16 S | outh | | 8 East | | | | 16 Sc | uth | | 29 Eas | <u> </u> | | 16 Sc | outh | 3 | 0 Eas |
|--------------------|------|-------------|--------------|----------|------------|----------|----------|---------------|----------|-------------|-------------|------------|----------|-------|----------|----|----------|
| 3 | 5 | 4 | 3 | 2 | 1 | Carls | 6 bad | 5 | 4 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 2 |
| , | 8 | 9 | 10 | 11 | 12 | 1 1 | 7 | 8 | 9 | 10 | 11 | 12 | 7 | 8 | 9 | 10 | 11 |
| 18 | 17 | 16 | 15 | 14 | 13 | - | 18 | 17 | 16 | 15 | 14 22 | 0 13 | 18 | 17 | 16 | 15 | 14 |
| 19 | 20 | 21 | 22 | 23 | 24 | 1 1 | 19 | 20 | 21 | 22 | dry 23 | 24 | 19 | 20 | 21 | 22 | 23 |
| | | 61 | | | | | 110 | | | | | | | | | | |
| 30 | 29 | 28 | 27 | 26 | 25 | 1 1 | 30 | 29 | 28 | 27 | 26 | 25 | 30 | 29 | 28 | 27 | 26 |
| 31 | 32 | 33 | 34 | 35 | 36 | 1 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 |
| | 17 S | outh | 2 | 8 East | <u> </u> | | - | 17 Sc | uth | | 29 East | | - | 17 Sc | outh | 3 | 0 Eas |
| 6 | 5 | 4 | 3 | 2 28 | | 7 6 | 6 | 5 | 4 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 2 |
| | Ļ | 1 | 1 | ļ., | | 4 | | <u> </u> | | ļ | | | <u> </u> | | <u> </u> | ļ | |
| 7 | 8 | 9 | 10 | 11 | 12 | | / | 8 | 9 | 10 | 11 | 12 | 7 | 8 | 9 | 10 | 11 |
| 18 | 17 | 16 | 15 | 14 | 13 | 1 1 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 |
| | L | <u> </u> | | 80 | | .l | | | | <u> </u> | | | | | | | |
| 19 | 20 | 21 | 22 45 | 23 | 24 | | 19 | 20 | 21 | 22 7 | 6 23 | 24 | 19 | 20 80 | 21 | 22 | 23 |
| 2 24 30 | 29 | 28 | 79 | 26 | 25 | ┨ | 30 | 29 210 | 28 | 80 27 | 26 | SITE 25 | 30 | 29 | 28 | 27 | 26 |
| 30 | 23 | 120 | -' | ا | 23 | 1 1 | 30 | 208 | 20 | 21 | 20 | 25 | 30 | 29 | 20 | 21 | 20 |
| 31 | 32 | 33 | 34 | 35 | 36 | 1 1 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 |
| | | | | 258 | | j l | | | | | 153 | | | | | | |
| | 18 S | outh | 2 | 8 East | | | | 18 Sc | uth | | 29 Eas | } | | 18 Sc | nuth | 3 | 0 Eas |
| ŝ | 5 | 4 | 3 | 2 55 | 1 | 7 1 | 6 | 5 | 4 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 2 |
| 7 | 8 81 | 1 08 | 10 | 11 | 12 | ┨ | 7 | 8 | 9 | 10 9 | 95 11 | 12 | 7 | 8 | 9 | 10 | 11 |
| 40 | 69 | ľ | " | '' | ' ' | | , | ا | ľ | ' ' | ,3 11 | '* | J' | ľ | ľ | 10 | '' |
| | 17 | 16 | 15 80 | 14 | 13 | 1 [| 18 | 17 | 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 |
| | | + | 22 | 23 | 24 | 1 1 | 19 | 20 | 21 | 22 | 23 | 24 | 19 | 20 | 21 | 22 | 23 4 |
| 18 | 20 | 21 | | | 1 | | - | | | [| | 158 | ا آ | 1 | Ī., | | 7 |
| 18 | 20 | 21 226 | 122 | | 1 | | | | | | | 25 | 30 | 29 | 28 | 27 | |
| 18 | | i | 27 | 26 | 25 | 1 | 30 | 29 | 28 | 27 | 26 | 25 | 00 | -` | ادا | 21 | 26 |
| 18 19 30 137 | | 226 | | 26 35 | 25 36 | J L | 30 | 29 32 | 28 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 26 35 |

New Mexico Water and Infrastructure Data System

Appendix C



6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, Suite E 5002 Basin Street, Suite A1

Lubbock. Texas 79424 El Paso, Texas 79922 Midland. Texas 79703

800-378-1296

806 - 794 - 1296 915-585-3443 432-689-6301

FAX 806 - 794 - 1298 FAX 915 - 585 - 4944 FAX 432-689-6313

972-242-7750 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrolkon. Texas 75006

E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ike Tavarez Tetra Tech 1910 N. Big Spring Street Midland, TX, 79705

Report Date: January 8, 2014

Work Order: 13121828

Project Location:

Eddy Co, NM

Project Name:

COG/BKU Central Battery

Project Number:

TBD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| | | | Date | Time | Date |
|--------|-------------|--------|-----------------------|-----------------------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 349391 | AH-1 0-1' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349392 | AH-1 1-1.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349393 | AH-1 2-2.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349394 | AH-1 3-3.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349395 | AH-2 0-1' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349396 | AH-2 1-1.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349397 | AH-2 2-2.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349398 | AH-2 3-3.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Dr. Blair Leftwich, Director Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project COG/BKU Central Battery were received by TraceAnalysis, Inc. on 2013-12-18 and assigned to work order 13121828. Samples for work order 13121828 were received intact at a temperature of 3.9 C.

Samples were analyzed for the following tests using their respective methods.

| | | Prep | Prep | QC | Analysis |
|----------------------|--------------|-------|-----------------------|--------|---------------------|
| Test | Method | Batch | Date | Batch | Date |
| BTEX | S 8021B | 91224 | 2013-12-20 at 12:31 | 107810 | 2013-12-23 at 09:48 |
| Chloride (Titration) | SM 4500-Cl B | 91386 | 2014-01-02 at 15:59 | 108052 | 2014-01-06 at 14:17 |
| TPH DRO - NEW | S 8015 D | 91251 | 2013-12-23 at 08:35 | 107808 | 2013-12-23 at 08:40 |
| TPH GRO | S 8015 D | 91224 | 2013-12-20 at 12:31 | 107811 | 2013-12-23 at 09:51 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13121828 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 5 of 20 Eddy Co, NM

Analytical Report

Sample: 349391 - AH-1 0-1'

Laboratory: Midland

Analysis: BTEX QC Batch: 107810 Prep Batch: 91224 Analytical Method: S 8021B Date Analyzed: 2013-12-23 Sample Preparation: 2013-12-20 Prep Method: S 5035 Analyzed By: AK Prepared By: AK

| | | | RL | | | |
|--------------|-----------------------|-----------------------|----------|--------------|----------|--------|
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Benzene | U | 1 | < 0.0200 | mg/Kg | 1 | 0.0200 |
| Toluene | U | 1 | < 0.0200 | ${ m mg/Kg}$ | 1 | 0.0200 |
| Ethylbenzene | U | 1 | < 0.0200 | ${ m mg/Kg}$ | 1 | 0.0200 |
| Xylene | U | 1 | < 0.0200 | mg/Kg | 1 | 0.0200 |

| | | | | | | Spike | Percent | Recovery |
|------------------------------|------|-----------------------|--------|-------|----------|------------------------|----------|----------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Trifluorotoluene (TFT) | | | 1.41 | mg/Kg | 1 | 2.00 | 70 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 1.59 | mg/Kg | 1 | 2.00 | 80 | 70 - 130 |

Sample: 349391 - AH-1 0-1'

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 108052 Prep Batch: 91386 Analytical Method: SM 4500-Cl B Date Analyzed: 2014-01-06 Sample Preparation: 2014-01-06

Prep Method: N/A Analyzed By: AR Prepared By: AR

| | | | RL | | | |
|-----------|------|------|--------|---------------------------|----------|------|
| Parameter | Flag | Cert | Result | $\mathbf{U}\mathbf{nits}$ | Dilution | RL |
| Chloride | | | 5800 | mg/Kg | 10 | 4.00 |

Sample: 349391 - AH-1 0-1'

Laboratory: Midland

Analysis: TPH DRO - NEW QC Batch: 107808
Prep Batch: 91251

Analytical Method: S 8015 D Date Analyzed: 2013-12-23 Sample Preparation:

Prep Method: N/A Analyzed By: KC Prepared By: KC

Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 6 of 20

Eddy Co, NM

| | | | | | | Spike | Percent | Recovery |
|-------------|------|-----------------------|--------|--------------|----------|--------------|----------|----------|
| Surrogate | Flag | Cert | Result | ${ m Units}$ | Dilution | ${f Amount}$ | Recovery | Limits |
| n-Tricosane | | | 106 | mg/Kg | 1 | 100 | 106 | 70 - 130 |

Sample: 349391 - AH-1 0-1'

Laboratory: Analysis:

Midland TPH GRO

QC Batch: 107811 Prep Batch: 91224

Analytical Method:

S 8015 D Date Analyzed: 2013-12-23 Sample Preparation: 2013-12-20

Prep Method: S 5035

Analyzed By: ΑK Prepared By: AK

| | | | RL | | | |
|-----------|------|-----------------------|--------|-------|----------|------|
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| GRO | U | 1 | < 4.00 | mg/Kg | 1 | 4.00 |

| | | | | | | Spike | Percent | Recovery |
|------------------------------|------|-----------------------|--------|-------|----------|------------------------|----------|----------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Trifluorotoluene (TFT) | | | 2.05 | mg/Kg | 1 | 2.00 | 102 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 2.56 | mg/Kg | 1 | 2.00 | 128 | 70 - 130 |

Sample: 349392 - AH-1 1-1.5'

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 108052 Prep Batch: 91386

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2014-01-06 2014-01-06

Prep Method: N/A Analyzed By: AR.

