SITE INFORMATION

1

| | | | port Type: | | re 🛛 | | |
|--------------------|--------------------------|---------------------------------------|--|----------------|---------------|--|--|
| General Site In | formation: | | and the second | | | the analysis of the second secon | |
| Site: | | | ank Battery | | | | |
| Company: | | COG Operat | ting LLC | | ······ | | |
| Section, Town | ship and Range | Unit B | Sec 34 | T22S | R27E | | |
| Lease Number | | API-30-015- | 35789 | | | | |
| County: | | Eddy Count | у | | | | |
| GPS: | | | 32.35320° N | | | 104.17399° W | |
| Surface Owner | | State | | | | | |
| Mineral Owner | • | | | | | | |
| | | | om the intersectio Turn right on to lo | | | ay 62, travel South on Highway 285 | |
| Release Data: | | | M. 1423 A.B. | | | | |
| Date Released: | | 7/9/2013 | | | | | |
| Type Release: | | Oil and produ | uced water | | | | |
| | | Drain Line Fa | ailure | | | | |
| Fluid Released: | | | 16 bbls Produce | | | | |
| | | | d Produced Wate | | | | |
| Official Comm | unication: | | | 調査にいいましたの | | | |
| Name: | Robert McNeill | | | | Ike Tavarez | | |
| Company: | COG Operating, LL | С | 1 | | Tetra Tech | | |
| Address: | One Concho Cente | | 1 | | 4000 N. Big S | pring St | |
| Auuress. | | | | | 4000 N. DIY S | pring St. | |
| 0.1 | 600 W. Illinois Ave | | | | | | |
| City: | Midland Texas, 797 | /01 | | Midland, Texas | | | |
| Phone number: | (432) 686-3023 | | (432) 682-4559 | | | 9 | |
| Fax: | (432) 684-7137 | | | | | | |
| Email: | rmcneill@concho | resources.com | <u>1</u> | | ike.tavarez@ | tetratech.com | |
| Ranking Criter | ia 🦾 🖓 | | | | | | |
| Depth to Ground | lwater: | | Ranking Score | 1 | | Site Data | |
| <50 ft | | | 20 | | | | |
| 50-99 ft | | | 10 | | <u></u> | 10 | |
| >100 ft. | | · · · · · · · · · · · · · · · · · · · | 0 | | | | |
| WellHead Protec | | | Ranking Score | | | Site Data | |
| | ,000 ft., Private <200 f | | 20 | | | | |
| Water Source >1 | ,000 ft., Private >200 f | <i>t.</i> | 0 | 1 | | 0 | |
| Surface Body of | Water: | | Ranking Score | | 5 | Site Data | |
| <200 ft. | | | 20 | | | | |
| 200 ft - 1,000 ft. | | | 10 | | | | |
| >1,000 ft. | | · | 0 | | | 0 | |
| Te | otal Ranking Score | | 10 | | | RECEIVED | |
| | | | ble Soil RRAL (| ma/ka) | 8 · · 3 | | |
| | | Benzene | Total BTEX | TPH | | MAR 05 2014 | |
| | | 10 | 50 | 1,000 | -1 | | |
| | | | L | .1 ,,000 | | NMOCD ARTESIA | |



November 19, 2013

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

Re: Closure Report for the COG Operating LLC., Weems #1 Tank Battery, Unit B, Section 34, Township 22 South, Range 27 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Weems #1 Tank Battery located in Unit B, Section 34, Township 22 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.35320°, W 104.17399°. 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 July 09, 2013, and released approximately one hundred fifty four (154) barrels of oil and sixteen (16) barrels of produced water from 1 inch nipple that failed on a drain line due to corrosion. To alleviate the problem, COG personnel replaced the nipple to prevent a reoccurrence. Zero (0) barrels of oil or produced water was recovered. The spill initiated inside a lined tank battery, but then ran onto the pad affecting an area approximately 85' X 15' and 55' x 20'. The initial C-141 form is enclosed in Appendix A.

Groundwater

According to the NM State Engineers Well Report, two (2) water wells were listed in Section 34 with depth to groundwater of approximately 60' below surface. The Geology and Groundwater Conditions in Southern Eddy County, New Mexico Resource shows groundwater depth of approximately 53' 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 1,000 mg/kg.

Soil Assessment and Analytical Results

On August 14, 2013, Tetra Tech personnel inspected and sampled the spill area. Three (3) auger holes (AH-1, AH-2 and AH-3) were installed using a stainless steel hand auger to assess the impacted soils. Selected 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 sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, a hydrocarbon impact was detected in the subsurface soils. The BTEX concentrations detected were all below the RRAL. Auger holes (AH-1 and AH-3) showed a shallow impact to the soils at 0'-1', but declined below the TPH RRAL at 1'-1.5' below surface. The area of auger hole (AH-2) showed a deeper impact to the subsurface soils and not vertically defined. The bottom auger hole sample showed a TPH concentration of 22,500 mg/kg at 6'-6.5' below surface. Deeper samples were not collected due to the dense formation at the site.

In addition, the chlorides detected ranged from <20.0 mg/kg to 340 mg/kg. The chloride concentrations detected do not appear to be an environmental concern.

Remedial Activities and Conclusion

COG excavated the impacted material as highlighted (green) in Table 1 and shown on Figure 4. The areas of AH-1 and AH-3 were excavated to a depth of approximately 1.0' below surface to remove the hydrocarbon impacted soil above the RRAL.



In the area of AH-2, a backhoe trench was installed to vertically define the hydrocarbon extents. Based on the results, the area was excavated to approximately 8.0' below surface where the hydrocarbon impact decreased below regulatory levels. Approximately 0000 cubic yards of soil was transported to proper disposal and the excavation was backfilled with clean soil to grade.

COG proposes to close the site due to the remedial actions taken following the approved work plan. The final C-141 is included in Appendix A. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted, TETRA TECH

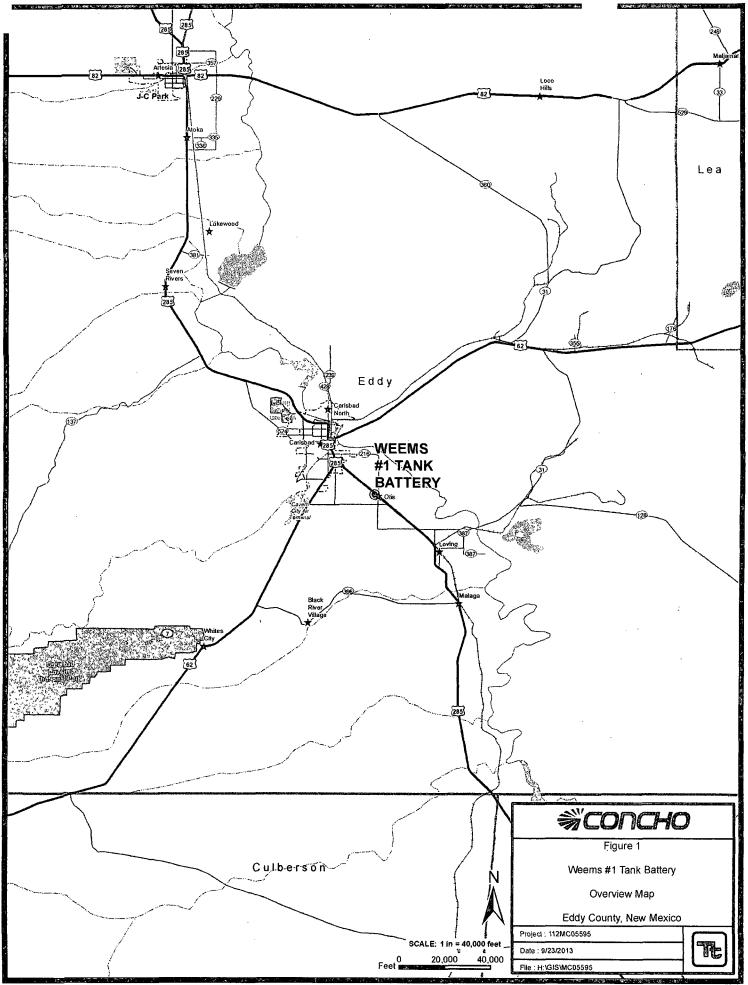
no Vin

Marcus Kujawski Staff Scientist

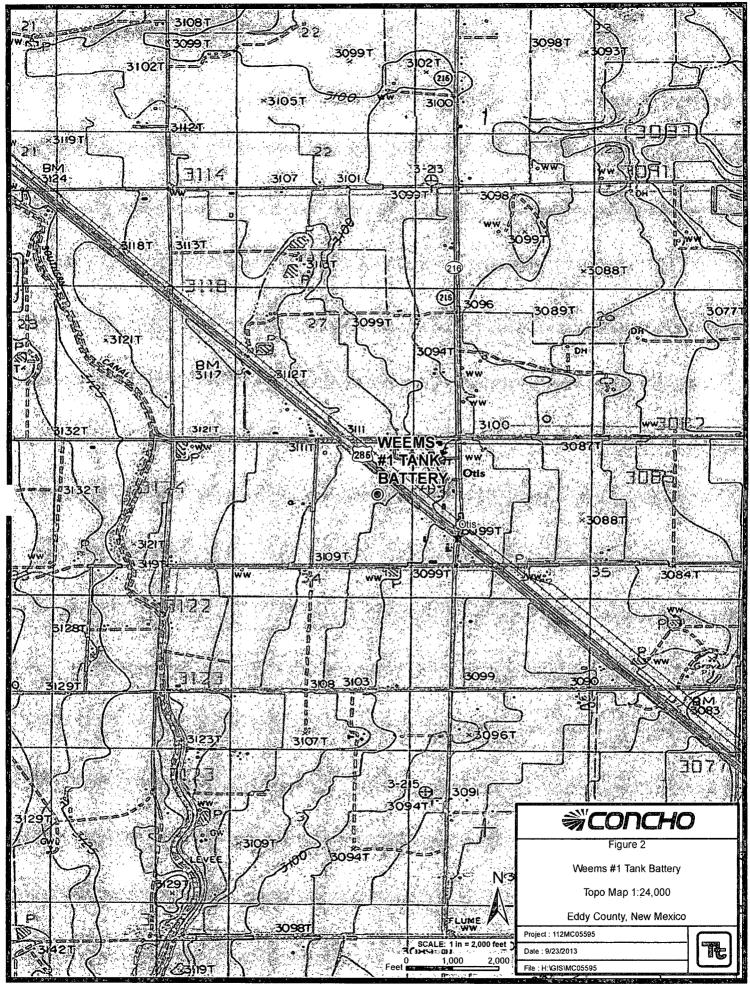
cc: Robert McNeill - COG

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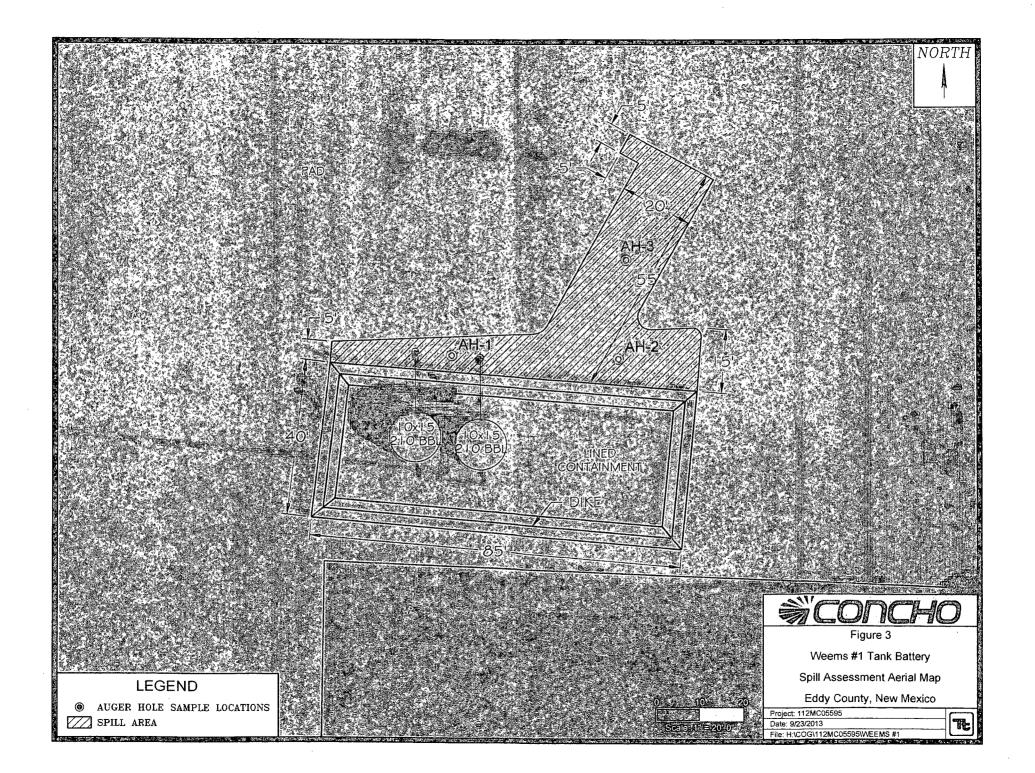
Figures