Prepared By: AR

RL Cert Parameter Flag Result Dilution RLUnits Chloride 610 4.00mg/Kg 5

Sample: 349393 - AH-1 2-2.5'

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 108052 Prep Batch: 91386

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2014-01-06 2014-01-06

Prep Method: N/A Analyzed By: AR. Prepared By: AR.

 $continued \dots$

Report Date: January 8, 2014 TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 7 of 20 Eddy Co, NM

sample 349393 continued . . .

| | | | RL | | | |
|-----------|------|-----------------------|--------|---------|----------|------|
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 841 | m mg/Kg | 5 | 4.00 |

Sample: 349394 - AH-1 3-3.5'

Laboratory:

Midland

Analysis:

Chloride (Titration)

OC Batch:

 $\overline{\text{Chloride}}$

108052

Analytical Method:

Date Analyzed:

SM 4500-Cl B 2014-01-06

Prep Method: N/AAnalyzed By: AR.

Prep Batch: 91386

Sample Preparation:

2014-01-06

Prepared By: AR.

Flag Cert Parameter

RL

Result Units Dilution RL1230 mg/Kg 5 4.00

Sample: 349395 - AH-2 0-1'

Laboratory:

Midland

Analysis: BTEX QC Batch: 107810 Prep Batch: 91224

Analytical Method: Date Analyzed:

Sample Preparation:

S 8021B 2013-12-23 2013-12-20 Prep Method: S 5035 Analyzed By: AK Prepared By: AK

RLParameter Flag Cert Result Units Dilution RLBenzene U < 0.0200 mg/Kg 1 0.0200 Toluene < 0.0200 mg/Kg 1 0.0200 υ Ethylbenzene < 0.0200 mg/Kg 1 0.0200 U < 0.0200 Xylene mg/Kg 1 0.0200

| | | | | | | Spike | Percent | Recovery |
|------------------------------|------|-----------------------|--------|-------|----------|-------------------|----------|----------|
| Surrogate | Flag | Cert | Result | Units | Dilution | \mathbf{Amount} | Recovery | Limits |
| Trifluorotoluene (TFT) | | | 1.42 | mg/Kg | 1 | 2.00 | 71 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 1.58 | mg/Kg | 1 | 2.00 | 79 | 70 - 130 |

Report Date: January 8, 2014

Work Order: 13121828 COG/BKU Central Battery Page Number: 8 of 20 Eddy Co, NM

Sample: 349395 - AH-2 0-1'

Laboratory: Midland

TBD

Analysis: Chloride (Titration)

QC Batch: 108052Prep Batch: 91386

Analytical Method: SM 4500-Cl B Date Analyzed:

2014-01-06 Sample Preparation: 2014-01-06 Prep Method: N/A Analyzed By: AR. Prepared By: AR.

RL

Parameter Flag Cert Result Units Dilution RL4.00 Chloride 2870 10 mg/Kg

Sample: 349395 - AH-2 0-1'

Laboratory: Midland

Analysis: TPH DRO - NEW

QC Batch: 107808 Prep Batch: 91251

Analytical Method: S 8015 D Date Analyzed:

2013-12-23

Prep Method: N/AAnalyzed By: KC

Sample Preparation: Prepared By: KC

RLCert Parameter Flag Result Units Dilution RL $\overline{\text{DRO}}$ < 50.0 50.0 mg/Kg U 1

| | | | | | | Spike | Percent | Recovery |
|-------------|-----------------------|-----------------------|--------|-------|----------|------------------------|----------|----------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| n-Tricosane | | | 108 | mg/Kg | 1 | 100 | 108 | 70 - 130 |

Sample: 349395 - AH-2 0-1'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 107811 Prep Batch: 91224

Analytical Method: S 8015 D Date Analyzed: 2013-12-23 Sample Preparation: 2013-12-20

Prep Method: S 5035 Analyzed By: AK Prepared By: AK

RLParameter Cert Flag Result Units Dilution RLGRO U < 4.00mg/Kg 4.00 ι 1

| _ | | | _ | | | Spike | Percent | Recovery |
|------------------------------|------|-----------------------|-------------------------|------------------------|---------------------------|--------------------|----------|-------------------------|
| Surrogate | Flag | Cert | Result | Units | $\operatorname{Dilution}$ | \mathbf{A} mount | Recovery | Limits |
| Triffuorotoluene (TFT) | | | 2.06 | mg/Kg | 1 | 2.00 | 103 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 2.29 | ${ m mg/Kg}$ | 1 | 2.00 | 114 | 70 - 130 |

Page Number: 9 of 20 Report Date: January 8, 2014 Eddy Co, NM COG/BKU Central Battery **TBD** Sample: 349396 - AH-2 1-1.5' Laboratory: Midland Prep Method: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Analyzed By: QC Batch: 108052 Date Analyzed: 2014-01-06 Sample Preparation: Prep Batch: 91386 2014-01-06 Prepared By: RLUnits Dilution Parameter Flag Cert Result Chloride 442 mg/Kg 5 Sample: 349397 - AH-2 2-2.5' Midland Laboratory: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 108052 Date Analyzed: 2014-01-06 Analyzed By:

Work Order: 13121828

N/A

AR

AR.

RL

4.00

AR

AR

RL

4.00

Prepared By:

5

Dilution

| Sample: | 349398 - | AH-2 | 3-3.5 |
|---------|----------|------|-------|
| - | | | |

Laboratory: Midland

91386

Flag

Prep Batch:

Parameter

Chloride

| Analysis: | lysis: Chloride (Titration) | | eal Method: | SM 4500-Cl B | Prep Method: | N/A |
|-------------|-----------------------------|-----------------------|--------------|--------------|--------------|------|
| QC Batch: | 108052 | Date Ar | alyzed: | 2014-01-06 | Analyzed By: | AR. |
| Prep Batch: | 91386 | Sample | Preparation: | 2014-01-06 | Prepared By: | AR |
| | | | | | | |
| | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 889 | mg/Kg | 5 | 4.00 |

Sample Preparation:

Cert

RL

543

Result

2014-01-06

Units

mg/Kg

Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 10 of 20 Eddy Co, NM

Method Blanks

Method Blank (1)

QC Batch: 107808

QC Batch: 107808 Prep Batch: 91251 Date Analyzed: 2013-12-23 QC Preparation: 2013-12-23 Analyzed By: KC Prepared By: KC

| | | | | | | Spike | Percent | Recovery |
|-------------|-----------------------|-----------------------|--------|-------|----------|--------|----------|--------------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| n-Tricosane | | | 109 | mg/Kg | 1 | 100 | 109 | 88.3 - 126.1 |

Method Blank (1)

QC Batch: 107810

QC Batch: 107810 Prep Batch: 91224

Date Analyzed: QC Preparation:

Analyzed By: AK Prepared By: AK

| | | | MDL | | |
|--------------|-----------------------|-----------------------|----------------|---------------------------|---------------------|
| Parameter | Flag | Cert | Result | Units | RL |
| Benzene | | 1 | < 0.00533 | mg/Kg | 0.02 |
| Toluene | | 1 | < 0.00645 | mg/Kg | 0.02 |
| Ethylbenzene | | 1 | < 0.0116 | m mg/Kg | 0.02 |
| Xylene | | 1 | < 0.00874 | mg/Kg | 0.02 |

2013-12-23

2013-12-20

| | | | | | | Spike | Percent | Recovery |
|------------------------------|------|------|--------|--------------|----------|----------------------------|----------|----------|
| Surrogate | Flag | Cert | Result | Units | Dilution | $\mathbf{A}\mathbf{mount}$ | Recovery | Limits |
| Trifluorotoluene (TFT) | | | 1.45 | mg/Kg | 1 | 2.00 | 72 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 1.47 | ${ m mg/Kg}$ | 1 | 2.00 | 74 | 70 - 130 |

Method Blank (1)

QC Batch: 107811

QC Batch: 107811 Prep Batch: 91224 Date Analyzed: 2013-12-23 QC Preparation: 2013-12-20 Analyzed By: AK Prepared By: AK Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 11 of 20 Eddy Co, NM

| Parameter | Flag | | Cert | | MDL Result | | Units | m RL |
|------------------------------|------|-----------------------|--------|--------------|---------------|--------------|----------|----------|
| GRO | | | 1 | | < 2.32 | | mg/Kg | 4 |
| | | | | | | Spike | Percent | Recovery |
| Surrogate | Flag | Cert | Result | ${ m Units}$ | Dilution | ${f Amount}$ | Recovery | Limits |
| Trifluorotoluene (TFT) | | | 2.13 | mg/Kg | 1 | 2.00 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 2.20 | mg/Kg | 1 | 2.00 | 110 | 70 - 130 |

Method Blank (1)

QC Batch: 108052

QC Batch: 108052 Date Analyzed: 2014-01-06 2014-01-02 Analyzed By: AR.

Prep Batch: 91386

QC Preparation:

Prepared By: AR

MDL Parameter Cert Result Units RLFlag Chloride < 3.85 mg/Kg 4

Report Date: January 8, 2014 Work Order: 13121828 Page Number: 12 of 20 **TBD** COG/BKU Central Battery Eddy Co, NM

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 107808 Date Analyzed:

2013-12-23

Analyzed By: KC

Prep Batch: 91251

QC Preparation: 2013-12-23

Prepared By: KC

| | | | LCS | | | Spike | Matrix | | Rec. |
|-------|--------------|--------------|--------|--------------|------|--------|--------|------|--------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit |
| DRO | | 1 | 292 | ${ m mg/Kg}$ | 1 | 250 | < 6.88 | 117 | 79.4 - 120.1 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|-------|---|--------------|--------|-------|------|--------|--------|------|--------------|-----|-------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| DRO | | 1 | 291 | mg/Kg | 1 | 250 | < 6.88 | 116 | 79.4 - 120.1 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | $_{ m LCS}$ | LCSD | | | Spike | LCS | LCSD | Rec. |
|-------------|-------------|--------|-------|------|--------|------|------|--------------|
| Surrogate | Result | Result | Units | Dil. | Amount | Rec. | Rec. | Limit |
| n-Tricosane | 112 | 112 | mg/Kg | 1 | 100 | 112 | 112 | 92.9 - 137.7 |

Laboratory Control Spike (LCS-1)

QC Batch: 107810 Prep Batch: 91224

Date Analyzed: 2013-12-23 QC Preparation: 2013-12-20

Analyzed By: AK Prepared By: AK

| | | | LCS | | | Spike | Matrix | | Rec. |
|--------------|---|--------------|--------|--------------|------|------------------------|-----------|------|------------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | \mathbf{Limit} |
| Benzene | | 1 | 1.56 | mg/Kg | 1 | 2.00 | < 0.00533 | 78 | 70 - 130 |
| Toluene | | 1 | 1.74 | mg/Kg | 1 | 2.00 | < 0.00645 | 87 | 70 - 130 |
| Ethylbenzene | | 1 | 1.66 | ${ m mg/Kg}$ | 1 | 2.00 | < 0.0116 | 83 | 70 - 130 |
| Xylene | | 1 | 5.14 | mg/Kg | 1 | 6.00 | < 0.00874 | 86 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|--------------|--------------|---|--------|--------------|------|--------|-----------|------|----------|-----|-------|
| Param | \mathbf{F} | С | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Benzene | | 1 | 1.60 | mg/Kg | 1 | 2.00 | < 0.00533 | 80 | 70 - 130 | 3 | 20 |
| Toluene | | 1 | 1.60 | ${ m mg/Kg}$ | 1 | 2.00 | < 0.00645 | 80 | 70 - 130 | 8 | 20 |
| Ethylbenzene | | 1 | 1.64 | ${ m mg/Kg}$ | 1 | 2.00 | < 0.0116 | 82 | 70 - 130 | 1 | 20 |
| Xylene | | 1 | 4.98 | mg/Kg | 1 | 6.00 | < 0.00874 | 83 | 70 - 130 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 8, 2014 TBD

Work Order: 13121828

Page Number: 13 of 20 COG/BKU Central Battery Eddy Co, NM

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT) | 1.83 | 1.46 | mg/Kg | 1 | 2.00 | 92 | 73 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 1.94 | 1.59 | mg/Kg | 1 | 2.00 | 97 | 80 | 70 - 130 |

Laboratory Control Spike (LCS-1)

QC Batch: 107811 Prep Batch: 91224

Date Analyzed: 2013-12-23 QC Preparation: 2013-12-20 Analyzed By: AK Prepared By: AK

| | | | LCS | | | Spike | Matrix | | Rec. |
|-------|--------------|--------------|--------|-------|------|--------------|--------|------------------------|------------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | ${f Amount}$ | Result | Rec . | \mathbf{Limit} |
| GRO | | 1 | 15.2 | mg/Kg | 1 | 20.0 | < 2.32 | 76 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | ${ m Rec.}$ | | RPD |
|-------|--------------|-----------------|--------|-------|------|--------|--------|------|-------------|-----|------------------------|
| Param | \mathbf{F} | $^{\mathrm{C}}$ | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| GRO | | ı | 16.9 | mg/Kg | 1 | 20.0 | < 2.32 | 84 | 70 - 130 | 11 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | LCS | LCSD | | | Spike | LCS | LCSD | Rec. |
|------------------------------|--------|--------|--------------|------|--------|------|------|------------------|
| Surrogate | Result | Result | Units | Dil. | Amount | Rec. | Rec. | \mathbf{Limit} |
| Trifluorotoluene (TFT) | 1.94 | 2.12 | mg/Kg | 1 | 2.00 | 97 | 106 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 2.42 | 2.46 | ${ m mg/Kg}$ | 1 | 2.00 | 121 | 123 | 70 - 130 |

Laboratory Control Spike (LCS-1)

QC Batch: 108052 Prep Batch: 91386

Date Analyzed: 2014-01-06 QC Preparation: 2014-01-02

Analyzed By: AR. Prepared By: AR.

| | | | LCS | | | Spike | Matrix | | Rec. |
|----------|---|--------------|--------|-------|------|--------|--------|------|------------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | \mathbf{Limit} |
| Chloride | | | 2410 | mg/Kg | 1 | 2500 | < 3.85 | 96 | 89.7 - 115.9 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|---|--------------|--------|-------|------|--------|--------|------|--------------|-----|-------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 2460 | mg/Kg | 1 | 2500 | < 3.85 | 98 | 89.7 - 115.9 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 14 of 20 Eddy Co, NM

Matrix Spike (MS-1)

Spiked Sample: 349344

QC Batch:

107808

Date Analyzed:

2013-12-23

Analyzed By: KC

Prepared By:

Prep Batch:

91251

QC Preparation: 2013-12-23 KC

| | | | MS | | | Spike | Matrix | | Rec. |
|-------|--------------|--------------|--------|-------|------|--------|--------|------|--------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | ${f Limit}$ |
| DRO | | 1 | 273 | mg/Kg | 1 | 250 | < 6.88 | 109 | 64.8 - 149.9 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|-------|---|--------------|--------|------------------|------|--------|--------|------|------------------------|-----|------------------------|
| Param | F | \mathbf{C} | Result | \mathbf{Units} | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| DRO | | 1 | 265 | mg/Kg | 1 | 250 | < 6.88 | 106 | 64.8 - 149.9 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | MS | MSD | | | Spike | MS | MSD | Rec. |
|-------------|--------|--------|------------------|------|--------|------|------|--------------|
| Surrogate | Result | Result | \mathbf{Units} | Dil. | Amount | Rec. | Rec. | Limit |
| n-Tricosane | 108 | 104 | mg/Kg | 1 | 100 | 108 | 104 | 85.4 - 147.7 |

Matrix Spike (MS-1)

Spiked Sample: 349344

QC Batch: Prep Batch:

107810 91224

Date Analyzed:

2013-12-23

QC Preparation: 2013-12-20 Analyzed By: AK Prepared By: ΑK

MS Spike Matrix Rec. Param \mathbf{F} \mathbf{C} Result Units Dil. Amount Result Rec. Limit Benzene 1.52 2.00 < 0.00533 76 70 - 130 mg/Kg 1 2.00 Toluene 1.54 mg/Kg 1 < 0.00645 77 70 - 130 2.00 Ethylbenzene 1.57 mg/Kg 1 < 0.0116 78 70 - 130 Xylene 4.72 mg/Kg 6.00 < 0.00874 79 70 - 130 1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|--------------|--------------|--------------|--------|-------|------|--------|-----------|------|----------|-----|-------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Benzene | | 1 | 1.47 | mg/Kg | 1 | 2.00 | < 0.00533 | 74 | 70 - 130 | 3 | 20 |
| Toluene | | 1 | 1.50 | mg/Kg | 1 | 2.00 | < 0.00645 | 75 | 70 - 130 | 3 | 20 |
| Ethylbenzene | | 1 | 1.50 | mg/Kg | 1 | 2.00 | < 0.0116 | 75 | 70 - 130 | 5 | 20 |
| Xylene | | 1 | 4.57 | mg/Kg | 1 | 6.00 | < 0.00874 | 76 | 70 - 130 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MS | MSD | | | Spike | MS | MSD | Rec. |
|------------------------|-----|-----|--------|--------|--------------|------|------------------------|------|------|----------|
| Surrogate | | | Result | Result | Units | Dil. | Amount | Rec. | Rec. | Limit |
| Trifluorotoluene (TFT) | Qsr | Qsr | 1.33 | 1.28 | ${ m mg/Kg}$ | 1 | 2 | 66 | 64 | 70 - 130 |

 $continued \dots$

Report Date: January 8, 2014

Work Order: 13121828 COG/BKU Central Battery Page Number: 15 of 20 Eddy Co, NM

TBD

matrix spikes continued . . .

| | MS | MSD | | | Spike | MS | MSD | Rec. |
|------------------------------|--------|--------|-------|------|--------|------|------|----------|
| Surrogate | Result | Result | Units | Dil. | Amount | Rec. | Rec. | Limit |
| 4-Bromofluorobenzene (4-BFB) | 1.55 | 1.49 | mg/Kg | 1 | 2 | 78 | 74 | 70 - 130 |

Matrix Spike (MS-1)

Spiked Sample: 349344

QC Batch:

107811

Date Analyzed:

2013-12-23

Analyzed By: AK

Prep Batch: 91224

QC Preparation: 2013-12-20

Prepared By: AK

| | | | MS | | | Spike | Matrix | | Rec. |
|-------|---|---------------------------------------|--------|-------|------|--------|--------|------|----------|
| Param | F | $\mathbf{C}_{\underline{\mathbf{C}}}$ | Result | Units | Dil. | Amount | Result | Rec. | Limit |
| GRO | | 1 | 15.4 | mg/Kg | 1 | 20.0 | < 2.32 | 77 | 70 - 130 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|-------|---|--------------|--------|-------|------|--------|--------|------|----------|-----|-------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| GRO | | 1 | 15.2 | mg/Kg | 1 | 20.0 | < 2.32 | 76 | 70 - 130 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | MS | MSD | | | Spike | MS | MSD | Rec. |
|------------------------------|--------|--------|-------|------|--------|------|------|------------------|
| Surrogate | Result | Result | Units | Dil. | Amount | Rec. | Rec. | \mathbf{Limit} |
| Trifluorotoluene (TFT) | 1.95 | 1.91 | mg/Kg | 1 | 2 | 98 | 96 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 2.38 | 2.41 | mg/Kg | 1 | 2 | 119 | 120 | 70 - 130 |

Matrix Spike (MS-1)

Spiked Sample: 349404

QC Batch:

108052 Prep Batch: 91386

Date Analyzed:

2014-01-06

QC Preparation: 2014-01-02

Analyzed By: AR

Prepared By: AR

| | | | MS | | | Spike | Matrix | | Rec. |
|----------|---|--------------|--------|-------|------|--------|--------|------|------------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | \mathbf{Limit} |
| Chloride | | | 2450 | mg/Kg | 5 | 2500 | 76.9 | 95 | 78.9 - 121 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|---|--------------|--------|-------|------|--------|--------|------|------------|-----|-------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 2590 | mg/Kg | 5 | 2500 | 76.9 | 100 | 78.9 - 121 | 6 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 8, 2014

TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 16 of 20 Eddy Co, NM

Calibration Standards

Standard (CCV-1)

QC Batch: 107808

Date Analyzed: 2013-12-23

Analyzed By: KC

| | | | | CCVs | CCVs | CCVs | Percent | |
|-------|-----------------------|-----------------------|-------|-------|-------|-----------------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 254 | 102 | 80 - 120 | 2013-12-23 |

Standard (CCV-2)

QC Batch: 107808

Date Analyzed: 2013-12-23

Analyzed By: KC

| | | | | $rac{	ext{CCVs}}{	ext{True}}$ | $\begin{array}{c} { m CCVs} \\ { m Found} \end{array}$ | $rac{	ext{CCVs}}{	ext{Percent}}$ | Percent Recovery | Date |
|-------|------|-----------------------|-------|--------------------------------|--|-----------------------------------|---------------------|------------|
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 284 | 114 | 80 - 120 | 2013-12-23 |

Standard (CCV-3)

QC Batch: 107808

Date Analyzed: 2013-12-23

Analyzed By: KC

| | | | | CCVs | CCVs | CCVs | Percent | |
|-------|-----------------------|-----------------------|-------|-----------------------|-----------------|----------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 273 | 109 | 80 - 120 | 2013-12-23 |

Standard (CCV-1)

QC Batch: 107810

Date Analyzed: 2013-12-23

Analyzed By: AK

| | | | | CCVs True | CCVs Found | ${ m CCVs} \ { m Percent}$ | Percent Recovery | Date |
|---------|------|------|---------|--------------|---------------|----------------------------|---------------------|------------|
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Benzene | | 1 | mg/kg | 0.100 | 0.0860 | 86 | 80 - 120 | 2013-12-23 |
| Toluene | | 1 | m mg/kg | 0.100 | 0.0847 | 85 | 80 - 120 | 2013-12-23 |

 $continued \dots$

Report Date: January 8, 2014 TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 17 of 20 Eddy Co, NM

| standard | continued | |
|----------|-----------|--|
| | | |

| | | | | CCVs True | ${ m CCVs}$ Found | ${ m CCVs} \ { m Percent}$ | Percent Recovery | Date |
|--------------|-----------------------|-----------------------|--------------|--------------|-------------------|----------------------------|---------------------|------------|
| Param | Flag | Cert | ${ m Units}$ | Conc. | Conc. | Recovery | Limits | Analyzed |
| Ethylbenzene | | l | mg/kg | 0.100 | 0.0814 | 81 | 80 - 120 | 2013-12-23 |
| Xylene | | 1 | ${ m mg/kg}$ | 0.300 | 0.246 | 82 | 80 - 120 | 2013-12-23 |

Standard (CCV-2)

QC Batch: 107810

Date Analyzed: 2013-12-23

Analyzed By: AK

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|--------------|-----------------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene | | 1 | mg/kg | 0.100 | 0.0852 | 85 | 80 - 120 | 2013-12-23 |
| Toluene | | 1 | mg/kg | 0.100 | 0.0832 | 83 | 80 - 120 | 2013-12-23 |
| Ethylbenzene | | 1 | mg/kg | 0.100 | 0.0797 | 80 | 80 - 120 | 2013-12-23 |
| Xylene | | 1 | mg/kg | 0.300 | 0.240 | 80 | 80 - 120 | 2013-12-23 |

Standard (CCV-3)

QC Batch: 107810

Date Analyzed: 2013-12-23

Analyzed By: AK

| | | | | CCVs | CCVs | CCVs | Percent | |
|--------------|-----------------------|------|---------------|-----------------------|-----------------|-----------------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | $_{ m Units}$ | Conc. | Conc. | Recovery | Limits | Analyzed |
| Benzene | | 1 | mg/kg | 0.100 | 0.0864 | 86 | 80 - 120 | 2013-12-23 |
| Toluene | | 1 | ${ m mg/kg}$ | 0.100 | 0.0842 | 84 | 80 - 120 | 2013-12-23 |
| Ethylbenzene | | ı | mg/kg | 0.100 | 0.0796 | 80 | 80 - 120 | 2013-12-23 |
| Xylene | | 1 | mg/kg | 0.300 | 0.240 | 80 | 80 - 120 | 2013-12-23 |

Standard (CCV-1)

QC Batch: 107811

Date Analyzed: 2013-12-23

Analyzed By: AK

| | | | | CCVs | CCVs | CCVs | Percent | |
|-------|------|------|-------|-----------------|-------|-----------------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | mg/Kg | 1.00 | 0.906 | 91 | 80 - 120 | 2013-12-23 |

Report Date: January 8, 2014 TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 18 of 20 Eddy Co, NM

Standard (CCV-2)

QC Batch: 107811

Date Analyzed: 2013-12-23

Analyzed By: AK

| | | | | CCVs | CCVs | CCVs | Percent | |
|-------|-----------------------|-----------------------|--------------|-----------------------|-----------------|-----------------|----------|------------|
| | | | | True | Found | Percent | Recovery | · Date |
| Param | Flag | Cert | ${ m Units}$ | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | mg/Kg | 1.00 | 0.812 | 81 | 80 - 120 | 2013-12-23 |

Standard (CCV-3)

QC Batch: 107811

Date Analyzed: 2013-12-23

Analyzed By: AK

| | | | | CCVs | CCVs | CCVs | Percent | |
|-------|-----------------------|------|------------------|-----------------|-----------------|-----------------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | \mathbf{Units} | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | mg/Kg | 1.00 | 0.837 | 84 | 80 - 120 | 2013-12-23 |

Standard (CCV-1)

QC Batch: 108052

Date Analyzed: 2014-01-06

Analyzed By: AR.

| | | | | CCVs | CCVs | CCVs | Percent | |
|----------|------|-----------------------|-------|-----------------------|-------|----------|----------|-----------------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | mg/Kg | 100 | 102 | 102 | 85 - 115 | 2014-01-06 |

Standard (CCV-2)

QC Batch: 108052

Date Analyzed: 2014-01-06

Analyzed By: AR

| | | | | CCVs | CCVs | CCVs | $\operatorname{Percent}$ | |
|----------|-----------------------|-----------------------|--------------|-----------------------|-----------------|-----------------|--------------------------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | ${ m mg/Kg}$ | 100 | 98.5 | 98 | 85 - 115 | 2014-01-06 |

Report Date: January 8, 2014

Work Order: 13121828 COG/BKU Central Battery Page Number: 19 of 20 Eddy Co, NM

Appendix

Report Definitions

| Name | Definition |
|---------------------------|----------------------------|
| $\overline{\mathrm{MDL}}$ | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

Laboratory Certifications

| | Certifying | Certification | Laboratory |
|--------------|------------|---------------------|---------------|
| \mathbf{C} | Authority | Number | Location |
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-13-7 | Midland |

Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
- Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
 - U The analyte is not detected above the SDL

Attachments

Report Date: January 8, 2014 TBD

Work Order: 13121828 COG/BKU Central Battery Page Number: 20 of 20 Eddy Co, NM

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

| Analysis Request of Chain of Custody Recor | | | | | | | | | rd | | _ | | | | | | | PA | | | 1 | | OF: | | | | | | |
|--|--|-----------|--------|----|------|------------------------------|--------------------------------------|----------------------|----------------|------------|----------|------|------|---------|-----------------|----------------------|----------------------|---------------------|-----------|--------------------------|---------------------------|---------------|-------------|-------------|------------------|-------------------------------|----------|----|----------|
| | | | - | - | | | | | | | | | | | | | | (C | | | | S RE | | | Vo.) | | | | |
| | | | | | | Midland, Tex | Spring St. | | | | | | | | 5 (Ext. to C35) | ठ | Vr Pd Hg | | | | | | | | | DS | | | |
| CLIENT NAT | Ś | | | | | SITE MANAGE TKE T | r: avarce | INERS | | | | RVAT | | 1 1 | TX1005 | s Ba Cd | is Ba Cd | s | | 260/624 | 3270/625 | | | | | ns, pH, 1 | | | |
| PROJECT N | ROJECT NO.: PROJECT NAME: BKU COG - Gerttal Battru | | | | | CONTA | (Ž | | | | | | MOD. | s Ag A | s Ag A | es Volatile | | 8240/8 | i. Vol. 8 | 809 | | اي | Air) | s/Catic | | | I | | |
| LAB I.D. NUMBER | DATE 2013 | TIME | MATRIX | | GRAB | SAMPL | Eddy AD WIM EIDENTIFICATION | NUMBER OF CONTAINERS | FILTERED (Y/N) | HCL | SONE TO: | NONE | | J - I | PAH 8270 | RCRA Metals Ag As Ba | TCLP Metals Ag As Ba | TCLP Semi Volatiles | RCI | GC.MS Vol. 8240/8260/624 | GC.MS Semi. Vol. 8270/625 | PCB's 8080/60 | Chloride | Gamma Spec. | Alpha Beta (Air) | Major Anions/Cations, pH, TDS | | | |
| 349391 | 12/16 | | S | | χ | (1-0) 1 HA | | 1 | N | | · | X | | X | X | | | | | | | | X | | | | | | |
| 392 | , | | (| | | 11-1.5 |) | 1 | (| | | | | | | | | | | | | | | | | | | | |
| 393 | | | | | | (2-2. | <u>5)</u> | | | | | | | | | | | | | | | | \parallel | | | | | | |
| 394 | | | | | | (3-3 | 5) | | | | | | | | | | | | | | | | | | | | | | |
| 395 | | | | | | AH Z (0-1) | | | | | | | | X | X | | | | | | | | | | | | | | |
| 396 | | | | | | (1-1,5 |) | | | | | | | | | | | | | | | | | | | | | | |
| 397 | | | | | | (2-2.5 | •) | \parallel | | | | | | | | | | | | | | | | | | | | | |
| 398 | > | | | | | (3 -3.5 | 5) | | | | 1 | , | | | | | | | L | | | | V | | | | | | |
| | | | | | Ţ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 1/ | | 1 | م | | | | | L | | | | | | | | | | |
| RELINQUISHED | BY: (Signatur | المحك | | | | Date: 3/18/15 Time: 0\$30 | RECEIVED BY ₂ (Signature) | | | Dat Tim | | 319 | ** | <u></u> | S | AMPL Adr | E SHI | (Prir | 18 li | ritial) | 16 | lee | | | Date Time | : 121 :: | الإمال | | - |
| RELINQUISHED | BY: (Signatur | ne) | | | | Date: | RECEIVED BY: (Signature) | | | Dat Tim | | | | | . | FEDE | <u>×</u> | | | BUS | i | | | | IRBIL | | | | - |
| RELINQUISHED | BY: (Signatur | e) | | | | Date: | RECEIVED BY: (Signature) | | | Dat Tim | - | | | | | | DELI | | | PERS | | - | | | THEF | esuits | by: | | - |
| RECEIVING LAR | | TOOL | 0 | | | | RECEIVED BY: (Signature) | | | | | | | | ٦ | - 1. | | + | . [/ | 'nις | 52/ | | | | R | USH C | harges | 3 | \dashv |
| CITY: _Mdl | | STATE: | | PI | IONE | ZIP: C | ATE: | TI | νE: _ | | | | | | | VY | e — | 10 | ~ · | ~- | | | | | | uthoriz Yes | ed: | No | |
| SAMPLE COND | ITION WHEN I | RECEIVED: | | | | REMARKS: Rua Alepen S | amples of TPH ly | Cee | d | 2 | Si | 000 |) | ВТ | EX | L | ice | e0 | es | Si | 2 | n | Y | res | R To | ys. | <u> </u> | | |
| | Please fill out all copies - Laboratory retains Yellow copy Return Ordinal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