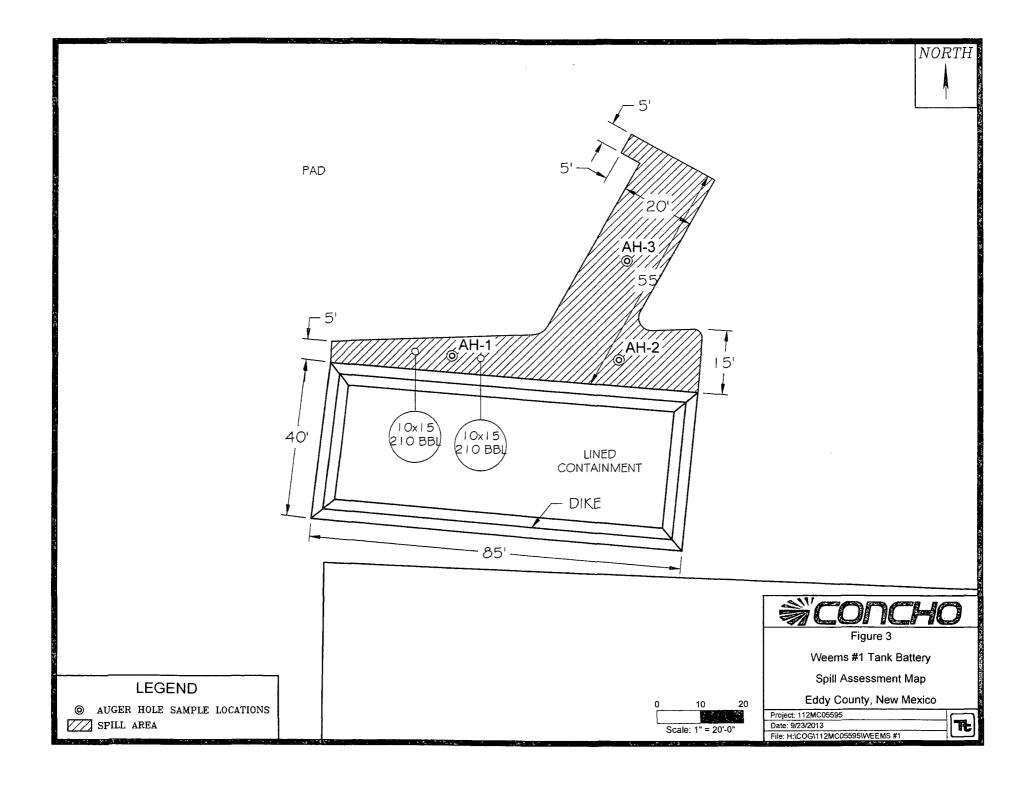


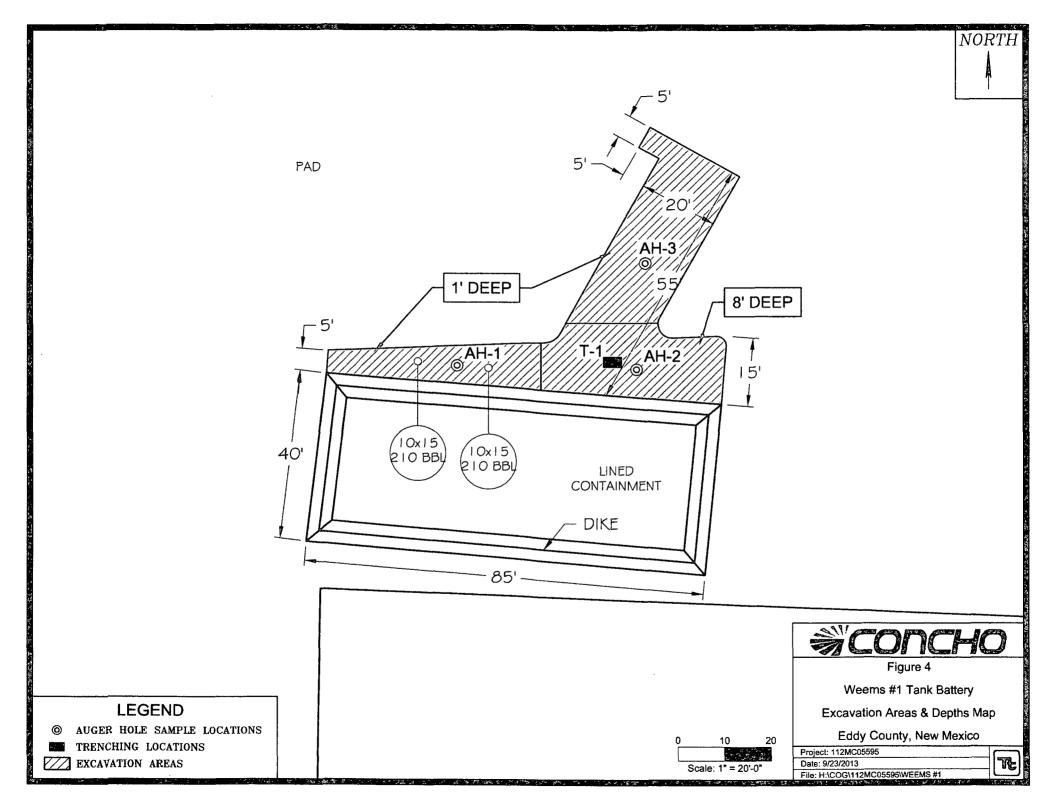
Drawn By: Alan McClanahan



Drawn By: Alan McClanaban







Tables

Table 1 COG Operating LLC. Weems #1 Tank Battery Eddy County, New Mexico

| Comercia ID | Commis Data | BEB | Excavation Bottom | Soil | Status | 1 | PH (mg/k | g) | Benzene | Toluene | Ethlybenzene | Xylene | Total BTEX | Chloride |
|-------------|-------------|----------------------|---|----------------|---|--------|----------|--------|---------|---------|--------------|---------|---------------|----------|
| Sample ID | Sample Date | Sample Depth (ft) | Depth (ft) | In-Situ | Removed | GRO | DRO | Total | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| AH-1 | 8/14/2013 | 0-1 | 0 | | X | 1,650 | 93:4 | 1,743 | <0:0200 | 0.294 | .2.82 | 2.61 | 5.43 | <20.0 |
| | 11 | 1-1.5 | It | Х | | 24.7 | <50.0 | 24.7 | - | _ | - | - | | <20.0 |
| | 11 | 2-2 <i>.</i> 5 | 11 | Х | | - | - | - | - | - | - | - | - | <20.0 |
| | " | 3-3.5 | 14 | х | | - | - | - | - | - | - | - | - | 98.5 |
| | " | 4-4.5 | н | Х _. | | - | - | - | - | - | - | - | - | 73.9 |
| AH-2 | 8/14/2013 | 0-1 | 0 | | X | 2;560 | 561 | 3,121 | <0.100 | <0.100 | 7.75 | 37.6 | 45.4 | <20.0 |
| | A | 1-1.5 | | | X | 3,790 | 2,140 | 5,930 | | | | | | <20.0 |
| | 11 | 2-2.5 | 27550 | | X | 3,740 | 3,950 | 7,690 | | | | | | 217 |
| | 0 | 3-3.5 | | | × X 🐔 | 6,360 | 6,500 | 12,860 | | 建建 | | | | 340 |
| | 11 | 4-4.5 | | | X | 6,970 | 8,670 | 15,640 | | | | | | 271 |
| | n | 5-5.5 | | C. | X | 6,530 | 8,780 | 15,310 | | | | | | 212 |
| Trench | 14 | 6-6.5 ≥ ⁱ | $\{ \begin{matrix} \mathbf{u} \\ \mathbf{v} \\ v$ | | X | 10,300 | 12,200 | 22,500 | | | | | | 98.7 |
| T-1 | 11/11/2013 | sex 0 ; | 4 | | X | 6840 | 8,670 | 15,510 | <5.00 | 57.5 | -29.4 | 349 | 436 | |
| | n | 2 | 6 | | ⊂ X ⊂ | 444. | 1,510 | 1,954 | <0.500 | 1.03 < | 2.25 | 15.2 | 18.4 | |
| | | 4 | 8 | Х | | <10.0 | <10.0 | <10.0 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | - |
| | 11 | 6 | 10 | Х | | <10.0 | <10.0 | <10.0 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | - |
| | R | 8 | 12 | Х | | <10.0 | <10.0 | <10.0 | <0.050 | 0.084 | <0.050 | <0.150 | <0.300 | - |
| | u | 10 | 14 | Х | | <10.0 | <10.0 | <10.0 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | - |
| AH-3 | 8/14/2013 | 0-1 | 0 | | X | 3130 | 412 - | 3,542 | <0.400 | <0.400 | 8.69 | 24.2 | 32.9 | <20.0 |
| | 0 | 1-1.5 | 11 | X | The first of the second statement of the second | 24.7 | <50.0 | 24.7 | - | - | - | - | - | 24.7 |
| | a) | 2-2.5 | 11 | Х | | - | - | - | | - | - | - | - | 59.2 |
| | | 3-3.5 | 11 | x | | - | - | - | - | · - | - | - | - | 187 |
| | 18 | 4-4.5 | u | Х | | - | - | - | - | - | | - | - | 197 |
| | п | 5-5.5 | U | Х | | - | - | - | - | - | - | - | - | 78.9 |
| | n | 6-6.5 | 11 | Х | | - | - | - | _ | - | - | - | - | 143 |

Trench

(-)

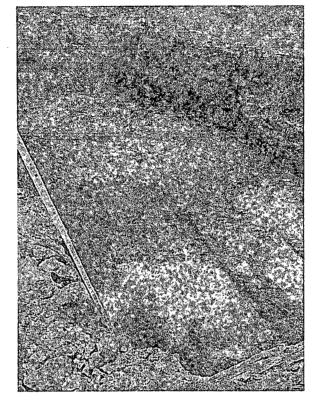
Trench to Define

Not Analyzed

Excavation Depths

Photos

COG Operating LLC Weems #1 Tank Battery Eddy County, New Mexico



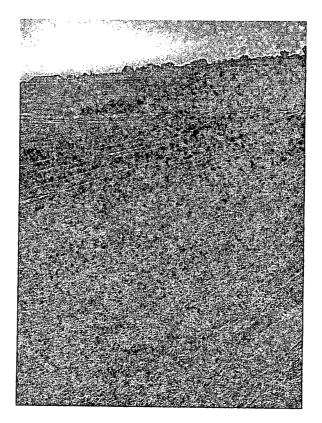
TETRA TECH

View East – AH-2 area at 4.0'



View East - T-1 in the area of AH-2 at 10.0'

COG Operating LLC Weems #1 Tank Battery Eddy County, New Mexico



View Southeast – AH-2 and AH-3 areas backfilled

Appendix A

State of New Mexico Energy Minerals and Natural Resources

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

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

| | | | Rele | | the transformer state | $\frac{1}{1}$ and Co | orrective A | ction | | ningen en skal i sjolfenske oper kommenser | | anna ann an an an an ann an an an an an |
|---|--|---|--|---|-------------------------------------|--|--|--------------------------------------|---|--|--------------------------------|---|
| | | | 11010 | | | OPERA7 | | 001011 | | al Report | \boxtimes | Final Report |
| Name of Co | mpany C | COG Operat | ing LLC | ···· | | | bert McNeill | | | <u></u> | <u> </u> | |
| | | ois Ave, Mic | | | | | No. (432) 685-4 | 332 | · · · · · · · · · · · · · · · · · · · | | | |
| Facility Nar | | | | | | Facility Type Tank Battery | | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | · · · · · | · · · · · | .* | | | 20.01 | E 1525790 |
| Surface Ow | ner: State | | | Mineral C | | | ···· | | Lease | NO. (AP1#) | 30-01 | 5-1535789 |
| | | | | | | N OF REI | r | | | | | |
| Unit Letter B | Section 34 | Township 22S | Range 27E | Feet from the | North | /South Line | Feet from the | East/V | Vest Line | County | | |
| | | | | Latitude 32.35 | | Ū. | le 104.17399° V | V | | | | |
| | | | | NAT | URE | OF RELI | | | | | | |
| Type of Rele | ase: Oil and | Produced Wa | nter | | | 1 | Release 154 bbls s Produced Water | 1 | | Recovered (ced Water |) bbls o | f Oil, 0 bbls |
| Source of Re | Source of Release: One inch nipple | | | | | Date and H 7/09/2013 | lour of Occurrence | e | | Hour of Dis 3 9:00 am | covery | |
| Was Immediate Notice Given? | | | | | equired | If YES, To | Whom? cher - NMOCD | 4 | | | | |
| By Whom? N | fichelle Mu | | | | | | lour 7/11/2013 8 | :40 am | | | | |
| Was a Water | | hed? | | ···· | | | blume Impacting t | | rcourse. | | | |
| 🗌 Yes 🖾 No | | | | | | N/A | | | | | | |
| If a Watercou | rse was Imp | pacted, Descri | be Fully.* | | | | | | | | | |
| | | em and Remec | | | d the nip | ple with a new | w one to prevent a | a reoccu | B 2 B 7 | MAR 05 | 2014 | |
| Describe Are | Affected a | and Cleanup A | ction Tak | en.* | | | | | | | | |
| is located on | the pad and hauled away | the adjacent p y for proper d | oasture. Te | tra Tech inspecte | ed site ar | id collected si | one inch nipple t amples to define s e with clean back | pills ext | ent. Soil t | hat exceeded | I RRAI | was |
| regulations al public health should their c or the environ | l operators a or the envir perations ha ment. In ag | are required to onment. The ave failed to a | o report an acceptanc dequately CD accept | d/or file certain re e of a C-141 repo investigate and re | elease no ort by the emediate | otifications ar NMOCD ma contamination | knowledge and un ad perform correct arked as "Final Re on that pose a thre e the operator of r | tive acti eport" de eat to gre | ons for rel bes not rel bund wate | eases which ieve the ope r, surface wa | may er rator of ater, hu | idanger liability man health |
| | | 1, SF | \prec | | | | OIL CONS | SERV | ATION | DIVISIO | DN | |
| Signature: Printed Name | : Ike Tavara | | Hent | fu col | $\overline{)}$ | Approved by District Supervisor: | | | | | | |
| Title: Project | | | / | | | Approval Dat | e: | E | Expiration | Date: | | |
| E-mail Addre | ss: Ike.Tava | arez@TetraTe | ch.com | | | Conditions of | Approval: | | | Attached | | |
| Date: 11/19/2 Attach Addit | | ts If Necessa | | ne: (432) 682-455 | 59 | | | | | | | |

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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

| Release Notification | on and Corrective Act | tion | Nan (2012) |
|--|---|---|---|
| | OPERATOR | 🛛 Initia | l Report 🛛 Final Repor |
| Name of Company COG OPERATING LLC | Contact Pat I | Ellis | |
| Address 600 West Illinois Avenue, Midland, TX 79701 | Telephone No. 432-230 | 0-0077 | |
| Facility Name Weems #001 | Facility Type Tank B | Battery | |
| Surface Owner State Mineral Owner | ſ | Lease N | lo. (AP1#) 30-01535789 |
| LOCATIO | ON OF RELEASE | | |
| | · | | |
| Unit Letter Section Township Range Feet from the Nor B 34 22S 27E | th/South Line Feet from the E | East/West Line | County EDDY |
| Latitude 32.35320 | Longitude 104.17399 | | |
| | E OF RELEASE | | |
| Type of Release Oil and produced water | Volume of Release 154bbls of | | |
| Severa of Bolesce One indusingly | I6bbls of produced wa | | Obbls of produced water |
| Source of Release One inch nipple | Date and Hour of Occurrence 07-09-2013 | | Hour of Discovery 3 9:00am |
| Was Immediate Notice Given? Xes No Not Require | d If YES, To Whom? d Mike | e Bratcher - NM | OCD |
| By Whom? Michelle Mullins | Date and Hour 07-11-2013 8 | | |
| Was a Watercourse Reached? | If YES, Volume Impacting the | Watercourse. | |
| If a Watercourse was Impacted, Describe Fully.* | | ···· | |
| Describe Cause of Problem and Remedial Action Taken.* | | | |
| A one inch nipple failed on drain line due to corrosion. Replaced one in | ch nipple with a new one to prevent | a reoccurrence. | |
| Describe Area Affected and Cleanup Action Taken.* | | | <u>, an </u> |
| Initially an estimated 154bbls of oil and 16bbls of produced water was r | alward due to a new inch simple that | • 6-11-11 W | |
| The spill area is located on the pad and the adjacent pasture. Tetra Tech release and we will present a work plan to the NMOCD for approval pri- | will sample the spill site area to deli | ineate any possil | se contamination from the |
| I hereby certify that the information given above is true and complete to regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remedi or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations. | notifications and perform corrective the NMOCD marked as "Final Repo ate contamination that pose a threat | e actions for rele ort" does not relie to ground water, | ases which may endanger eve the operator of liability , surface water, human health |
| | OIL CONSE | RVATION | DIVISION |
| Signature: Rolat Mark | | | |
| Printed Name: Robert Grubbs Jr | Approved by District Supervisor: | | |
| Title: Senior Environmental Coordinator | Approval Date: | Expiration D | Date: |
| E-mail Address: rgrubbs@concho.com | Conditions of Approval: | | Attached |
| Date: 07-12-2013 Phone: 432-661-6601 | | | |

* Attach Additional Sheets If Necessary

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Appendix B

Water Well Data Average Depth to Groundwater (ft) COG - Weems #1 Eddy County, New Mexico

| | 21 So | uth | 26 | | |
|-------------------------|---------------|---------------|------------------|--------------|---------|
| 6 | 5 65 | 4 | 3 140 | 2 120 | 1 89 |
| 7 66 ^{Arte} | 8 Sinado | 9 150 | 10 115 | 11 | 12 |
| 18 150 | 17 174 | 16 139 | 15 93 | 14 | 13 76 |
| 240 | 178 35 | 65 | 65 | | 170 |
| 19 254 | 20 | 21 70 | 22 55 | 23 36 | 24 50 |
| | 210 | | | 34 | 43 |
| 30 | 29 220 | 28 7 5 | 27 | 26 40 | 25 41 |
| 115 | ŀ | 190 | | | 40 |
| 31 200 | 32 | 33 45 | 34 | 35 90 | 36 23 |
| | 164 | 120 | | | 26 |

| | 22 South | | | 26 East | | | |
|---------------|----------|---------------|--------------|----------------|---------------|--|--|
| 6 | 5 | 4 68 | 3 140 | 2 105 | 1 32 | | |
| | | | 135 | | 41 | | |
| 7 | 8. | 9 73 | 10 95 | 11 60 | 12 32 | | |
| | | | | 60 | 45 | | |
| 18 | 17 | 16 | 15 | 14 68 | 13 45 | | |
| | | | | 30 | 60 | | |
| 19 | 20 180 | 21 | 22 | 23 78 | 24 85 | | |
| | | | | | 108 | | |
| 30 | 29 | 28 140 | 27 96 | 26 71 | 25 96 | | |
| | | | | | | | |
| 31 105 | 32 | 33 | 34 | 35 1 50 | 36 115 | | |
| | | | | | | | |

| | 23 Sc | outh | 26 | | |
|-------|--------|------|---------------|----|----|
| 6 | 5 | 4 | 3 220 | 2 | 1 |
| 7 | 8 267 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 224 | 23 | 24 |
| 30 99 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 223 | 33 | 34 | 35 | 36 |

| | 21 So | outh | 27 | East | |
|--------------|-------|--------------|----|-------|--------------|
| 6 34 | 5 | 4 | 3 | 2 | 1 12 |
| 175 | 350 | | | | 186 |
| 7 | 8 | 981 | 10 | 11 | 12 |
| | | 78 | | 1 | |
| 18 | 17 | 16 | 15 | 14 | 13 |
| | | | | | |
| 19 30 | 20 | 21 Site | 22 | 23 | 24 |
| 3627 | | 75 | | | |
| 30 15 | 29 11 | 28 40 | 27 | 26 | 25 12 |
| 16 | 31 30 | 46 | | 70 32 | |
| 31 15 | 32 15 | 33 | 34 | 35 | 36 |
| 17 | 16 | | | 30 | |

| | 22 So | outh | 27 | | |
|---------------|--------------------|----------------------|-------------------|--------------|--------------|
| 6 | 585 | 4 46 | 3 | 2 | 1 40 |
| 7 | 8 22 40 | 9 40 40 | 10 11 40 | 11 | 12 |
| 18 84 | 17 28 29 | 16 70 | 15 15 20 | 14 | 13 |
| 19 | 20 52 53 | 21 60 55 | 22 34 100 | 23 45 | 24 15 |
| 30 99 100 | 29 85 90 | 28 66 84 | 27 47 112 | 26 38 40 | 25 40 |
| 31 112 145 | 32 81 170 | 33 66 1 50 | 34 53. 80Site, | | 36 28 57 |

| | 21 Sc | outh _ | 28 | East | |
|-----------|----------|--------|----|------|----|
| 6 | 5 | 4 80 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 189 19 | 17 37 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

| | 22 So | outh _ | 28 | 28 East | | |
|-------------|--------------|--------|----|---------|----|--|
| 6 | 5 | 4 131 | 3 | 2 | 1 | |
| 7 | 8 | 9 | 10 | 11 | 12 | |
| 18 | 17 | 16 | 15 | 14 | 13 | |
| 19 | 20 | 21 | 22 | 23 | 24 | |
| 30 12 10 | 29 | 28 | 27 | 26 | 25 | |
| 31 42 | 32 35 | 33 | 34 | 35 | 36 | |

| | | 23 Sc | outh | 27 | | |
|-------|----------|--------|------|----|-------|-------|
| Carls | 6 bad | 583 | 4 90 | 3 | 2 70 | 1 17 |
| | 7 | 8 | 9 | 10 | 11 | 12 40 |
| | 18 | 17 | 16 | 15 | 14 76 | 13 |
| | 19 | 20 | 21 | 22 | 23 23 | 24 90 |
| | 30 | 29 103 | 28 | 27 | 26 | 25 |
| | 31 | 32 | 33 | 34 | 35 | 36 |

| | 23 Sc | outh | 28 | East | |
|----------------|------------|-------------|----------|------------|-------------|
| 6 1 6.5 | 5 | 4 | 3 | 2 | 1 |
| 7 26.5 | 8 | 9 | 10 | 11 30.5 | 12 20 |
| 18 63 | 17 | 16 | 15 14 | 14 | 13 12 33 |
| 19 | 20 56 | 21 | 22 39 | 23 | 24 36 |
| 30 | 29 28.7 | 28 oving | 27 | 26 | 25 44 |
| 31 | 32 | 33 | 34 | 35 | 36 |

New Mexico State Engineers Well Reports

USGS Well Reports

Geology and Groundwater Conditions in Southern Eddy, County, NM

Appendix C

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Summary Report

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

| Report Date: | September | 3, | 2013 |
|--------------|-----------|----|------|
|--------------|-----------|----|------|

Work Order: 13082238

253 263 263 263 263 263 263 263 263 263

Project Location:Eddy Co., NMProject Name:COG/Weems #1 TBProject Number:112MC05595

| | | | Date | Time | Date |
|--------|-------------|--------|------------|-------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 339579 | AH-1 ()-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339580 | AH-1 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339581 | AH-1 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339582 | AH-1 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339583 | AH-1 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339584 | AH-2 0-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339585 | AH-2 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339586 | AH-2 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339587 | AH-2 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339588 | AH-2 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339589 | AH-2 5-5.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339590 | AH-2 6-6.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339591 | AH-3 0-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339592 | AH-3 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339593 | AH-3 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339594 | AH-3 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339595 | AH-3 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339596 | AH-3 5-5.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339597 | AH-3 6-6.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |

| | 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) |
| 339579 - AH-1 0-1' | < 0.0200 | 0.294 | 2.82 | 2.61 | 93.4 | 1650 Qs |
| 339580 - AH-1 1-1.5' | | | | | <50.0 | 24.7 Qs |
| 339584 - AH-2 0-1' | < 0.100 | < 0.100 | 7.75 | 37.6 | 561 | 2560 Q∞ |
| 339585 - AH-2 1-1.5' | | | | | 2140 ¹ | 3790 Qs |

continued ...

¹Sample run out of hold time.

... continued

| | |] | BTEX | 1 | 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) |
| 339586 - AH-2 2-2.5' | | | | | 3950 ² | 3740 Je,Qs |
| 339587 - AH-2 3-3.5' | | | • | | 6500 Jo | 6360 Qs |
| 339588 - AH-2 4-4.5' | | | | | 8670 Je | 6970 Qs |
| 339589 - AH-2 5-5.5' | | | | | 8780 Je | 6530 Qs |
| 339590 - AH-2 6-6.5' | | | | | 12200 Je | 10300 Je,Q |
| 339591 - AH-3 0-1' | < 0.400 | < 0.400 | 8.69 | 24.2 | 412 | 3130 Qs |
| 339592 - AH-3 1-1.5' | | | | | <50.0 | 24.7 Qs |

Sample: 339579 - AH-1 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 339580 - AH-1 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 339581 - AH-1 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|---------------------|
| Chloride | | <20.0 | mg/Kg | 4 |

Sample: 339582 - AH-1 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 98.5 | mg/Kg | 4 |

Sample: 339583 - AH-1 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|-------------------------|-------|---------------------|
| Chloride | | 73.9 | mg/Kg | 4 |

Sample: 339584 - AH-2 0-1'

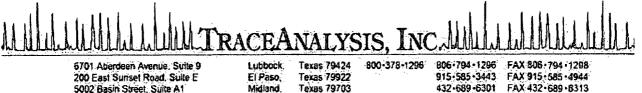
continued ...

²Sample run out of hold time.

| Report Date: Sept | ember 3, 2013 | Work Order: 13082238 | Page | Number: 3 of 4 | |
|--|-------------------------------|----------------------|----------------|----------------|--|
| sample 339584 con | tinued | | | | |
| Param | Flag | Result | Units | RL | |
| Param | Flag | Result | Units | RL | |
| Chloride | | <20.0 | mg/Kg | 4 | |
| Sample: 339585 | - AH-2 1-1.5' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | <20.0 | mg/Kg | 4 | |
| Sample: 339586 | - AH-2 2-2.5' | | | | |
| Param | Flag | Result | Units | RL | |
| Chloride | | 217 | mg/Kg | 4 | |
| Sample: 339587 Param Chloride | - AH-2 3-3.5' Flag | Result 340 | Units mg/Kg | RL 4 | |
| | | | | | |
| Sample: 339588 | - AH-2 4-4.5' | | | | |
| | | Result | Units | RL | |
| Param | - AH-2 4-4.5' Flag | Result 271 | Units mg/Kg | RL 4 | |
| Sample: 339588 Param Chloride Sample: 339589 | Flag | | | | |
| Param Chloride Sample: 339589 | Flag - AH-2 5-5.5' | 271 | mg/Kg | 4 | |
| Param Chloride Sample: 339589 | Flag | | | | |
| Param Chloride Sample: 339589 Param | Flag - AH-2 5-5.5' Flag | 271 Result | mg/Kg Units | 4 RL | |
| Param Chloride Sample: 339589 Param Chloride | Flag - AH-2 5-5.5' Flag | 271 Result | mg/Kg Units | 4 RL | |

Sample: 339591 - AH-3 0-1'

| Report Date: September 3, 2013 | | Work Order: 13082238 | Page Number: 4 of 4 | |
|--------------------------------|--|----------------------|---------------------|---------------------|
| Param | Flag | \mathbf{Result} | Units | RL |
| Chloride | | <20.0 | mg/Kg | 4 |
| Sample: 339592 | - AH-3 1-1.5' | | | |
| Param | Flag | Result | Units | RL |
| Chloride | | 24.7 | nıg/Kg | 4 |
| Sample: 339593 | - AH-3 2-2.5' | | | |
| Param | Flag | Result | Units | RL |
| Chloride | | 59.2 | mg/Kg | 4 |
| Sample: 339594 | - AH-3 3-3.5' | | | |
| Param | Flag | Result | Units | RL |
| Chloride | | 187 | nıg/Kg | 4 |
| Sample: 339595 | - AH-3 4-4.5' | | | |
| Param | Flag | Result | Units | RL |
| Chloride | ······································ | 197 | mg/Kg | 4 |
| Sample: 339596 | - AH-3 5-5.5' | | | |
| Param | Flag | Result | Units | RL |
| Chloride | | 78.9 | mg/Kg | 4 |
| | | | | |
| Sample: 339597 | - AH-3 6-6.5' | | | |
| Sample: 339597 Param | - AH-3 6-6.5' Flag | Result | Units | RL |



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Certifications

NELAP DoD LELAP DBE Kansas Oklahoma ISO 17025 WBE HUB NCTRCA

Analytical and Quality Control Report

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

Report Date: September 3, 2013

Work Order: 13082238

Project Location: Eddy Co., NM Project Name: COG/Weems #1 TB Project Number: 112MC05595

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

| | ne may near negros o and | • • • • | Date | Time | Date |
|--------|--------------------------|---------|----------------|-------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 339579 | AH-1 0-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339580 | AH-1 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339581 | AH-1 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339582 | AH-1 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339583 | AH-1 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339584 | AH-2 0-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339585 | AH-2 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339586 | AH-2 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339587 | AH-2 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339588 | AH-2 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339589 | AH-2 5-5.5' | soil | 2013 - 08 - 14 | 00:00 | 2013-08-22 |
| 339590 | AH-2 6-6.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339591 | AH-3 0-1' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339592 | AH-3 1-1.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339593 | AH-3 2-2.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339594 | AH-3 3-3.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339595 | AH-3 4-4.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |
| 339596 | AH-3 5-5.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |

| | | | Date | Time | Date |
|--------|-------------|--------|------------|-------|------------|
| Sample | Description | Matrix | Taken | Taken | Received |
| 339597 | AH-3 6-6.5' | soil | 2013-08-14 | 00:00 | 2013-08-22 |