May 12, 2014

IKE TAVAREZ

TETRA TECH

1910 N. BIG SPRING STREET

MIDLAND, TX 79705

RE: BKU CENTRAL TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/06/14 9:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab-accred-certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg & Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Analytical Results For:

TETRA TECH IKE TAVAREZ

1910 N. BIG SPRING STREET

MIDLAND TX, 79705

Fax To:

(432) 682-3946

Received:

05/06/2014

05/12/2014

Sampling Date:

05/02/2014

Reported:

Sampling Type:

Soil

Project Name:

BKU CENTRAL TANK BATTERY

Sampling Condition:

** (See Notes)

Project Number:

112MC06171

Sample Received By:

Jodi Henson

Project Location:

COG

Sample ID: T-1 AH-1 0' (H401374-01)

| - | | |
|----------|------------|--|
| Chlasida | CM4EOOCL D | |

mg/kg

7200

Result

240

Analyzed By: AP

Analyte

Result

Reporting Limit 16.0

Reporting Limit

16.0

Analyzed 05/12/2014

Analyzed

05/12/2014

Method Blank ND

BS 400

BS

400

% Recovery 100

True Value QC 400

True Value QC

400

RPD Qualifier

Sample ID: T-1 AH-1 2' (H401374-02)

Chloride, SM4500CI-B

Analyte

Analyzed By: AP

Method Blank

% Recovery

100

3.92

3.92

3.92

RPD Qualifier

Chloride

Chloride

Sample ID: T-1 AH-1 4' (H401374-03)

Chloride, SM4500Cl-B

| ma | /kı |
|----|-----|

Analyzed By: AP

Result 2320 Reporting Limit

16.0

16.0

Analyzed 05/12/2014 Method Blank ND

ND

BS

400

% Recovery

100

True Value QC

400

RPD Qualifier

Qualifier

Chloride

Chloride

Sample ID: T-1 AH-1 6' (H401374-04)

Chloride, SM4500Cl-B

3480

Analyzed By: AP

| | | | | _ |
|---------|--------|-------|------------|---|
| Analyte | Result | Repor | ting Limit | |

| Analyzed |
|------------|
| 05/12/2014 |

Method Blank ND

BS 400 % Recovery 100

True Value QC 400

RPD 3.92

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the ar All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

TETRA TECH IKE TAVAREZ 1910 N. BIG SPRING STREET MIDLAND TX, 79705 (432) 682-3946

Fax To:

Received: Reported: 05/06/2014

05/12/2014

Project Name: **BKU CENTRAL TANK BATTERY**

Project Number:

Analyte

Analyte

112MC06171

Project Location:

COG

Sampling Date:

Sampling Type:

Sampling Condition: Sample Received By:

** (See Notes)

05/02/2014

Jodi Henson

Soil

Sample ID: T-1 AH-1 8' (H401374-05)

Chloride, SM4500CI-B

Chloride

Chloride

Chloride

Result

3000

Analyzed By: AP

Reporting Limit

16.0

Reporting Limit

16.0

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed

05/12/2014

Analyzed

05/12/2014

Method Blank ND

BS 400

BS

400

% Recovery

100

True Value QC RPD Qualifier

Sample ID: T-1 AH-1 10' (H401374-06)

Chloride, SM4500CI-B

Result

2760

Analyzed By: AP

Method Blank

% Recovery

100

True Value QC

400

400

RPD Qualifier

3.92

3.92

Sample ID: T-1 AH-1 12' (H401374-07)

Chloride, SM4500CI-B

2040

Result

800

Result

964

Analyzed By: AP

Analyte Result Reporting Limit

Analyzed 05/12/2014

Analyzed

05/12/2014

Method Blank ND

ND

BS 400 % Recovery 100

True Value QC

Qualifier RPD

3.92

Sample ID: AH-1 NSW (H401374-08)

Chloride, SM4500CI-B

Analyte

mg/kg

Analyzed By: AP

Method Blank BS % Recovery

100

104

True Value QC 400

400

400

RPD 3.92

3.92

Qualifier

Chloride

Sample ID: AH-1 SSW (H401374-09)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte Chloride

Analyzed 05/09/2014

Method Blank ND

ND

RS 416

400

True Value QC % Recovery

RPD

Qualifier

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subs es, affiliates or successors ansing out of or related to the performance of the services hereunder by Cordinal, regardless of whether such

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

TETRA TECH IKE TAVAREZ

1910 N. BIG SPRING STREET

MIDLAND TX, 79705

Fax To: (432) 682-3946

Received:

05/06/2014

Sampling Date:

05/05/2014

Reported:

05/12/2014

Sampling Type:

Soil

Project Name:

BKU CENTRAL TANK BATTERY

Sampling Condition:

** (See Notes)

Project Number:

112MC06171

Sample Received By:

Jodi Henson

Project Location:

COG

Sample ID: AH-1 ESW (H401374-10)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: AP | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 768 | 16.0 | 05/09/2014 | ND | 416 | 104 | 400 | 3.92 | |

Sample ID: AH-1 WSW (H401374-11)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: AP | | | | | |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 272 | 16.0 | 05/09/2014 | ND | 416 | 104 | 400 | 3.92 | |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's exchance remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in witing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced excert in full with written anomoral of Cardinal Japonatories.

Celey D. Keene



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500CI-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keine

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| LAB I.D. NUMBER | DATE 5/2/14 | TIME | MATRIX | COMP | GRAB | SAMPL | E IDENTIFICATION | 1912 Hary | NUMBERO | FILTERED (Y/N) | HNO3 | ICE | NONE | BTEX 8021B | TPH 8015 | RCRA Metals Ag | TCLP Metals / | TCLP Semi Volatiles | RC! | GC.MS Vol. 8240/8260/624 | GC.MS Semi. Vol PCB's 8080/608 | Pest. 808/6 | Chloride Gamma Spec. | Alpha Beta (Air) | PLM (Asbe | Major Anions/Cations, pH, 1DS | | |
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6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, Suite E 5002 Basin Street, Suite A1 (BioAquatic) 2501 Mayes Rd., Suite 100

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432-689-6301 Texas 75006 Carroliton. 972-242-7750

E-Mail: lab@traceanalysis.com WEB: www.fraceanalysis.com

Certifications

WBE **NCTRCA** DBE**NELAP** DoD LELAP Oklahoma ISO 17025 HUB Kansas

Analytical and Quality Control Report

Ike Tavarez

Tetra Tech

1901 N. Big Spring St.

Midland, TX, 79705

Report Date: June 24, 2014

Work Order: 14062016

Project Location:

Eddy Co, NM

Project Name:

COG/BKU Central Battery

Project Number:

112MC06171

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| | | | Date | ${f Time}$ | Date |
|--------|-------------|--------|------------|------------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 366372 | BH-1 4-5' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366373 | BH-1 6-7' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366374 | BH-1 9-10' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366375 | BH-1 14-15' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366376 | BH-1 19-20' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366377 | BH-1 24-25' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366378 | BH-1 29-30' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366379 | BH-1 39-40' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366380 | BH-1 49-50' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366381 | BH-1 59-60' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366382 | BH-1 64-65' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366383 | BH-1 69-70' | soil | 2014-06-17 | 00:00 | 2014-06-20 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael april