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 39 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Miebael april

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

Report Contents

| Case Narrative | 5 |
|---|---|
| Analytical Report | 6 |
| | 6 |
| Sample 339580 (AH-1 1-1.5') | 7 |
| | 8 |
| | 8 |
| Sample 339583 (AH-1 4-4.5') | 9 |
| Sample 339584 (AH-2 0-1') | 9 |
| Sample 339585 (AH-2 1-1.5') | 0 |
| Sample 339586 (AH-2 2-2.5') | 1 |
| Sample 339587 (AH-2 3-3.5 ²) | 2 |
| Sample 339588 (AH-2 4-4.5') | 3 |
| Sample 339589 (AH-2 5-5.5') | 4 |
| Sample 339590 (AH-2 6-6.5') | 5 |
| Sample 339591 (AH-3 0-1') | 3 |
| Sample 339592 (AH-3 1-1.5') 15 | 3 |
| Sample 339593 (AH-3 2-2.5') | 9 |
| Sample 339594 (AH-3 3-3.5') |) |
| Sample 339595 (AH-3 4-4.5') |) |
| Sample 339596 (AH-3 5-5.5') |) |
| Sample 339597 (AH-3 6-6.5') |) |
| | |
| Method Blanks 22 | |
| QC Batch 104431 - Method Blank (1) 2: QC Batch 104452 - Method Blank (1) 2: | |
| \mathbf{v} | - |
| QC Batch 104453 - Method Blank (1) 2: QC Batch 104454 - Method Blank (1) 2: | |
| - | |
| QC Batch 104527 - Method Blank (1) 22 QC Batch 104535 - Method Blank (1) 22 | - |
| QC Batch 104535 - Method Blank (1) | |
| QC Batch 104635 - Method Blank (1) 22 QC Batch 104635 - Method Blank (1) 23 | |
| QC Datch 104055 - Method Diank (1) | , |
| Laboratory Control Spikes 24 | ł |
| QC Batch 104431 - LCS (1) | ł |
| QC Batch 104452 - LCS (1) | Ĺ |
| QC Batch 104453 - LCS (1) | Ł |
| QC Batch 104454 - LCS (1) |) |
| QC Batch 104527 - LCS (1) | ; |
| QC Batch 104535 - LCS (1) | ; |
| QC Batch 104631 - LCS (1) | ; |
| QC Batch 104635 - LCS (1) | , |
| QC Batch 104431 - MS (1) | , |
| QC Batch 104452 - MS (1) | 3 |
| QC Batch 104453 - MS (1) | ; |
| QC Batch 104454 - MS (1) |) |

Page 3 of 39

| | QC Batch | 104527 - | MS (1 |). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
|----|-----------|-------------------------|-------|----------|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|----|-----|-----|-----|-----|---|-----|-----|-----|---|-----|---|-----|---|-----|-----|---|---|-----------|
| | QC Batch | 104535 - | MS (1 | L) . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | -30 |
| | QC Batch | ı 104631 - | MS (1 | Ĺ). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 30 |
| | QC Batch | 104635 - | MS (1 | Ú, | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 31 |
| | • | | ` | <i>.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ca | libration | Standar | ds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| | QC Batch | ı 104431 [°] - | · CCV | (1) | | | | | • | | | | | | | | | | | | | | | • | | | | | ••• | | | | 32 |
| | QC Batch | ı 104431 - | · CCV | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| | QC Batch | 104431 - | CCV | (3) | | | | | | | | | · | | | | | | | | | | | | | | | | | | | | 32 |
| | QC Batch | 104431 - | CCV | (4) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| | QC Batch | 104452 - | CCV | (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| | QC Batch | 104452 - | CCV | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| | QC Batch | 104453 - | CCV | (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| | QC Batch | 104453 - | · CCV | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| | QC Batch | 104454 - | CCV | (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| | QC Batch | 104454 - | CCV | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 |
| | QC Batch | 104527 - | CCV | (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 |
| | QC Batch | 104527 - | CCV | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | · | | | | | | | | 34 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| | QC Batch | 104631 - | CCV | (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| | QC Batch | | | · · | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| | QC Batch | | | • • | | | | | | | | | | | | | | | | | | • • | | | | | | | | | | • | 36 |
| | Co Duitin | 101000 | 001 | (2) | • • | • • | ••• | ••• | • • | • | • • | ••• | • • | ••• | •• | • • | • • | • • | ••• | • | ••• | • • | • • | · | ••• | • | • • | • | ••• | • • | • | · | 00 |
| Ap | pendix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | Report De | efinitions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | Laborator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | Standard | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | Result Co | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | Attachme | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 39 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Page 4 of 39

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Case Narrative

Samples for project COG/Weems #1 TB were received by TraceAnalysis, Inc. on 2013-08-22 and assigned to work order 13082238. Samples for work order 13082238 were received intact at a temperature of 5.2 C.

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

| | | Prep | Prep | $\rm QC$ | Analysis |
|----------------------|--------------|-------|---------------------|----------|---------------------|
| Test | Method | Batch | Date | Batch | Date |
| BTEX | S 8021B | 88565 | 2013-08-28 at 12:00 | 104527 | 2013-08-29 at 09:20 |
| Chloride (Titration) | SM 4500-Cl B | 88453 | 2013-08-26 at 10:05 | 104452 | 2013-08-27 at 16:08 |
| Chloride (Titration) | SM 4500-Cl B | 88453 | 2013-08-26 at 10:05 | 104453 | 2013-08-27 at 16:24 |
| Chloride (Titration) | SM 4500-Cl B | 88453 | 2013-08-26 at 10:05 | 104454 | 2013-08-27 at 16:32 |
| TPH DRO - NEW | S 8015 D | 88492 | 2013-08-26 at 10:32 | 104431 | 2013-08-27 at 10:33 |
| TPH DRO - NEW | S 8015 D | 88645 | 2013-08-30 at 14:00 | 104631 | 2013-09-03 at 09:27 |
| TPH DRO - NEW | S 8015 D | 88651 | 2013-08-30 at 14:00 | 104635 | 2013-08-30 at 10:35 |
| TPH GRO | S 8015 D | 88572 | 2013-08-28 at 12:00 | 104535 | 2013-08-29 at 11:13 |

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 13082238 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: September 3, 2013 112MC05595 Work Order: 13082238 COG/Weems #1 TB Page Number: 6 of 39 Eddy Co., NM

Analytical Report

Sample: 339579 - AH-1 0-1'

| Laboratory: Midland Analysis: BTEX QC Batch: 104527 Prep Batch: 88565 | | D | Date Ana | l Method: lyzed: reparation: | S 8021E 2013-08 : 2013-08 | -29 | | Prep Method Analyzed By Prepared By: | KC |
|--|------|------|-----------------------|------------------------------------|---------------------------------|----------|--------|--|---------------|
| | | | | | RL | | | | |
| Parameter | Flag | | Cert | | Result | Units | | Dilution | \mathbf{RL} |
| Benzene | υ | | 1 | < | 0.0200 | mg/Kg | | 1 | 0.0200 |
| Toluene | | | 1 | | 0.294 | mg/Kg | | 1 | 0.0200 |
| Ethylbenzene | | | 1 | | 2.82 | mg/Kg | | 1 | 0.0200 |
| Xylene | | | 1 | | 2.61 | mg/Kg | | 1 | 0.0200 |
| | | | | | | | Spike | Percent | Recovery |
| Surrogate | H | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Trifluorotoluene (TFT) | | | | 2.31 | mg/Kg | 1 | 2.00 | 116 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | | 1.83 | mg/Kg | 1 | 2.00 | 92 | 70 - 130 |

Sample: 339579 - AH-1 0-1'

| Laboratory: | Midland | | | | | |
|-------------|----------------------|----------|--------------|------------------|--------------|---------------|
| Analysis: | Chloride (Titration) | Analytic | al Method: | SM 4500-Cl B | Prep Method: | N/A |
| QC Batch: | 104452 | Date An | alyzed: | 2013-08-27 | Analyzed By: | AR |
| Prep Batch: | 88453 | Sample . | Preparation: | 2013-08-26 | Prepared By: | \mathbf{AR} |
| | | | | | | |
| | | | RL | | | |
| Parameter | Flag | Cert | Result | \mathbf{Units} | Dilution | \mathbf{RL} |
| Chloride | υ | | <20.0 | mg/Kg | 5 | 4.00 |

Sample: 339579 - AH-1 0-1'

| Laboratory: | Midland | | 1 | | | |
|-------------|---------------|-----------------------|---------------------|------------|--------------|---------------------|
| Analysis: | TPH DRO - NEW | Anal | ytical Method: | S 8015 D | Prep Method: | N/A |
| QC Batch: | 104431 | Date | Analyzed: | 2013-08-27 | Analyzed By: | CW |
| Prep Batch: | 88492 | Samj | ple Preparation: | 2013-08-26 | Prepared By: | CW |
| | | | | | | |
| | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| DRO | В | 1 | 93.4 | mg/Kg | 1 | 50.0 |
| | | | | | | |

| Report Date: Sep 112MC05595 | otember 3, 20 | | | Work Ord COG/We | Page Number: 7 of 39 Eddy Co., NM | | | |
|--------------------------------|---------------|------|--------|--------------------|--------------------------------------|-----------------|---------------------|--------------------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| n-Tricosane | | | 105 | mg/Kg | 1 | 100 | 105 | 76.3 - 192.6 |

Sample: 339579 - AH-1 0-1'

| Laboratory: Midland Analysis: TPH GRO QC Batch: 104535 Prep Batch: 88572 | | Da | te Anal | Method: yzed: eparation: | S 8015 1 2013-08 2013-08 | -29 | | Prep Metho Analyzed By Prepared By | 7: KC |
|---|-------|------|---------|--------------------------------|--------------------------------|----------|-----------------|--|---------------------|
| | | | | | RL | | | | |
| Parameter | Flag | | Cert | Re | sult | Units | 3 | Dilution | RL |
| GRO | Qs | | 1 | 1 | 650 | mg/Kg | S | 20 | 4.00 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| Trifluorotoluene (TFT) | l Q#r | Qsr | | 1.67 | mg/Kg | 20 | 40.0 | 4 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | | 44.2 | mg/Kg | 20 | 40.0 | 110 | 70 - 130 |

Sample: 339580 - AH-1 1-1.5'

| Laboratory: | Midland | | | | | | |
|-------------|---------------------|------|-----------------------|-------------|--------------|--------------|---------------|
| Analysis: | Chloride (Titration | n) | Analytics | d Method: | SM 4500-Cl B | Prep Method | : N/A |
| QC Batch: | 104453 | | Date Ana | lyzed: | 2013-08-27 | Analyzed By: | AR |
| Prep Batch: | 88453 | 453 | | reparation: | 2013-08-26 | Prepared By: | AR |
| | | | | RL | | | |
| Parameter | | Flag | Cert | Result | Units | Dilution | \mathbf{RL} |
| Chloride | | U | | <20.0 | mg/Kg | 5 | 4.00 |

Sample: 339580 - AH-1 1-1.5'

| Laboratory: Analysis: QC Batch: Prep Batch: | Analysis: TPH DRO - NEW QC Batch: 104635 | | Date A | cal Method: nalyzed: Preparation: | S 8015 D 2013-08-30 2013-08-30 | Prep Method: Analyzed By: Prepared By: | N/A CW CW |
|--|---|------|--------|---|--------------------------------------|--|-----------------|
| | | | | RL | | | |
| Parameter | | Flag | Cert | Result | Units | Dilution | RL |
| DRO | | Jb | 1 | <50.0 | mg/Kg | 1 | 50.0 |

| Report Date: September 3, 2013 112MC05595 | | | | Work Ord COG/We | Page Number: 8 of 39 Eddy Co., NM | | | |
|--|------|------|--------|--------------------|--------------------------------------|-----------------|---------------------|--------------------|
| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| n-Tricosane | | | 115 | mg/Kg | 1 | 100 | 115 | 76.3 - 192.6 |

Sample: 339580 - AH-1 1-1.5'

| Laboratory: Midland Analysis: TPH GRO QC Batch: 104535 Prep Batch: 88572 | | | Date An | al Method alyzed: Preparatio | 2013-0 | 8-29 | | Prep Metho Analyzed By Prepared By | y: KC |
|---|------|------------------|-----------------------|------------------------------------|---------------|----------|-------------------------|--|----------|
| | | | | | \mathbf{RL} | | | | |
| Parameter | Flag | | Cert | I | Result | Uni | ts | Dilution | RL |
| GRO | Q* | | 1 | | 24.7 | mg/K | g | 1 | 4.00 |
| | | | | | | | Spike | Percent | Recovery |
| Surrogate | | \mathbf{F} lag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Trifluorotoluene (TFT) | | | | 1.50 | mg/Kg | 1 | 2.00 | 75 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFE | 3) | | | 1.69 | mg/Kg | 1 | 2.00 | 84 | 70 - 130 |

Sample: 339581 - AH-1 2-2.5'

| Laboratory: | Midland | | | | | | |
|-------------|-----------------|--------|----------|---------------------|--------------|--------------|---------------|
| Analysis: | Chloride (Titra | ution) | Analytic | al Method: | SM 4500-Cl B | Prep Method: | N/A |
| QC Batch: | 104453 | | Date An | alyzed: | 2013-08-27 | Analyzed By: | AR |
| Prep Batch: | 88453 | | Sample I | Preparation: | 2013-08-26 | Prepared By: | AR |
| | | | | RL | | | |
| Parameter | | Flag | Cert | Result | Units | Dilution | \mathbf{RL} |
| Chloride | | U | | <20.0 | mg/Kg | 5 | 4.00 |

Sample: 339582 - AH-1 3-3.5'

| Prep Batch: | 88453 | Sample Preparation: | 2013-08-26 | Prepared By: | AR |
|-------------|----------------------|---------------------|--------------|--------------|-----|
| QC Batch: | 104453 | Date Analyzed: | 2013-08-27 | Analyzed By: | AR. |
| Analysis: | Chloride (Titration) | Analytical Method: | SM 4500-Cl B | Prep Method: | N/A |
| Laboratory: | Midland | | | | |

continued ...

| 112MC05595 | September 3, 201; | 3 | | Work Order: 1 COG/Weems | | Page Number: 9 of 39 Eddy Co., NM | | | |
|---|---|------|---|--|--|--------------------------------------|---|--|--|
| sample 33958. | 2 continued | | | | | | | | |
| | | | | RL | J | | | | |
| Parameter | | Flag | Cert | Result | ; Unit | s D | ilution | R.L | |
| | | | | RI | | | | | |
| Parameter | | Flag | Cert | Result | | s Di | ilution | \mathbf{RL} | |
| Chloride | | ¥ | | 98.5 | mg/K | g | 5 | 4.00 | |
| Sample: 339 Laboratory: | 9583 - AH-1 4-4. Midland | 5' | | | | | | | |
| Analysis: | Chloride (Titratio | n) | | tical Method: | SM 4500-Cl B 2013-08-27 | | Prep Method: N/A | | |
| QC Batch: | 104453 | | | Analyzed: | Analyzed By: AR | | | | |
| Prep Batch: | 88453 | | Sample | e Preparation | | Prepared By: AR | | | |
| | | | | | | | | | |
| | | | | RL | , | | | | |
| Parameter | | Flag | Cert | RL Result | | s Di | ilution | RL | |
| Parameter Chloride | | Flag | Cert | | ; Unit | | ilution 5 | RL 4.00 | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: | 9584 - AH-2 0-1' Midland BTEX 104527 88565 | Flag | Cert Analytical I Date Analy Sample Prej | Result 73.9 Method: S & zed: 20 | ; Unit | g P A | | 4.00 | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: | Midland BTEX 104527 | | Analytical I Date Analy Sample Pre | Result 73.9 Method: S & zed: 20 paration: 20 RI | Unit mg/K 021B 13-08-29 13-08-28 | g P A P | 5 rep Method: nalyzed By: repared By: | 4.00 S 5035 KC KC | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: Parameter | Midland BTEX 104527 | Flag | Analytical I Date Analy Sample Pre Cert | Result 73.9 Method: S & zed: 20 paration: 20 RI Result | Unit mg/K 021B 13-08-29 13-08-28 | g P A P Dih | 5 rep Method: nalyzed By: repared By: ition | 4.00 S 5035 KC KC RL | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: Parameter Benzene | Midland BTEX 104527 | Flag | Analytical I Date Analy Sample Prej Cert | Result 73.9 73.9 Method: S & zed: 20 paration: 20 RI Result <0.100 | COLLE COLE CO | g P A P Dih | 5 rep Method: nalyzed By: repared By: ition 5 | 4.00 S 5035 KC KC RL 0.0200 | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Benzene Toluene | Midland BTEX 104527 | Flag | Analytical I Date Analy Sample Prej Cert | Result 73.9 73.9 Vethod: S & zed: 200 paration: 200 paration: 201 RI Result <0.100 <0.100 | COU21B 13-08-29 13-08-28 COU21B 13-08-29 13-08-28 COU21B 13-08-28 COU21B 13-08-28 COU21B 13-08-28 COU21B 13-08-29 13-08-28 COU21B 13-08-29 13-08-29 13-08-28 COU21B 13-08-29 13-08-29 13-08-28 COU21B 13-08-29 13-08-29 13-08-28 COU21B 13-08-29 13-08-29 13-08-28 COU21B 13-08-29 13-08-29 13-08-28 COU21B 13-08-29 13-08-28 COU21B 13-08-29 COU21B 13-08-29 COU21B 13-08-29 COU21B 13-08-29 COU21B 13-08-29 COU21B 13-08-28 COU21B 13-08 COU21B 13-08 COU218 | g P A P Dih | 5 rep Method: nalyzed By: repared By: ition 5 5 | 4.00 S 5035 KC KC RL 0.0200 0.0200 | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Senzene Foluene Ethylbenzene | Midland BTEX 104527 | Flag | Analytical M Date Analy Sample Pre Cert | Result 73.9 73.9 73.9 Zed: 201 paration: 201 RI Result <0.100 | Unit mg/K 021B 13-08-29 13-08-28 5 Units 0 mg/Kg 0 mg/Kg 0 mg/Kg | g P A P Dih | 5 rep Method: nalyzed By: repared By: ition 5 | 4.00 S 5035 KC KC RL 0.0200 0.0200 0.0200 | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Benzene Foluene Ethylbenzene Xylene | Midland BTEX 104527 | Flag | Analytical I Date Analy Sample Prej Cert | Result 73.9 73.9 73.9 73.9 Yethod: S & zed: 200 paration: 201 RI Result <0.100 | Unit mg/K 021B 13-08-29 13-08-28 Units 0 mg/Kg 0 mg/Kg 0 mg/Kg | g P A P Dih Spike | 5 rep Method: nalyzed By: repared By: tion 5 5 5 5 5 5 5 | 4.00 S 5035 KC KC 0.0200 0.0200 0.0200 0.0200 0.0200 Recovery | |
| Chloride Sample: 339 Laboratory: Analysis: QC Batch: | Midland BTEX 104527 88565 | Flag | Analytical M Date Analy Sample Pre Cert | Result 73.9 73.9 73.9 73.9 Method: S & zed: 200 paration: 201 RI Result <0.100 | Unit mg/K 021B 13-08-29 13-08-28 5 Units 0 mg/Kg 0 mg/Kg 0 mg/Kg | g P A P Dih Spike | 5 rep Method: nalyzed By: repared By: tion 5 5 5 5 5 5 | 4.00 S 5035 KC KC RL 0.0200 0.0200 0.0200 0.0200 | |

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| Report Date: September 3, 2013 112MC05595 | | | | Work Ord COG/W | | Page Number: 10 of 39 Eddy Co., NM | | | |
|--|---|-------|---|---|---------------------|---------------------------------------|---|---------------------------------------|----------------------|
| Sample: 33 | 9584 - AH-2 0-1' | | | | | | | | |
| Laboratory: Analysis: QC Batch: Prep Batch: | Midland Chloride (Titratic 104453 88453 | 911) | D | nalytical Met ate Analyzed ample Prepar | : 20 | 4 4500-Cl B 13-08-27 13-08-26 | | Prep Me Analyzec Prepared | l By: AR |
| | | | | | \mathbf{RL} | | | | |
| Parameter | | Flag | Cei | | Result | Units | | Dilution | RL |
| Chloride | | U | | | <20.0 | mg/Kg | | 5 | 4.00 |
| Laboratory: Analysis: QC Batch: Prep Batch: | Midland TPH DRO - NEV 104431 88492 | I | Analytical Method:S 8015 DDate Analyzed:2013-08-27Sample Preparation:2013-08-26 | | | | | thod: N/A l By: CW l By: CW | |
| Parameter | | Flag | Cei | rt. I | RL | Units | | Dilution | RL |
| DRO | | | 1 | | 561 | mg/Kg | | 1 | 50.0 |
| Surrogate | Flag | Cert | Result | Units | Dilutic | Spike on Amour | | ercent ecovery | Recovery Limits |
| n-Tricosane | | | 111 | mg/Kg | 1 | 100 | | 111 | 76.3 - 192.6 |
| Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | 9584 - AH-2 0-1' Midland TPH GRO 104535 88572 | | Date . | tical Method Analyzed: e Preparation | 2013-0 | 8-29 | | Prep Meth Analyzed I Prepared E | By: KC |
| Parameter | | Flag | Cer | t F | RL Result | Units | | Dilution | RL |
| GRO | | Qs | 1 | | 2560 | mg/Kg | | 20 | 4.00 |
| Surrogate | /mmm) | | | ert Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| | ono l'EUTIT | | | | | | | | |
| Trifluorotolu | cobenzene (4-BFB) | O Qsr | Qsr | $1.58 \\ 39.5$ | mg/Kg mg/Kg | $\frac{20}{20}$ | $\begin{array}{c} 40.0\\ 40.0\end{array}$ | $\frac{4}{99}$ | 70 - 130 70 - 130 |

| | Report Date: September 3, 2013 112MC05595 | | | Work Order: 13082238 COG/Weems #1 TB | | | | | |
|----------------|--|--|--|---|---|--|---|---|--|
| 585 - AH-2 1-1 | 1.5' | | | | | | | | |
| Midland | | | | | | | | | |
| | sion) | | | | | | | N/A | |
| | | | | | | | | AR. | |
| 88453 | | San | ipie Preparat | 51011: 1 | 2013-08-26 | Prepare | ed By: | \mathbf{AR} | |
| | | | | RL | | | | | |
| | Flag | Cert | | | | Dilution | | RI | |
| | | | < | 20.0 | mg/Kg | 5 | | 4.00 | |
| | Flag | | R | RL | Units | Dilution | eu by: | CW RJ | |
| 4 | | 1 | 2 | 2140 | mg/Kg | 1 | | 50.0 | |
| | | | | | Spike | Percent | Reco | overy | |
| Flag | Cert | Result | Units | Dilu | tion Amount | Recovery | Lin | nits | |
| | | 159 | mg/Kg | 1 | 100 | 159 | 76.3 - | 192.0 | |
|) | Chloride (Titrat 104453 88453 585 - AH-2 1- Midland TPH DRO - NE 104631 88645 | Chloride (Titration) 104453 88453 585 - AH-2 1-1.5' Midland TPH DRO - NEW 104631 88645 Flag 4 | Chloride (Titration) Ana 104453 Dat 88453 San Flag Cert 585 - AH-2 1-1.5' Midland TPH DRO - NEW An 104631 Da 88645 San Flag Cert 4 1 Flag Cert Result | Chloride (Titration)Analytical Meth Date Analyzed: Sample Preparat 104453 Date Analyzed: Sample Preparat 88453 Sample PreparatFlagCertRe $585 - AH-2 1-1.5'$ Analytical Meth Date Analyzed: 88645 104631 Date Analyzed: Sample Preparat 88645 Sample Preparat 104631 Date Analyzed: Sample Preparat 104631 Date Analyzed: Sa | Chloride (Titration)Analytical Method:104453Date Analyzed:88453Sample Preparation:88453RLFlagCertResult < 20.0 585 - AH-2 1-1.5'Sample Preparation:MidlandDate Analytical Method:104631Date Analyzed:88645Sample Preparation:RLFlagCertResult412140FlagCert | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | |

| Parameter | Flag | | | R | Result | | Units | | $\mathbf{R}\mathbf{L}$ |
|--|-------|------|------|--------------|----------------|----------|-----------------|---------------------|------------------------|
| GRO | Qs | | | 3790 | | mg/Kg | | 20 | 4.00 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) | 5 Qsr | Qsr | | 1.73 47.4 | mg/Kg mg/Kg | 20 20 | 40.0 40.0 | 4 118 | 70 - 130 70 - 130 |

| Report Date 112MC05595 | | 3, 201 | 3 | | | Work Orde COG/Wee | | | | | Page Number: 12 of 39 Eddy Co., NM | | |
|--|---|---------|-------|------------------------|-------------|---|----------------------------|---------------------------|----------------------|---------------------------------|---------------------------------------|-------------------|----------------------------------|
| Sample: 33 | 9586 - AH- | -2 2-2. | 5' | | | | | | | | | | |
| Laboratory: Analysis: QC Batch: Prep Batch: | Chloride (Titration) : 104453 h: 88453 | | | | Date | ytical Meth Analyzed: de Prepara | 2 | 5M 45 2013-0 2013-0 | | | Prep Me Analyze Prepare | d By: | N/A AR AR |
| Parameter Chloride | Flag | | | | Cert | Re | RL esult 217 | | Unit: mg/Kg | | Dilution 5 | | RL 4.00 |
| Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | 9586 - AH- Midland TPH DRO 104631 88645 | | | | Date | lytical Met 9 Analyzed 19 Prepara | : | S 801 2013- 2013- | 09-03 | | Prep Ma Analyze Prepare | d By: | N/A CW CW |
| Parameter DRO | | | Flag | | Cert | | RL esult 3950 | | Unit mg/K | | Dilution 1 | | RL 50.0 |
| Surrogate n-Tricosane | Q _{FF} | Flag | Cert | Res | sult 210 | Units mg/Kg | Dilu 1 | | Spil Amo 100 | unt I | Percent Recovery 210 | | overy nits 192.6 |
| Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | 9586 - AH- Midland TPH GRO 104535 88572 | | 5' | Da | ate Ana | l Method: lyzed: 'reparation: | | .5 D 08-29 08-28 | | | Prep Metl Analyzed Prepared | By: I | 5035 (C (C |
| Parameter GRO | | | Flag | | Cert | | RL sult 5740 | | Units mg/Kg | | Dilution 20 | | RL 4.00 |
| Surrogate Trifluorotolue 4-Bromofluor | | -BFB) | 7 Qsr | Flag _{Qsr} | Cert | Result 1.20 41.8 | Units mg/K mg/K | g | Dilution 20 20 | Spike Amount 40.0 40.0 | Percent t Recovery 3 104 | <u>/ Ĺi</u> 70 | covery mits - 130 - 130 |