Dr. Blair Leftwich, Director Dr. Michael Abel, Project Manager

Report Contents

| Analytical Report Sample 366372 (BH-1 4-5') Sample 366373 (BH-1 6-7') Sample 366373 (BH-1 9-10') Sample 366374 (BH-1 19-10') Sample 366376 (BH-1 19-20') Sample 366376 (BH-1 19-20') Sample 366377 (BH-1 12-25') Sample 366377 (BH-1 22-30') Sample 366378 (BH-1 29-30') Sample 366378 (BH-1 29-30') Sample 366380 (BH-1 90-0') Sample 366380 (BH-1 59-0') Sample 366381 (BH-1 59-0') Sample 366381 (BH-1 60-70') Method Blanks QC Batch 113052 - Method Blank (1) QC Batch 113055 - M | Case Narrative | 4 |
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| QC Batch 113052 - MS (1) 12 QC Batch 113053 - MS (1) 12 QC Batch 113055 - MS (1) 12 Calibration Standards 14 QC Batch 113052 - ICV (1) 14 QC Batch 113053 - ICV (1) 14 QC Batch 113053 - ICV (1) 14 QC Batch 113053 - CCV (1) 14 QC Batch 113055 - ICV (1) 14 QC Batch 113055 - CCV (1) 15 Appendix 16 Report Definitions 16 Laboratory Certifications 16 | Matrix Spikes | 12 |
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| Calibration Standards 14 QC Batch 113052 - ICV (1) 14 QC Batch 113052 - CCV (1) 14 QC Batch 113053 - ICV (1) 14 QC Batch 113053 - CCV (1) 14 QC Batch 113055 - ICV (1) 14 QC Batch 113055 - CCV (1) 15 Appendix 16 Report Definitions 16 Laboratory Certifications 16 | | 12 |
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| QC Batch 113052 - CCV (1) 14 QC Batch 113053 - ICV (1) 14 QC Batch 113053 - CCV (1) 14 QC Batch 113055 - ICV (1) 14 QC Batch 113055 - CCV (1) 15 Appendix 16 Report Definitions 16 Laboratory Certifications 16 | | 14 |
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| QC Batch 113055 - ICV (1) 14 QC Batch 113055 - CCV (1) 15 Appendix 16 Report Definitions 16 Laboratory Certifications 16 | | 14 |
| QC Batch 113055 - CCV (1) 15 Appendix 16 Report Definitions 16 Laboratory Certifications 16 | | 14 |
| Appendix Report Definitions | QC Batch 113055 - ICV (1) | 14 |
| Report Definitions 16 Laboratory Certifications 16 | QC Batch 113055 - CCV (1) | 15 |
| Report Definitions 16 Laboratory Certifications 16 | Appendix | 10 |
| Laboratory Certifications | | |
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| Standard riags | V | |
| Attachments 16 | _ | |

Case Narrative

Samples for project COG/BKU Central Battery were received by TraceAnalysis, Inc. on 2014-06-20 and assigned to work order 14062016. Samples for work order 14062016 were received intact at a temperature of 10.6 C.

Samples were analyzed for the following tests using their respective methods.

| | | Prep | Prep | QC | Analysis |
|----------------------|--------------|-------|-----------------------|--------|---------------------|
| Test | Method | Batch | Date | Batch | Date |
| Chloride (Titration) | SM 4500-Cl B | 95597 | 2014-06-20 at 13:48 | 113052 | 2014-06-23 at 14:01 |
| Chloride (Titration) | SM 4500-Cl B | 95599 | 2014-06-20 at 13:51 | 113053 | 2014-06-23 at 14:04 |
| Chloride (Titration) | SM 4500-Cl B | 95602 | 2014-06-20 at 14:11 | 113055 | 2014-06-23 at 14:21 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 14062016 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 5 of 17 Eddy Co, NM

Analytical Report

Sample: 366372 - BH-1 4-5'

Laboratory:

Midland

Analysis:

Chloride (Titration)

113052

Analytical Method:

SM 4500-Cl B

Prep Method: N/A SC

QC Batch: Prep Batch:

95597

Date Analyzed: 2014-06-23 Sample Preparation: 2014-06-20 Analyzed By:

Prepared By: SC

RL

Parameter Result Flag Cert Units Dilution RLChloride 690 4.00 mg/Kg

Sample: 366373 - BH-1 6-7'

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

QC Batch: Prep Batch:

113053

Date Analyzed:

2014-06-23

Analyzed By: SC

95599

Sample Preparation:

2014-06-20

Prepared By: SC

RL

| Parameter | Flag | Cert | Result | Units | Dilution | RL |
|-----------|------|------|--------|-------|----------|------|
| Chloride | | | 2160 | mg/Kg | 5 | 4.00 |

Sample: 366374 - BH-1 9-10'

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A Analyzed By: SC

QC Batch: Prep Batch:

113053 95599

Date Analyzed: Sample Preparation: 2014-06-23 2014-06-20

Prepared By: SC

RL

| Parameter | Flag | Cert | Result | Units | Dilution | RL |
|-----------|------|------|--------|-------|----------|------|
| Chloride | | | 2880 | mg/Kg | 5 | 4.00 |

Work Order: 14062016 Page Number: 6 of 17 Report Date: June 24, 2014 112MC06171 COG/BKU Central Battery Eddy Co, NM Sample: 366375 - BH-1 14-15' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 113053 Date Analyzed: 2014-06-23 Analyzed By: SCPrep Batch: 95599 Sample Preparation: 2014-06-20 Prepared By: SCRLParameter Flag Cert Result Units Dilution RLChloride 2020 mg/Kg 5 4.00 Sample: 366376 - BH-1 19-20' Laboratory: Midland Chloride (Titration) Analytical Method: Analysis: SM 4500-Cl B Prep Method: N/A QC Batch: 113053 Date Analyzed: 2014-06-23 Analyzed By: SCPrep Batch: 95599 Sample Preparation: 2014-06-20 Prepared By: SCRLParameter Flag Cert Result Units Dilution RLChloride 2980 mg/Kg 4.00 5 Sample: 366377 - BH-1 24-25' Midland Laboratory: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 113053 Date Analyzed: 2014-06-23 Analyzed By: SCPrep Batch: 95599 Sample Preparation: 2014-06-20 Prepared By: SCRLParameter Flag Cert Result Units Dilution RLChloride 3990 mg/Kg 5 4.00

Analytical Method:

Sample Preparation:

Date Analyzed:

SM 4500-Cl B

2014-06-23

2014-06-20

Prep Method:

Analyzed By:

Prepared By:

N/A

SC

SC

Sample: 366378 - BH-1 29-30'

Midland

113053

95599

Chloride (Titration)

Laboratory:

Analysis:

QC Batch:

Prep Batch:

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 7 of 17 Eddy Co, NM

| | | | RL | | | |
|-----------|------|-----------------------|--------|--------------|----------|------|
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 3080 | ${ m mg/Kg}$ | 5 | 4.00 |

Sample: 366379 - BH-1 39-40'

Laboratory:

QC Batch:

Midland

Analysis: Chloride (Titration)

113053

Prep Batch: 95599 Analytical Method:

Date Analyzed: Sample Preparation: SM 4500-Cl B

2014-06-23 2014-06-20

Prep Method: N/AAnalyzed By: SC

Prepared By: SC

| | | | R.L | | | |
|-----------|-----------------------|------|--------|-------|----------|------|
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 1250 | mg/Kg | 5 | 4.00 |

ът

Sample: 366380 - BH-1 49-50'

Laboratory:

Prep Batch:

Midland

Analysis: Chloride (Titration) QC Batch: 113053

95599

Analytical Method:

Date Analyzed:

SM 4500-Cl B 2014-06-23

Prep Method: N/A Analyzed By:

Sample Preparation: 2014-06-20 RL

Prepared By: SC

SC

Parameter Flag Cert Result Units Dilution RLChloride 1110 4.00 mg/Kg 5

Sample: 366381 - BH-1 59-60'

Laboratory: Midland

QC Batch:

Analysis: Chloride (Titration)

113053 Prep Batch: 95599

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2014-06-23 2014-06-20

Prep Method: N/A Analyzed By: SCPrepared By: SC

RLParameter Flag Cert Result Units Dilution RLChloride $\overline{673}$ mg/Kg 4.00 5

112 MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 8 of 17

Eddy Co, NM

Sample: 366382 - BH-1 64-65'

Laboratory: N

Midland

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

Analysis: QC Batch: Prep Batch:

113053 95599 Date Analyzed: Sample Preparation: 2014-06-23 2014-06-20 Analyzed By: SC Prepared By: SC

RL

Parameter Flag Chloride Cert

 Result
 Units

 385
 mg/Kg

5

Dilution

RL

4.00

Sample: 366383 - BH-1 69-70'

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

QC Batch: Prep Batch: 113055 95602

Date Analyzed: 2014-06-23 Sample Preparation: 2014-06-20 Analyzed By: SC Prepared By: SC

RL

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 9 of 17 Eddy Co, NM

Method Blanks

Method Blank (1)

QC Batch: 113052

QC Batch: 113052 Prep Batch: 95597

Date Analyzed:

2014-06-23

Analyzed By:

QC Preparation: 2014-06-20 Prepared By:

MDL

Parameter Flag Cert Result Units RLChloride < 3.85 mg/Kg

Method Blank (1)

QC Batch: 113053

QC Batch:

113053 Prep Batch: 95599

Date Analyzed: QC Preparation: 2014-06-20

2014-06-23

Analyzed By: SC

Prepared By: SC

MDL

Flag Parameter Cert Result Units RLChloride < 3.85 mg/Kg 4

Method Blank (1)

QC Batch: 113055

QC Batch:

Chloride

113055

Date Analyzed:

2014-06-23

Analyzed By:

Prep Batch: 95602

QC Preparation:

2014-06-20

Prepared By: SC

RL

4

Parameter Cert Flag

MDL Result Units < 3.85 mg/Kg

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 10 of 17 Eddy Co, NM

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch:

113052

Date Analyzed:

2014-06-23

Analyzed By: SC

Prepared By:

Prep Batch: 95597

QC Preparation: 2014-06-20

| | | | $_{ m LCS}$ | * | | Spike | Matrix | | ${ m Rec.}$ |
|----------|---|-----------------|-------------|-------|------|--------|--------|------|------------------------|
| Param | F | $^{\mathrm{C}}$ | Result | Units | Dil. | Amount | Result | Rec. | Limit |
| Chloride | | | 2560 | mg/Kg | 5 | 2500 | <19.2 | 102 | 85 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|--------------|--------------|--------|-------|------|--------|--------|------|----------|-----|------------------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 2560 | mg/Kg | 5 | 2500 | <19.2 | 102 | 85 - 115 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

113053

Date Analyzed:

2014-06-23

Analyzed By: SC

Prep Batch: 95599

QC Preparation: 2014-06-20

Prepared By:

| | | | LCS | | | Spike | Matrix | | Rec. |
|----------|-----|---|--------|-------|------|--------------|--------|------|----------|
| Param | _ F | C | Result | Units | Dil. | ${f Amount}$ | Result | Rec. | Limit |
| Chloride | | | 2600 | mg/Kg | 5 | 2500 | <19.2 | 104 | 85 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|---|------------|--------|-------|------|--------|--------|------|----------|-----|-------|
| Param | F | $^{\rm C}$ | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 2640 | mg/Kg | 5 | 2500 | <19.2 | 106 | 85 - 115 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