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| | Report Date: September 3, 2013 112MC05595 | | | Work Orde COG/Wee | | | Page Number: 13 of 39 Eddy Co., NM | | | |
|--|---|-------------------|--------------|----------------------|---|------------------------|---------------------------------------|---|-----------------------------|---------------------|
| Sample: 33 | 9587 - A | H-2 3-3 | 3.5' | | | | | | | |
| Laboratory: Analysis: QC Batch: Prep Batch: | sis: Chloride (Titration) atch: 104453 Batch: 88453 | | | Date | ytical Metho Analyzed: ple Preparat | 2013-0 | | Prep Method Analyzed By: Prepared By: | | N/A AR. AR. |
| | Flag | | | | | RL | | | | |
| Parameter Chloride | | | Cert | | sult 340 | Units mg/Kg | Dilution 5 | | RL 4.00 | |
| | | 587 - AH-2 3-3.5' | | | | | mg/ ng | | | 4.00 |
| Sample: 33 | 9587 - A | H-2 3-3 | 3.5' | | | | | | | |
| Laboratory: Analysis: QC Batch: Prep Batch: | Midland TPH DF 104631 88645 | | W | Dat | dytical Metl e Analyzed: 1ple Prepara | 2013- | 09-03 | | 4ethod: ed By: ed By: | N/A CW CW |
| Parameter | | | Flag | Cert | Ba | RL sult | Units | Dilution | | RL |
| DRO | | | Je T. TUB | 1 | | 500 | mg/Kg | 1 | | 50.0 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | | overy nits |
| n-Tricosane | Qar | Qsr | Oert | 299 | mg/Kg | 1 | 100 | 299 | | 192.6 |
| Sample: 33 | 9587 - A | H-2 3-3 | 3.5' | | | | | | | |
| Laboratory: | Midland | | | A 1 | 13473 | 0.0015 5 | | | (1 J | 0 r00r |
| Analysis: QC Batch: | TPH GF 104535 | (U) | | Analytic Date An | al Method: | S 8015 D 2013-08-29 | 1 | Prep Me Analyzec | | S 5035 KC |
| Prep Batch: | 104555 88572 | | | | Preparation: | | | Prepared | | KC |
| | | | | | | RL | | | | |
| Parameter | | | Flag | Cert | | sult | Units mg/Kg | Dilution 20 | | RL |
| GRO | L Tag Us | | 1 | 6 | 20.00 | | | | 4.00 | |

| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|----------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT) | 8 Qsr | Qsr | | 1.16 | mg/Kg | 20 | 40.0 | 3 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | | 29.3 | mg/Kg | 20 | 40.0 | 73 | 70 - 130 |
| | | | | | 0, 0 | | | | |

| Report Date 112MC05595 | : September 3, 20 | 13 | | Work Order: 13 COG/Weems | | Page Number: 14 of 39 Eddy Co., NM | | |
|---|---|-----------|--------------------|--|-----------------------------|---------------------------------------|--------------------------------|-----------------------------|
| Sample: 33 | 9588 - AH-2 4-4 | 5' | | | | | | |
| Laboratory: Analysis: QC Batch: Prep Batch: | Midland Chloride (Titrati 104453 88453 | on) | Date | lytical Method: e Analyzed: ple Preparation: | 2013-0 | | Prep M Analyze Prepare | ed By: AR |
| | | | | RL | | | | |
| Parameter | | Flag | Cert | Result | | Units | Dilution | R |
| 1 mmonor | | | | 271 | | mg/Kg | 5 | 4.0 |
| Chloride | 9588 - AH-2 4-4 | | | | | | | |
| Chloride | 9588 - AH-2 4-4 Midland TPH DRO - NE [*] 104631 88645 | | Dat | alytical Method: a Analyzed: aple Preparation | S 801 2013-0 : 2013-0 | 5 D 19-03 | Prep M Analyze Prepare | ed By: CW |
| Chloride Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | Midland TPH DRO - NE' 104631 | W | Dat San | dytical Method: a Analyzed: aple Preparation RL | 2013-0 | 5 D 19-03 18-30 | Analyze Prepare | ed By: CW ed By: CW |
| Chloride Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: Parameter | Midland TPH DRO - NE' 104631 | | Dat | dytical Method: le Analyzed: aple Preparation RL Result | 2013-0 | 5 D)9-03)8-30 Units | Analyze Prepare Dilution | ed By: CW ed By: CW R |
| Chloride Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | Midland TPH DRO - NE' 104631 | W | Dat San | dytical Method: a Analyzed: aple Preparation RL | 2013-0 | 5 D 19-03 18-30 | Analyze Prepare | ed By: CW ed By: CW |
| Chloride Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: Parameter | Midland TPH DRO - NE' 104631 | W Flag | Dat San Cert | alytical Method: le Analyzed: aple Preparation RL Result 8670 | 2013-0 | 5 D)9-03)8-30 Units | Analyze Prepare Dilution | ed By: CW ed By: CW R |

Sample: 339588 - AH-2 4-4.5'

| Laboratory:MidlandAnalysis:TPH GROQC Batch:104535Prep Batch:88572 | | Da | te [°] Anal | Method: yzed: eparation | S 8015 1 2013-08 : 2013-08 | -29 | | Prep Metho Analyzed By Prepared By | y: KC |
|---|----------|------|----------------------|-------------------------------|----------------------------------|----------|-----------------|--|--------------------|
| | | | | | RL | | | | |
| Parameter | Flag | | Cert | Re | esult | Units | | Dilution | \mathbf{RL} |
| GRO | Qs | | 1 | 6 | 597 0 | mg/Kg | | 50 | 4.00 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| Trifluorotoluene (TFT) | 9 Qar | Qar | | 1.37 | mg/Kg | 50 | 100 | 1 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | Qsr | Qsr | | 40.1 | mg/Kg | 50 | 100 | 40 | 70 - 130 |

| : Septemb | er 3, 201 | 3 | | Work Order COG/Wee | | | Page Number: 15 of 39 Eddy Co., NM | | | |
|-------------------|---|--|--|---|--|--|--|--|--|--|
| 9589 - Al | H-2 5-5. | 5' | | | | | | | | |
| Midland | (175) | , | | | | | D | (| NI / A | |
| | (Titratic | m) | | | | | | N/A AR | | |
| 104455 88453 | | | | | | | | | AR | |
| | Flag | | | | RL | | | | | |
| | | Flag | Cert | | | Units | Dilution | | RL | |
| | | | | | 212 | mg/Kg | 5 | | 4.00 | |
| $104631 \\ 88645$ | | | | | | | | | CW CW | |
| | | | | | | | | 0.11 | | |
| | | Flag | Cert | Re | sult | Units | Dilution | | RL | |
| | | Flag | Cert | | sult 780 | Units Mg/Kg | Dilution 1 | | | |
| | | | | | | | | Reco | \mathbf{RL} | |
| | Flag | | | | | mg/Kg | 1 | Lin | RL 50.0 | |
| | 9589 - Al Midland Chloride 104453 88453 9589 - Al Midland TPH DR 104631 | 9589 - AH-2 5-5. Midland Chloride (Titratic 104453 88453 9589 - AH-2 5-5. Midland TPH DRO - NEW 104631 | 9589 - AH-2 5-5.5' Midland Chloride (Titration) 104453 88453 Flag 9589 - AH-2 5-5.5' Midland TPH DRO - NEW 104631 | 9589 - AH-2 5-5.5' Midland Chloride (Titration) Anal; 104453 Date 88453 Samp Flag Cert 9589 - AH-2 5-5.5' Midland TPH DRO - NEW Anal; 104631 Date | 9589 - AH-2 5-5.5' Midland Chloride (Titration) Analytical Method 104453 Date Analyzed: 88453 Sample Preparation Flag Cert Reg 9589 - AH-2 5-5.5' Midland TPH DRO - NEW Analytical Method 104631 Date Analyzed: 88645 Sample Preparation | 9589 - AH-2 5-5.5' Midland Chloride (Titration) Analytical Method: SM 45 104453 Date Analyzed: 2013-0 88453 Sample Preparation: 2013-0 RL Flag Cert Result 212 9589 - AH-2 5-5.5' Midland TPH DRO - NEW Analytical Method: S 801 104631 Date Analyzed: 2013- 88645 Sample Preparation: 2013- | 9589 - AH-2 5-5.5' Midland Chloride (Titration)Analytical Method: Date Analyzed: 2013-08-27 Sample Preparation: 2013-08-26RL FlagCert ResultImage: PlagCert ResultPose - AH-2 5-5.5'Midland TPH DRO - NEW 104631Analytical Method: Date Analyzed: 2013-08-26Sample Preparation: 212Cert ResultSample Preparation: 212Sample Preparation: 212Sample Preparation: 212Sample Preparation: 212Sample Preparation: 2013-08-30 | 9589 - AH-2 5-5.5' Midland Chloride (Titration) Analytical Method: SM 4500-Cl B Prep M 104453 Date Analyzed: 2013-08-27 Analyz 88453 Sample Preparation: 2013-08-26 Preparation: RL RL Inits Dilution 212 mg/Kg 5 9589 - AH-2 5-5.5' Midland Prep M TPH DRO - NEW Analytical Method: S 8015 D Prep M 104631 Date Analyzed: 2013-09-03 Analyzed: 88645 Sample Preparation: 2013-08-30 Preparation | 9589 - AH-2 5-5.5' Midland Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: 104453 Date Analyzed: 2013-08-27 Analyzed By: 88453 Sample Preparation: 2013-08-26 Prepared By: RL Flag Cert Result Units Dilution 212 mg/Kg 5 9589 - AH-2 5-5.5' Midland TPH DRO - NEW Analytical Method: S 8015 D Prep Method: 104631 Date Analyzed: 2013-09-03 Analyzed By: | |

| Analysis: TPH GRO QC Batch: 104535 Prep Batch: 88572 | | Dat | te Analy | Method: yzed: eparation: | S 8015 I 2013-08- 2013-08- | 29 | | Prep Methoc Analyzed By Prepared By | : KC |
|--|-------------------|------|----------|--------------------------------|----------------------------------|----------|-----------------|---|--------------------|
| | | | | | \mathbf{RL} | | | | |
| Parameter | Flag | (| Cert | Re | sult | Units | | Dilution | \mathbf{RL} |
| GRO | Qs | | 1 | 6 | 530 | mg/Kg | | 50 | 4.00 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| Trifluorotoluene (TFT) | 10 _{Qsr} | Qsr | | 1.01 | mg/Kg | 50 | 100 | 1 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | Qsr | Qsr | | 31.5 | mg/Kg | 50 | 100 | 32 | 70 - 130 |

| Report Date 112MC05595 | eport Date: September 3, 2013 12MC05595 | | | | | Vork Order COG/Weei | | | | Page Number: 16 of 39 Eddy Co., NM | | |
|--|---|----------|--------|-------------------|-------------|--------------------------------|------------------------------|----------------------|-----------------|---------------------------------------|----------------------|--------------------------|
| Sample: 33 | 9590 - A | H-2 6-6 | .5' | | | | | | | | | |
| Laboratory: | Midland | | | | | | | | | | | |
| Analysis: | Chloride | (Titrati | on) | | | tical Metho | | 4500-Cl B | | Prep M | | N/A |
| QC Batch: | 104454 | | | | | Analyzed: | | 3-08-27 | | Analyze | | AR AR |
| Prep Batch: | 88453 | | | | Sample | e Preparat | 011: 201 | 3-08-26 | | Prepare | id Dy: | AU. |
| | | | | | | | RL | | | | | |
| Parameter | | | Flag | (| Cert | | sult | Units | | Dilution | | RL |
| Chloride | | | | 98.7 mg/Kg | | | | | | 5 | | 4.00 |
| Sample: 33 | | | .5' | | | · | | | | | | |
| Laboratory: | Midland | | | | A 1 | | 1 (1) | | | D 14 | | NT / A |
| Analysis: | TPH DF | (O - NE | W | | | tical Meth | | 8015 D | | Prep M | | N/A |
| QC Batch: Prep Batch: | 104631 | | | | | Analyzed: le Prepara | | 13-09-03 13-08-30 | | Analyze Prepare | | CW CW |
| r rep batch: | 88645 | | | | Samp | ne riepara | 51011. ZU | 19-00-90 | | riepare | а by. | C W |
| | | | | | | | \mathbf{RL} | | | | | |
| Parameter | | | Flag | (| Cert | | sult | Units | | Dilution | | RL |
| DRO | | | Je | | 1 | 12 | 200 | mg/Kg | | 1 | | 50.0 |
| | | | | | | | | Spik | æ | Percent | Reco | very |
| Surrogate | | Flag | Cert | Rest | lt | Units | Dilutio | | | Recovery | Lin | • |
| n-Tricosane | Qsr | Qsr | | 4 | 36 | mg/Kg | 1 | 100 |) | 486 | 76.3 - | 192.6 |
| Sample: 33 Laboratory: Analysis: QC Batch: Prep Batch: | 9590 - A Midland TPH GF 104535 88572 | | 5.5' | Dat | e Anal | Method: yzed: eparation: | S 8015 2013-08 2013-08 | -29 | | Prep Met Analyzed Prepared | By: F | 5035 CC C |
| D | | | - | | ч , | D | RL | TT ** | | | | DI |
| Parameter GRO | | | Flag | (| <u>Cert</u> | | sult 300 | Units mg/Kg | | Dilution 50 | | $\frac{\text{RL}}{4.00}$ |
| J11() | | · · · · | Je,Qs | | 1 | 10. | | ing/itg | | | | 4.00 |
| Surrogate | | | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent t Recovery | | overy mits |
| Trifluorotolue | ene (TFT |) | II Qar | Qsr | | 0.911 | mg/Kg | 50 | 100 | 1 | 70 | - 130 |
| 4-Bromofluor | | | | | | | mg/Kg | | | | | |

١

| Report Date: September 3, 112MC05595 | 2013 | | ork Order: 130822 OG/Weems #1 T | Page Number: 17 of 39 Eddy Co., NM | | |
|---|------|---------------|------------------------------------|---------------------------------------|--------------|---------------------|
| Sample: 339591 - AH-3 | 0-1' | | | | | |
| Laboratory: Midland | | | | | | |
| Analysis: BTEX | | Analytical Me | ethod: S 8021B | 3 | Prep Method: | S 5035 |
| QC Batch: 104527 | | Date Analyze | d: 2013-08 | -29 | Analyzed By: | KC |
| Prep Batch: 88565 | | Sample Prepa | ration: 2013-08 | -28 | Prepared By: | \mathbf{KC} |
| | | | \mathbf{RL} | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Benzene | υ | 1 | < 0.400 | mg/Kg | 20 | 0.0200 |
| Toluene | U | 1 | < 0.400 | mg/Kg | 20 | 0.0200 |

| Toluene | U | | 1 | <(|).400 | mg/Kg | | 20 | 0.0200 |
|------------------------|-------------------|------|-----------------------|--------|-------|----------|--------|----------|----------|
| Ethylbenzene | | | 1 | | 8.69 | mg/Kg | | 20 | 0.0200 |
| Xylene | | | 1 | | 24.2 | mg/Kg | | 20 | 0.0200 |
| | | | | | | | Spike | Percent | Recovery |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Triffuorotoluene (TFT) | 12 _{Qsr} | Qsr | | 2.33 | mg/Kg | 20 | 40.0 | 6 | 70 - 130 |

27.5

mg/Kg

20

40.0

69

70 - 130

Qsr

QFT

Sample: 339591 - AH-3 0-1'

4-Bromofluorobenzene (4-BFB)

| Laboratory: Analysis: QC Batch: Prep Batch: | Midland Chloride (Titration) 104454 88453 | Date A | ical Method: .nalyzed: e Preparation: | SM 4500-Cl B 2013-08-27 2013-08-26 | Prep Method: Analyzed By: Prepared By: | ÁR |
|--|--|--------|---|--|--|---------------------|
| | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | U | | <20.0 | mg/Kg | 5 | 4.00 |

Sample: 339591 - AH-3 0-1'

| Laboratory: Analysis: QC Batch: Prep Batch: | alysis: TPH DRO - N Batch: 104431 | | Da | alytical Me te Analyzec nple Prepa | l: 20 | 8015 D 13-08-27 13-08-26 | Analyz | 1ethod: N/A aed By: CW ed By: CW |
|--|--------------------------------------|-------|--------|--|----------|--------------------------------|---------------------|--|
| Deserveter | | El- a | Cont | r | RL | TT :/ | | DI |
| Parameter | | Flag | Cert | I1 | lesult | Units | Dilution | RL |
| DRO | | | 1 | | 412 | mg/Kg | 1 | 50.0 |
| Surrogate | Flag | Cert | Result | Units | Dilution | Spike n Amount | Percent Recovery | Recovery Limits |
| n-Tricosane | | | 110 | mg/Kg | 1 | 100 | 110 | 76.3 - 192.6 |

| Report Date: September 3, 201 112MC05595 | Work Order: 13082238 COG/Weems #1 TB | | | | | Page Number: 18 of 39 Eddy Co., NM | | | |
|---|---|------|-----------------------|--------------------------------|----------------------------------|---------------------------------------|--------|---|----------|
| Sample: 339591 - AH-3 0-1' | | | | | | | | | |
| Laboratory:MidlandAnalysis:TPH GROQC Batch:104535Prep Batch:88572 | | Dat | te Analy | Method: yzed: eparation: | S 8015 I 2013-08- 2013-08- | -29 | | Prep Metho Analyzed B Prepared By | y: KC |
| | | | | | RL | | | | |
| Parameter | Flag | (| Cert | Re | sult | Units | | Dilution | RL |
| GRO | QF | | 1 | 3 | 130 | mg/Kg | | 20 | 4.00 |
| Commente | | Elem | Cunt | David | | Dilution | Spike | Percent | Recovery |
| Surrogate | 13 | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits |
| Trifluorotoluene (TFT) | | Qsr | | 1.66 | mg/Kg | 20 | 40.0 | 4 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | Qsr | QHF | | 25.0 | mg/Kg | 20 | 40.0 | 62 | 70 - 130 |

Sample: 339592 - AH-3 1-1.5'

| • | | | | | | |
|--|--|--|--------------|--|--|-------|
| Laboratory: Analysis: QC Batch: Prep Batch: | Midland Chloride (Titration) 104454 88453 | Analytical 1 Date Analy Sample Pre | | SM 4500-Cl B 2013-08-27 2013-08-26 | Prep Method: Analyzed By: Prepared By: | ÁR. |
| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
| 1 arameter | 1 lag | Cat | nesuit | Omes | Dittion | 11,12 |
| Chloride | | | 24.7 | mg/Kg | 5 | 4.00 |

Sample: 339592 - AH-3 1-1.5'

| Laboratory: Analysis: QC Batch: Prep Batch: | Midland TPH DRO - NH 104635 88651 | EW | Da | alytical Me te Analyzec nple Prepar | l: 2013- | 15 D -08-30 -08-30 | • | fethod: N/A zed By: CW ed By: CW |
|--|--|------|--------|---|---------------|--------------------------|---------------------|--|
| | | | | | \mathbf{RL} | | | |
| Parameter | | Flag | Cert | R | lesult | Units | Dilution | RL |
| DRO | | Jh | l | < | <50.0 | mg/Kg | 1 | 50.0 |
| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| n-Tricosane | | | 115 | mg/Kg | 1 | 100 | 115 | 76.3 - 192.6 |

| Report Date: September 3, 2013 112MC05595 | | | Work Order: 13082238 COG/Weems #1 TB | | | | | | Page Number: 19 of 39 Eddy Co., NM | |
|---|------|------|---|-----------------------------------|---------------------|----------|--------|--|---------------------------------------|--|
| Sample: 339592 - AH-3 1-1. | 5' | | | | | | | | | |
| Laboratory:MidlandAnalysis:TPH GROQC Batch:104535Prep Batch:88572 | | | Date An | al Metho alyzed: Preparatio | 2013-0 | 8-29 | | Prep Metho Analyzed B Prepared B | y: KC | |
| | | | | | RL | | | | | |
| Parameter | Flag | | Cert | | Result | Unit | ts | Dilution | RL | |
| GRO | Qs | | 1 | | 24.7 | mg/K | g | 1 | 4.00 | |
| | | | | | | | 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) | | | | 1.81 | mg/Kg | 1 | 2.00 | 90 | 70 - 130 | |

Sample: 339593 - AH-3 2-2.5'

| Chloride | | | 59.2 | mg/Kg | 5 | 4.00 |
|-------------|----------------------|----------|--------------|--------------|--------------|---------------|
| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
| Prep Batch: | 88453 | Sample I | Preparation: | 2013-08-26 | Prepared By: | AR |
| QC Batch: | 104454 | Date An | alyzed: | 2013-08-27 | Analyzed By: | \mathbf{AR} |
| Analysis: | Chloride (Titration) | Analytic | al Method: | SM 4500-Cl B | Prep Method: | N/A |
| Laboratory: | Midland | | | | | |

Sample: 339594 - AH-3 3-3.5'

| • | | | | | | |
|-------------|-----------------------|----------------|---------------------|--------------|--------------|---------------------|
| Laboratory: | Midland | | | | | |
| Analysis: | Chloride (Titration) | Analytic | al Method: | SM 4500-Cl B | Prep Method: | N/A |
| QC Batch: | 104454 | Date Analyzed: | | 2013-08-27 | Analyzed By: | AR |
| Prep Batch: | 88453 | v | | 2013-08-26 | Prepared By: | AR, |
| | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 187 | mg/Kg | 5 | 4.00 |

| 112MC0559 | : September 3, 2013 5 | | k Order: 13 G/Weems # | | Page Number: 20 of 39 Eddy Co., NM | | |
|---|---|-----------|------------------------------------|----------------------------|---------------------------------------|-----------|--|
| Sample: 33 | 9595 - AH-3 4-4.5' | | | | | | |
| Laboratory: | Midland | | | | | | |
| Analysis: | Chloride (Titration) | •• | l Method: | SM 4500-Cl B | Prep Method: | N/A | |
| QC Batch: | 104454 | v | | 2013-08-27 | Analyzed By: | AR. | |
| Prep Batch: | 88453 | Sample P | reparation: | 2013-08-26 | Prepared By: | AR | |
| | | | RL | | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL | |
| | | 197 | | nur/Ka | 5 | 4.00 | |
| Chloride | | | 197 | mg/Kg | J | 4.00 | |
| Sample: 33 | 9596 - AH-3 5-5.5' Midlaud | | 197_ | nig/ Kg | | 4.00 | |
| Sample: 33 | Midland | Analytica | | | | | |
| | | •/ | l Method: | SM 4500-Cl B 2013-08-27 | Prep Method: | N/A AR | |
| Sample: 33 Laboratory: Analysis: QC Batch: | Midland Chloride (Titration) | Date Ana | l Method: | SM 4500-Cl B | | N/A | |
| Sample: 33 Laboratory: Analysis: | Midland Chloride (Titration) 104454 | Date Ana | l Method: lyzed: | SM 4500-Cl B 2013-08-27 | Prep Method: Analyzed By: | N/A AR | |
| Sample: 33 Laboratory: Analysis: QC Batch: | Midland Chloride (Titration) 104454 | Date Ana | l Method: lyzed: reparation: | SM 4500-Cl B 2013-08-27 | Prep Method: Analyzed By: | N/A AR | |

Sample: 339597 - AH-3 6-6.5'

| Laboratory: Analysis: QC Batch: Prep Batch: | Midland Chloride (Titration) 104454 88453 | Date An | al Method: alyzed: Preparation: | SM 4500-Cl B 2013-08-27 2013-08-26 | Prep Method: Analyzed By: Prepared By: | AR |
|--|--|-----------------------|---------------------------------------|--|--|------|
| ~ | | | RL | | | |
| Parameter | Flag | Cert | Result | Units | Dilution | RL |
| Chloride | | | 143 | mg/Kg | 5 | 4.00 |

Report Date: September 3, 2013 112MC05595 Work Order: 13082238 COG/Weems #1 TB

Method Blanks

| n-Tricosane | | | | 102 | mg/Kg | 1 | 100 | 102 | 64.1 - 164.4 |
|--------------------------|-------------------|------|------------|--------|--------------------------|--------------------------|-----------------|---------------------|--------------------------|
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| DRO | | | | | 1 | | 14.1 | mg/Kg | 50 |
| Parameter | | | Fl | ag | Cert | | MDL Result | Units | RL |
| QC Batch: Prep Batch: | $104431 \\ 88492$ | | | | Analyzed: reparation: | 2013-08-27 2013-08-26 | | - | zed By: CW red By: CW |
| Method Bl | ank (1) | QC I | Batch: 104 | 431 | | | | | |

| Method Blank | (1) | QC Batch: 104452 |
|--------------|-----|------------------|
|--------------|-----|------------------|

| QC Batch: Prep Batch: | | Date Analyzed: QC Preparation: | | Analyzed By: Prepared By: | |
|--------------------------|-----------------|-----------------------------------|--------|------------------------------|---------------------|
| | | | MDL | | |
| Parameter | \mathbf{Flag} | Cert | Result | Units | RL |
| Chloride | | | <3.85 | mg/Kg | 4 |

Method Blank (1) QC Batch: 104453

| QC Batch: Prep Batch: | | Date Analyzed: QC Preparation: | | Analyzed By: Prepared By: | |
|--------------------------|------|-----------------------------------|--------|------------------------------|---------------|
| | | | MDL | | |
| Parameter | Flag | Cert | Result | Units | \mathbf{RL} |
| Chloride | | | <3.85 | mg/Kg | 4 |

| Report Date: Septembe 112MC05595 | r 3, 2013 | | | ler: 13082 eems #1 7 | | | Page Numb Ede | er: 22 of 39 dy Co., NM |
|--|------------------|--------------|-------------------------------|-------------------------|---|-------|--|--|
| Method Blank (1) | QC Batch: 104454 | 1 | | | | | | |
| QC Batch: 104454 | | | Analyzed: | 2013-08- | | | Analyzed | |
| Prep Batch: 88453 | | QC P | reparation: | 2013-08- | 26 | | Prepared | l By: AR |
| | | | | | MDL | | | |
| Parameter | Flag | | Cert | | Result | | Units | RL |
| Chloride | | | | | <3.85 | | mg/Kg | 4 |
| Method Blank (1) | QC Batch: 10452' | 7 | | , | | | | |
| | | | | | | | | |
| | | | Analwody | 2012 00 | 20 | | Analway | |
| QC Batch: 104527 Prep Batch: 88565 | ţ. | Date | Analyzed: reparation: | 2013-08- 2013-08- | | | Analyzed Prepared | |
| QC Batch: 104527 | | Date | • | | 28 | | | |
| QC Batch: 104527 | | Date QC P | reparation: | | | | Prepared | By: AK |
| QC Batch: 104527 Prep Batch: 88565 | Fla | Date QC P | • | | 28 MDL | | Prepared Units | |
| QC Batch: 104527 Prep Batch: 88565 Parameter | | Date QC P | reparation: Cert | | 28 MDL Result | | Prepared Units mg/Kg | l By: AK RL |
| QC Batch: 104527 Prep Batch: 88565 Parameter Benzene | | Date QC P | Preparation: Cert | | 28 MDL Result <0.00810 | | Prepared Units mg/Kg mg/Kg | By: AK RL 0.02 |
| QC Batch: 104527 Prep Batch: 88565 Parameter Benzene Toluene | | Date QC P | reparation: Cert 1 | | 28 MDL Result <0.00810 <0.00750 | | Prepared Units mg/Kg | By: AK RL 0.02 0.02 |
| QC Batch: 104527 Prep Batch: 88565 Parameter Benzene Toluene Ethylbenzene | | Date QC P | reparation: Cert | | 28 MDL Result <0.00810 <0.00750 <0.00730 | | Prepared Units mg/Kg mg/Kg mg/Kg | By: AK RL 0.02 0.02 0.02 |
| QC Batch: 104527 Prep Batch: 88565 Parameter Benzene Toluene Ethylbenzene | | Date QC P | reparation: Cert | | 28 MDL Result <0.00810 <0.00750 <0.00730 | | Prepared Units mg/Kg mg/Kg mg/Kg mg/Kg | RL 0.02 0.02 0.02 0.02 0.02 |
| QC Batch: 104527 Prep Batch: 88565 Parameter Benzene Toluene Ethylbenzene Xylene | Fla | Date QC P | Cert 1 1 1 1 1 | 2013-08- | 28 MDL Result <0.00810 <0.00750 <0.00730 <0.00700 | Spike | Prepared Units mg/Kg mg/Kg mg/Kg mg/Kg Percent | By: AK RL 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 |

Method Blank (1) QC Batch: 104535

| QC Batch: 104535 Prep Batch: 88572 | | | analyzed: eparation: | 2013-08-2 2013-08-2 | | | •/ | l By: KC By: AK |
|---------------------------------------|-------|------|-------------------------|------------------------|----------|-----------------|---------------------|--------------------|
| Parameter | Elect | | Cant | | MDL | | T | DI |
| | Flag | | Cert | | Result | | Units | RL |
| GRO | | | 1 | | <2.32 | | mg/Kg | 4 |
| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| Trifluorotoluene (TFT) | | | 1.51 | mg/Kg | 1 | 2.00 | 76 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | | | 1.65 | mg/Kg | 1 | 2.00 | 82 | 70 - 130 |

| Report Date: Septem 112MC05595 | ber 3, 20 | 013 | | | der: 13082238 7eems #1 TB | | Page Number: 23 of Eddy Co., N | | |
|-----------------------------------|-----------|------------|--------|-------------|------------------------------|--------|--------------------------------|--------------|--|
| Method Blank (1) | QC | Batch: 104 | 4631 | | | | | | |
| QC Batch: 104631 | | | Date . | Analyzed: | 2013-09-03 | | Analy | zed By: CW | |
| Prep Batch: 88645 | | | QC P | reparation: | 2013-08-30 | | Prepa | red By: CW | |
| | | | | | | MDL | | | |
| Parameter | | F | lag | Cert | | Result | Units | RL | |
| DRO | | | | 1 | | 16.6 | mg/Kg | 50 | |
| | | | | | | Spike | Percent | Recovery | |
| Surrogate | Flag | Cert | Result | Units | Dilution | Amount | Recovery | Limits | |
| n-Tricosane | | | 94.2 | mg/Kg | 1 | 100 | 94 | 64.1 - 164.4 | |

| Method Bla | ank (1) | QC I | Batch: 104 | 635 | | | | | |
|--------------------------|------------------------|------|------------|--------|-----------------------------|--------------------------|-----------------|---------------------|--------------------------|
| QC Batch: Prep Batch: | $\frac{104635}{88651}$ | | | | e Analyzed: Preparation: | 2013-08-30 2013-08-30 | | v | zed By: CW red By: CW |
| Parameter | | | Fl | ıg | Cert | | MDL Result | Units | \mathbf{RL} |
| DRO | | | | | 1 | | 10.8 | mg/Kg | 50 |
| Surrogate | | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
| n-Tricosane | | | | 106 | mg/Kg | 1 | 100 | 106 | 64.1 - 164.4 |