113055

Date Analyzed:

2014-06-23

Analyzed By: SC

Prep Batch: 95602

QC Preparation:

2014-06-20

Prepared By: SC

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 11 of 17

Eddy Co, NM

| | | | LCS | | | Spike | Matrix | | Rec. |
|----------|--------------|--------------|--------|--------------|------|--------------|--------|------|------------------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | ${f Amount}$ | Result | Rec. | Limit |
| Chloride | | | 2610 | ${ m mg/Kg}$ | 5 | 2500 | <19.2 | 104 | 85 - 115 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | LCSD | | | $_{ m Spike}$ | Matrix | | Rec. | | RPD |
|----------|--------------|--------------|--------|-------|------|---------------|--------|------|------------------------|-----|-------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | ${f Amount}$ | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 2610 | mg/Kg | 5 | 2500 | <19.2 | 104 | 85 - 115 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 12 of 17 Eddy Co, NM

Matrix Spikes

Matrix Spike (MS-1)

Spiked Sample: 366366

QC Batch:

113052

Date Analyzed:

2014-06-23

Analyzed By: SC

Prep Batch: 95597

QC Preparation: 2014-06-20

Prepared By: SC

| | | | MS | | | Spike | Matrix | | Rec. |
|----------|---|--------------|--------|-------|------|--------|--------|------|---------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | $_{ m Limit}$ |
| Chloride | | | 5760 | mg/Kg | 5 | 2500 | 3100 | 106 | 78.9 - 121 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|---|--------------|--------|--------------|------|------------------------|--------|------|------------|-----|------------------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 5910 | ${ m mg/Kg}$ | 5 | 2500 | 3100 | 112 | 78.9 - 121 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 366375

QC Batch:

113053

Date Analyzed:

2014-06-23

Analyzed By: SC

Prep Batch:

95599

QC Preparation: 2014-06-20

Prepared By: SC

| | | | MS | | | Spike | Matrix | | Rec. |
|----------|---|------------|--------|-------|------|--------|--------|------|---------------|
| Param | F | $^{\rm C}$ | Result | Units | Dil. | Amount | Result | Rec. | $_{ m Limit}$ |
| Chloride | | | 4660 | mg/Kg | 5 | 2500 | 2020 | 106 | 78.9 - 121 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | ${ m Rec.}$ | | RPD |
|----------|---|--------------|--------|-------|------|--------|--------|------|-------------|-----|------------------|
| Param | F | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | \mathbf{Limit} |
| Chloride | | | 4570 | mg/Kg | 5 | 2500 | 2020 | 102 | 78.9 - 121 | 2 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 366383

QC Batch: Prep Batch: 95602

113055

Date Analyzed:

2014-06-23 QC Preparation: 2014-06-20

Analyzed By: SC Prepared By: SC

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 13 of 17

Eddy Co, NM

| | | | MS | | | Spike | Matrix | | Rec. |
|----------|---|---|--------|------------------------|------|--------|--------|------|------------------|
| Param | F | C | Result | Units | Dil. | Amount | Result | Rec. | \mathbf{Limit} |
| Chloride | | | 3280 | ${ m mg/Kg}$ | 5 | 2500 | 386 | 116 | 78.9 - 121 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| | | | MSD | | | Spike | Matrix | | Rec. | | RPD |
|----------|--------------|--------------|--------|-------|------|--------|--------|------|------------------------|-----|------------------------|
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| Chloride | | | 3190 | mg/Kg | 5 | 2500 | 386 | 112 | 78.9 - 121 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 14 of 17 Eddy Co, NM

Calibration Standards

Standard (ICV-1)

QC Batch: 113052

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | ICVs True | ICVs Found | $rac{	ext{ICVs}}{	ext{Percent}}$ | Percent Recovery | Date |
|----------|------|------|-------|--------------|---------------|-----------------------------------|---------------------|------------|
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Standard (CCV-1)

QC Batch: 113052

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | CCVs | CCVs | CCVs | Percent | |
|----------|-----------------------|-----------------------|-------|-----------------|------------------------|-----------------|----------|---------------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | $\operatorname{Conc.}$ | Recovery | Limits | $\mathbf{Analyzed}$ |
| Chloride | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Standard (ICV-1)

QC Batch: 113053

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | ICVs | ICVs | ICVs | $\operatorname{Percent}$ | |
|----------|------|-----------------------|---------|-----------------------|-------|----------|--------------------------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | m mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Standard (CCV-1)

QC Batch: 113053

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | $rac{	ext{CCVs}}{	ext{True}}$ | ${ m CCVs}$ Found | $rac{	ext{CCVs}}{	ext{Percent}}$ | Percent Recovery | Date |
|----------|-----------------------|------|--------------|--------------------------------|-------------------|-----------------------------------|---------------------|------------|
| Param | Flag | Cert | ${ m Units}$ | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Report Date: June 24, 2014 112MC06171

Work Order: 14062016 COG/BKU Central Battery Page Number: 15 of 17 Eddy Co, NM

Standard (ICV-1)

QC Batch: 113055

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | ICVs | ICVs | ICVs | Percent | |
|----------|-----------------------|-----------------------|--------------|------------------------|-------|----------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | ${ m Units}$ | $\operatorname{Conc.}$ | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | m mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Standard (CCV-1)

QC Batch: 113055

Date Analyzed: 2014-06-23

Analyzed By: SC

| | | | | CCVs | CCVs | CCVs | Percent | |
|----------|-----------------------|-----------------------|---------|-----------------|-----------------|-----------------------|----------|------------|
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | m mg/Kg | 100 | 100 | 100 | 85 - 115 | 2014-06-23 |

Report Date: June 24, 2014 112MC06171 Work Order: 14062016 COG/BKU Central Battery Page Number: 16 of 17 Eddy Co, NM

Appendix

Report Definitions

| Name | Definition |
|---------------------------|----------------------------|
| $\overline{\mathrm{MDL}}$ | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

Laboratory Certifications

| | Certifying | Certification | Laboratory |
|--------------|------------|---------------------|---------------|
| \mathbf{C} | Authority | Number | Location |
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| | WBE | 237019 | TraceAnalysis |

Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
- Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
- U The analyte is not detected above the SDL

Attachments

Report Date: June 24, 2014 112MC06171 Work Order: 14062016 COG/BKU Central Battery Page Number: 17 of 17 Eddy Co, NM

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

, 10 _ _ U _

| An | Analysis Request of Chain of Custody Record | | | | | | | | | | 7 | | | | | | | | | P/ | \GE | : | | | _0 | F: | 2 | | |
|---|---|-------------|---------------------------------|------|------|---|----------|----------------------|-----|----------------|-------|-------|---------|-----------------|------|----------------|------------|----------------|---------------------|--------------------------|---------------------------|----------------|------------|------------|------------|-----------------------------|-----------------------|--------|-----|
| , , , , | TETRA TECH 1910 N. Big Spring St. | | | | | | | | | | | | _ | | | | | (| | | | | EQU Met | | T d No. | .) | | | |
| | | | deligning provide terraporation | | T | TETRA TECH 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946 | | | | | | | | is (Ext to Cas) | | d Cr Pb Hg Se | Vr Pd Hg | | | | | | | | | | TDS | | |
| CLIENT NAM | IE: | • | | | | SITE MANAGER: | | ERS | | | SER | /ATIV | E | TX1005 | 3 | ВаС | | | |)/624 | 0/625 | | | | | | , pH, TDS | | |
| PROJECT NO | | 1 | PR | OJ | ECT | NAME: | | TAIN | H | T | | | - | 00 | - 1 | As | SA | | tiles | 3/826(| J. 827 | | | | | | ations | | |
| Hzmc | 7120 | 1 | B | K | 4 | Central Tank Battery | | S S | | | | | | | , l | als Aç | tals A | selit | i Vola | 1.824 | mi. Vc | 0/608 | 808 | ٤ | A Air | estos) |)us/C | | |
| LAB I.D. NUMBER | DATE 2014 | TIME | MATRIX | COMP | GRAB | SAMPLE IDENTIFICATION Eddy Co. N.M. | | NUMBER OF CONTAINERS | 걸 | HNO3 | ICE | NONE | 2000 | B1EX 8021B | Iαο | RCRA Metals Ag | TCLP Me | TCLP Volatiles | TCLP Semi Volatiles | GC.MS Vol. 8240/8260/624 | GC.MS Semi. Vol. 8270/625 | PCB's 8080/608 | Pest. 808/ | Gamma Shec | Alpha Bet | PLM (Asbestos) | Major Anions/Cations, | | |
| 366312 | 6/17 | | 5 | | X | BH-1 4-5 | | | | | X | | | | | | | | | | | | <u> </u> | | | | Ш | | |
| 373 | | | | | 1 | le-7 | | | | | V | | | | | | | | | | | | • | Y | | | | | |
| 374 | | | | | | 9-10 | | | | | X | | | | | | | | | | | | 1 | K | | | | | |
| 375 | | | | | | 14-15 | | | | | X | | | | | | | | | | | | T | X | | | | | |
| 376 | | | | | | 19-20 | | | | | X | | | | | | | | | | | | 7 | (| | | | | |
| 377 | | | | | | 24-25 | | | Ī | | Υ . | | | | | | | | | | | | | X | | | | | |
| 378 | | | | | | 29 -30 | | | Ī | | X | | | | | | | | | | | | 1 | X | | | | | |
| 379 | | | | | П | 39-40 | | | | | ¥ | | | | | | | 1 | | | | | 1 | X | | | | | |
| 380 | | | | | | 49.50 | | | | | Ý | | | | | | 1 | | | | | | 1 | N | | П | | | |
| 381 | V | | U | | J | 59-40 | | | Ī | | 4 | /_ | | | | | | | | | | | 7 | | | П | | | |
| REMINOUISHED E | 37: (Signatur | enze | 2 | 1 | | Date: 10-20-19 RECEIVED BY (Signature) | | • | | Date: Time: | 7 | 2:5 | // } | 7 | SA | MPL | ED B | Y: (P | rint & | Initial |) | | | (| | ate: _ | 6- | ia: | -19 |
| HELINOUISHED E | 3Y: (Signature | | | | | Date: RECEIVED BY: (Signature) | | | | Date: Time: | | | | | SA | MPLI EDE | E SHI X | IPPE | D BY: | ·0: | e) | | | | | BILL # | # : | | |
| RELINQUISHED E | 3Y: (Signature | e) | | | | Date: RECEIVED BY: (Signature) | Date: | | | | | | | | TRA | | | NTAC | UP T PER | | : | | | отн | | ults by | /: | | |
| RECEIVING LABO ADDRESS: | DRATORY: | | | | | RECEIVED BY: (Signature) | | | | | | | | | 1 | | | | | | | | | | | RUSH Charges Authorized: | | | |
| CITY: | | STATE: | | PI | IONE | | | пме: | | | | | | | | | | | | | | | | | | 1 | Yes | a: | No |
| SAMPLE CONDITION WHEN RECEIVED: 10. 6° REMARKS: HULLIN L ALL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Please f | ill out all | copi | es | - L | aboratory retains Yellow copy - Return Orginal copy | to Tetra | Tech | 1 - | Proj | ect N | lana | er n | etai | ns P | ink (| cop | v - | Acc | our | ting | rec | eive | s G | old (| copy | <i>y</i> . | | |

| An | alvs | is F | 20 | | esi | t of (| Cha | ain | of Cust | odv | F | 26 | CC | rc | | | | | | | | | | PAG | E: | | 2 | (| OF: | 2 | <u></u> |
|------------------------------------|---------------|----------|--|--------------|----------------|--------------------------------|--------------------|-----------------|-------------------|------------------------|----------------------|----------------|----------------|------|-------|--------|-----------------|----------|----------------|-----------------|---------------------|-----|--------------------------|----------------|---------------|--------------|-----------|----------------|-------------------------------|---------------|-------------|
| | | | | | - P | | | | | <u> </u> | | | | | | | | | | | (Cir | | | | | UES letho | | 0.) | | | |
| | | | Constitution of the state of th | | | 1910 N Midland (432) 682 | l. Big S d, Tex | Spring as 79 | St. | | | | | | | | E (C) 04 40 (C) | 1 | Cr Pb Hg | Vr Pd Hg Se | | | | | | | | | rds | | |
| CLIENT NAM | NE: | 04 | | | | SITE M | ANAGE | | Sypro | | ERS | | | SER\ | /ATIV | Έ | TV400E | 3 | Ba | g B | | | 50/624 | 20/07 | | | | | S, pH, | | |
| PROJECT N | 0.: | | • | SKI SKI | NAME | | | | NK Bathe | evul | CONTAIN | ₹ E | Τ | | | | 8021B | <u>.</u> | s Ag As | s Ag As | /olatiles | | 3240/82 | 608 | 8 | | ا ن | (so) | s/Cation | | |
| LAB I.D. NUMBER | DATE 2014 | | MATRIX | | | | | | TIFICATION | | NUMBER OF CONTAINERS | FILTERED (Y/N) | HNO3 | ICE | NONE | | BTEX 8021B | PAH 8270 | RCRA Metals Ag | TCI P Volatiles | TCLP Semi Volatiles | RCI | GC.MS Vol. 8240/8260/624 | PCB's 8080/608 | Pest. 808/608 | Chloride | Gamma Spe | PLM (Asbestos) | Major Anions/Cations, pH, TDS | | |
| 382 | uln | | 5 | X | 9 | 34-1 | | 64 | -65 | | | | | X | | | | | | | | | | | | ¥ | | | | | |
| 383 | 4/17 | | | | | " | | | 1-70 | | | | | X | | | | | | | | | | | | X | | | | | |
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| | | | | | | | 1.18 | | | | | | | | 2 | A | | | | | | | | | | | | _ | | | |
| RELANGUIZHED | Y: (Signatur | nga | W | n e i series | Time: | 10.37 | | | BY (Signature) | nanga, mengangan panga | - | | Date: Time: | £1 | 0 | 3 | 1 | | MP() | - | ~== | | | | | | | Time: | | -47 | <i>-</i> 77 |
| RELINQUISHED | | | | | Date: Time: | | | | D BY: (Signature) | - | | | Date: Time: | | | | | 1 | EDEX AND | | | | BUS JPS | | | | | RBILL HER: | | | |
| RELINQUISHED | BY: (Signatur | =) | | | Date: Time: | | | RECEIVE | D BY: (Signature) | | | | Date: Time: | | | | | <u> </u> | TRA T | | | | | DN: | | | | | sults I | by: | |
| RECEIVING LAB ADDRESS: CITY: | ORATORY: | STATE: | | | | IP: | | | BY: (Signature) | | | | | | | | | | | | | | | | | | | RU Au | thoriz | harges ed: | |
| CONTACT: | TION WHEN E | ECEIVED: | | PHONE | | REMARKS: | | ATE: | | | TIM | E: | | | | | _ | | | · | | | | | | | | | Yes | | No |
| 10.70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Report Date: June 24, 2014 Work Order: 14062016 Page Number: 1 of 3

Summary Report

Ike Tavarez Tetra Tech

1901 N. Big Spring St. Midland, TX 79705

Report Date: June 24, 2014

Work Order: 14062016

Project Location: Eddy Co, NM

Project Name: COG/BKU Central Battery

Project Number: 112MC06171

| | | | Date | Time | Date |
|--------|-------------|--------|------------|-----------------------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 366372 | BH-1 4-5' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366373 | BH-1 6-7' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366374 | BH-1 9-10' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366375 | BH-1 14-15' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366376 | BH-1 19-20' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366377 | BH-1 24-25' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366378 | BH-1 29-30' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366379 | BH-1 39-40' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366380 | BH-1 49-50' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366381 | BH-1 59-60' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366382 | BH-1 64-65' | soil | 2014-06-17 | 00:00 | 2014-06-20 |
| 366383 | BH-1 69-70' | soil | 2014-06-17 | 00:00 | 2014-06-20 |

Sample: 366372 - BH-1 4-5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|------------------------|----|
| Chloride | | 690 | m mg/Kg | 4 |

Sample: 366373 - BH-1 6-7'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2160 | mg/Kg | 4 |

| Report Date: June 24, 2014 | | Work Order: 14062016 P. | | Page Number: 2 of 3 | |
|----------------------------|-------------|-------------------------|-------|---------------------|--|
| Sample: 366374 - I | 3H-1 9-10' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 2880 | mg/Kg | 4 | |
| Sample: 366375 - I | 3H-1 14-15' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 2020 | mg/Kg | 4 | |
| Sample: 366376 - I | 3H-1 19-20' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 2980 | mg/Kg | 4 | |
| Sample: 366377 - I | BH-1 24-25' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 3990 | mg/Kg | 4 | |
| Sample: 366378 - I | 3H-1 29-30' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | 3 | 3080 | mg/Kg | 4 | |
| Sample: 366379 - I | 39-40° | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 1250 | mg/Kg | 4 | |
| Sample: 366380 - I | 3H-1 49-50' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 1110 | mg/Kg | 4 | |
| Sample: 366381 - I | 3H-1 59-60' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 673 | mg/Kg | 4 | |

| Report Date: June | 24, 2014 | Work Order: 14062016 | Page 1 | Page Number: 3 of 3 | | | |
|------------------------------|---------------|----------------------|--------|---------------------|--|--|--|
| Sample: 366382 - BH-1 64-65' | | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 385 | mg/Kg | 4 | | | |
| Sample: 366383 | - BH-1 69-70' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 386 | mg/Kg | 4 | | | |

Work Order: 13121828 Report Date: January 8, 2014 Page Number: 1 of 2

Summary Report

Ike Tavarez Tetra Tech

1910 N. Big Spring Street

Midland, TX 79705

Report Date: January 8, 2014

Work Order: 13121828

Project Location: Eddy Co, NM

Project Name: COG/BKU Central Battery

Project Number: TBD

| | | | Date | Time | Date |
|--------|-------------|--------|------------|------------------------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 349391 | AH-1 0-1' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349392 | AH-1 1-1.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349393 | AH-1 2-2.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349394 | AH-1 3-3.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349395 | AH-2 0-1' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349396 | AH-2 1-1.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349397 | AH-2 2-2.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |
| 349398 | AH-2 3-3.5' | soil | 2013-12-16 | 00:00 | 2013-12-18 |

| | BTEX | | | TPH DRO - NEW | TPH GRO | |
|---------------------|----------|----------|--------------|---------------|---------|---------|
| | Benzene | Toluene | Ethylbenzene | Xylene | DRO | GRO |
| Sample - Field Code | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) |
| 349391 - AH-1 0-1' | < 0.0200 | < 0.0200 | < 0.0200 | < 0.0200 | < 50.0 | < 4.00 |
| 349395 - AH-2 0-1' | < 0.0200 | < 0.0200 | < 0.0200 | < 0.0200 | < 50.0 | < 4.00 |

Sample: 349391 - AH-1 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 5800 | mg/Kg | 4 |

Sample: 349392 - AH-1 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 610 | mg/Kg | 4 |

| Report Date: Janua | ury 8, 2014 | Work Order: 13121828 | Page Number: 2 | | | | |
|------------------------------|---------------|----------------------|----------------|----|--|--|--|
| Sample: 349393 - AH-1 2-2.5' | | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 841 | mg/Kg | 4 | | | |
| Sample: 349394 - | - AH-1 3-3.5' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 1230 | mg/Kg | 4 | | | |
| Sample: 349395 - | - AH-2 0-1' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 2870 | mg/Kg | 4 | | | |
| Sample: 349396 - | · AH-2 1-1.5' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 442 | mg/Kg | 4 | | | |
| Sample: 349397 - | · AH-2 2-2.5' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 543 | mg/Kg | 4 | | | |
| Sample: 349398 - | · AH-2 3-3.5' | | | | | | |
| Param | Flag | Result | Units | RL | | | |
| Chloride | | 889 | mg/Kg | 4 | | | |