Report Date: September 3, 2013 112MC05595 Work Order: 13082238 COG/Weems #1 TB Page Number: 24 of 39 Eddy Co., NM

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

| QC Batch: 104431 Prep Batch: 88492 | | Date An QC Prei | • | 13-08-27 13-08-26 | | | | zed By: red By: | CW CW |
|--|-------------|--------------------|---------------------------|----------------------|-----------------|------------------|---------------|--------------------|--------------|
| | _ | LCS | | | Spike | Matri | | | Rec. |
| Param | F | C Resu | | Dil. | Amount | | | | Limit |
| DRO | | 1 258 | 0/0 | | 250 | 14.1 | 98 | 53. | 8 - 129 |
| Percent recovery is based on the | e spike res | ult. RPD is b | ased on the | spike and | spike dupli | icate result | | | |
| | | LCSD | | Spike | Matrix | | Rec. | | RPD |
| Param | FC | | nits Dil. | Amount | | Rec. | Limit | RPD | Limit |
| DRO | 1 | 273 m | g/Kg 1 | 250 | 14.1 | | 3.8 - 129 | 6 | 20 |
| Percent recovery is based on the | e spike res | | | spike and | | | | | |
| U. | - | | | • | • | | | | |
| C | LCS | LCSD | Their | וית | Spike | LCS | LCSD | | lec. |
| Surrogate | Result | Result | Units | | Amount | Rec. | Rec. | | imit |
| n-Tricosane | 96.4 | 98.4 | mg/Kg | 1 | 100 | 96 | 98 | 61.3 | - 170.4 |
| Laboratory Control Spike (QC Batch: 104452 | LCS-1) | Date An | alyzed: 20 | 13-08-27 | | | Analy | zed By | : AR |
| Prep Batch: 88453 | | QC Prep | paration: 20 | 13-08-26 | | | Prepa | red By | AR |
| Param | · | LCS C Result | t Units | Dil. | Spike Amount | Matrix Result | Rec. | | lec. imit |
| Chloride | | 2360 | mg/Kg | 1 | 2500 | <3.85 | 94 | | - 115.9 |
| Percent recovery is based on the | e spike res | | | | | | | 00.1 | |
| | | LCSD | | Spike | Matrix | | Rec. | | RPD |
| Param | FC | | nits Dil. | Amount | | | Rec. Limit | RPD | Limit |
| Chloride | <u> </u> | | $\frac{103}{\text{Kg}}$ 1 | $\frac{10000}{2500}$ | | | 7 - 115.9 | $\frac{11D}{7}$ | 20 |
| | | | 10 - | 2000 | ~0.00 | | 110.0 | | |

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

| Report Date: September 3, 201- 112MC05595 | 3 | | | | | 13082238 as #1 TB | 3 | | Page Nu | mber: 2 Eddy C | |
|--|--------|-------|------------------------|-----------------------|-------------------------|-------------------------|---------------------------|---------------------------|-----------------------------|---------------------|-------------------------------|
| Laboratory Control Spike (l | CCS-: | 1) | | | | | | | | | |
| QC Batch: 104453 Prep Batch: 88453 | | | | te Analy: Prepara | | 013-08-27 013-08-26 | | | | zed By wed By: | |
| Param Chloride | | F | C | LCS Result 2360 | Units mg/Kg | Dil. | Spike Amount 2500 | Matrix Result <3.85 | t Rec. | L | Rec. imit - 115.9 |
| Percent recovery is based on the | spike | e res | ult. RPI |) is based | l on the | spike and | spike dupl | licate resu | lt. | | |
| Param Chloride | F | С | LCSD Result 2460 | Units mg/Kg | Dil. | Spike Amount 2500 | Matrix Result <3.85 | Rec. 98 89 | Rec. Limit .7 - 115.9 | RPD 4 | RPD Limit 20 |
| Percent recovery is based on the | spike | e res | ult. RPI |) is based | l on the | spike and | spike dupl | licate resu | lt. | | |
| Laboratory Control Spike (I QC Batch: 104454 Prep Batch: 88453 | LCS-1 | 1) | | te Analyz Prepara | | 013-08-27 013-08-26 | | | | vzed By wred By: | |
| Param | | F | CJ | LCS | Units | וית | Spike | Matriz | | | lec. imit |
| Chloride | | г | <u> </u> | Result 2570 | mg/Kg | 1 | Amount 2500 | Result <3.85 | | | - 115.9 |
| Percent recovery is based on the | spike | res | ult. RPI | | | spike and | | | | | |
| Param | F | С | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
| Chloride Rement recovery is based on the | anileo | | 2460 | mg/Kg | | 2500 | <3.85 | | .7 - 115.9 | 4 | 20 |
| Percent recovery is based on the | spike | resi | lit. KPI | J IS DASEC | i on the | spike and | spike aupi | icate resu | 15. | | |
| Laboratory Control Spike (I | CS-1 | l) | | | · | | | | | | |
| QC Batch: 104527 Prep Batch: 88565 | | | | te Analyz Prepara | |)13-08-29)13-08-28 | | | | zed By: .red By: | |
| Param | | F | С | LCS Result | Units | Dil. | Spike Amount | Mat Res | | ec. | Rec. Limit |
| Benzene Toluene Ethylbenzene | | | 1 | 2.06 2.06 1.96 | mg/Kg mg/Kg mg/Kg | 1 | $2.00 \\ 2.00 \\ 2.00$ | <0.00 <0.00 <0.00 |)750 10 |)3 7 | 0 - 130 0 - 130 0 - 130 |
| antinued | | | | 2.00 | | ± | 2.00 | | | <u> </u> | ., <u>100</u> |

continued ...

| Report Date: September 3, 2013 | Work Order: 13082238 | Page Number: 26 of 39 |
|--------------------------------|----------------------|-----------------------|
| 112MC05595 | COG/Weems #1 TB | Eddy Co., NM |
| control soluce continued | | |

control spikes continued ... LCS

| Param | \mathbf{F} | С | Result | Units | Dil. | Amount | Result | Rec. | Limit |
|------------------------------|------------------|--------|-------------------------|--------------|---------|-------------------------|-------------------------|------|------------------------|
| Xylene | | I | 5.96 | mg/Kg | 1 | 6.00 | < 0.00700 | 99 | 70 - 130 |
| Percent recovery is based of | on the spike res | ult. R | PD is base | ed on the sp | ike and | spike duplica | ate result. | | |
| | | TO | מי | | Colleg | Motnin | Day | | מממ |

Spike

Matrix

Rec.

| | | | LCSD | | | Spike | Matrix | | Rec. | | RPD |
|--------------|---|---|--------|------------------|------|-------------------------|-------------------|------|------------------------|--------|------------------------|
| Param | F | С | Result | Units | Dil. | Amount | \mathbf{Result} | Rec. | Limit | RPD | Limit |
| Benzene | | 1 | 2.09 | mg/Kg | 1 | 2.00 | < 0.00810 | 104 | 70 - 130 | 1 | 20 |
| Toluene | | ı | 2.06 | mg/Kg | 1 | 2.00 | < 0.00750 | 103 | 70 - 130 | 0 | 20 |
| Ethylbenzene | | 1 | 1.99 | $\mathrm{mg/Kg}$ | 1 | 2.00 | < 0.00730 | 100 | 70 - 130 | 2 | 20 |
| Xylene | | 1 | 5.96 | mg/Kg | 1 | 6.00 | < 0.00700 | 99 | 70 - 130 | 0 | 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. | Limit |
| Trifluorotoluene (TFT) | 2.06 | 2.08 | mg/Kg | 1 | 2.00 | 103 | 104 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 2.08 | 2.10 | mg/Kg | 1 | 2.00 | 104 | 105 | 70 - 130 |

Laboratory Control Spike (LCS-1)

4-Bromofluorobenzene (4-BFB)

| QC Batch: Prep Batch: | 104535 88572 | | | | e Analyz Preparat | | 13-08-29 13-08-28 | | | | Analyzed E Prepared B | 0 |
|--------------------------|------------------------|------|------|---------------------------------|---------------------------|-----------------|------------------------------|-----------------------------------|-------------------------|----------------------|--------------------------|---------------|
| Param | | | F | С | LCS Result | Units | Dil. | Spike Amou | | latrix Result | Rec. | Rec. Limit |
| GRO | | | | 3 | 16.0 | mg/Kg | ; 1 | 20.0 | < | <2.32 | 80 | 70 - 130 |
| Percent recov | very is based on the s | pike | resu | lt. RPD | is based | on the s | pike and s | pike dupl | icate re | sult. | | |
| | | | | LCSD | | | Spike | Matrix | 2 | \mathbf{Re} | ec. | RPD |
| Param | | F | С | LCSD Result | Units | Dil. | Spike Amount | | | Re Lin | | |
| Param GRO | | F | C | | Units mg/K | | | | Rec. | | nit RPD | |
| GRO | very is based on the s | | 1 | Result 15.3 | mg/K | g 1 | Amount 20.0 | Result <2.32 | Rec. 76 | Lin 70 - | nit RPD | Limit |
| GRO | very is based on the s | | 1 | Result 15.3 | mg/K is based | g 1 | Amount 20.0 | Result <2.32 pike dupl | Rec. 76 | Lin 70 - | nit RPD | Limit |
| GRO | very is based on the s | | 1 | Result 15.3 lt. RPD L0 | mg/K is based CS LO | g 1 on the s | Amount 20.0 pike and s | Result <2.32 pike dupl S | Rec. 76 icate res | Lin 70 - sult. | nit RPD 130 4 | Limit 20 |

1.85

mg/Kg

1

2.00

98

92

70 - 130

1.96

| Report Date: September 3, 2 112MC05595 | 013 | | | | | 13082238 is #1 TB | | | P | 4.1. | mber: 2 Eddy C | 27 01 05 20., NM |
|--|------------------------------------|--|--|---|---|--|---|---|---|--|--|---|
| Laboratory Control Spike | (LCS-1 | L) | | | | | | | | | | |
| QC Batch: 104631 Prep Batch: 88645 | | | | e Analyze Preparat | | 13-09-03 13-08-30 | | | | | zed By: red By: | CW CW |
| 2 | | - | a | LCS | TT T . | | Spike | | atrix | T | | Rec. |
| Param | | F | | Result | Units | Dil. | Amount | | sult | Rec. | | Limit |
| DRO | | | 1 | 291 | mg/Kg | | 250 | | 6.6 | 110 | 53. | 8 - 129 |
| Percent recovery is based on t | the spike | rest | ılt. RPI |) is based | on the | spike and | spike dupli | cate res | sult. | | | |
| | | | LCSD | | | Spike | Matrix | | \mathbf{R} | ec. | | RPD |
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Amount | Result | Rec. | Li | mit | RPD | Limit |
| DRO | | 1 | 286 | mg/Kg | 1 | 250 | 16.6 | 108 | 53.8 | - 129 | 2 | 20 |
| Percent recovery is based on t | the spike | rest | ılt. RPI |) is based | on the | spike and | spike dupli | cate res | sult. | | | |
| | LC | Q | LCSI |) | | | Spike | LCS | т | CSD | n | Rec. |
| | | | | | | | opice | | | | | |
| Surrogate | | | | | its | Dil | Amount | Rec | 1 | Rec | 1.3 | imit |
| Surrogate n-Tricosane | Rest 96. | ılt | Resul 98.9 | t Ur | iits /Kg | Dil. 1 | Amount 100 | <u>Rec.</u> 96 | | Rec. ⁻ 99 | | imit - 170.4 |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 | Rest 96. | 1lt4 | Resul 98.9 Dat | t Ur mg, | /Kg d: 20 | 1 13-08-30 | | | | 99 Analyz | 61.3 zed By: | - 170.4 |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 | Rest 96. | 1lt4 | Resul 98.9 Dat | t Ur mg, e Analyze Preparati | /Kg d: 20 | 1 | 100 | 96 | | 99 Analyz | 61.3 zed By: red By: | - 170.4 CW CW |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 | Rest 96. (LCS-1 | 11t 4 | Resul 98.9 Dat QC | t Ur mg, e Analyze Preparati LCS | /Kg d: 20 on: 20 | 1 13-08-30 13-08-30 | 100 Spike | 96 Ма | utrix | 99 Analyz Prepar | 61.3 zed By: red By: | - 170.4 CW CW Rec. |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param | Rest 96. (LCS-1 | 1lt4 | Resul 98.9 Dat QC | t Ur mg, e Analyze Preparati LCS Result | /Kg d: 20 on: 20 Units | 1 13-08-30 13-08-30 Dil. | 100 Spike Amount | 96 Ma Re | utrix sult | 99 Analyz Prepar Rec. | 61.3 zed By: red By: | - 170.4 CW CW Rec. |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO | Rest 96. (LCS-1 | <u>llt</u> 4 | Resul 98.9 Dat QC | t Ur mg, e Analyze Preparati LCS Result 271 | /Kg d: 20 on: 20 Units mg/Kg | 1 13-08-30 13-08-30 Dil. 1 | 100 Spike Amount 250 | 96 Ma Re 10 | ttrix sult 0.8 | 99 Analyz Prepar | 61.3 zed By: red By: | - 170.4 CW CW Rec. |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO | Rest 96. (LCS-1 | <u>llt</u> 4 | Resul 98.9 Dat QC | t Ur mg, e Analyze Preparati LCS Result 271 | /Kg d: 20 on: 20 Units mg/Kg | 1 13-08-30 13-08-30 Dil. 1 | 100 Spike Amount 250 | 96 Ma Re 10 | ttrix sult 0.8 | 99 Analyz Prepar Rec. | 61.3 zed By: red By: | - 170.4 CW CW Rec. |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 | Rest 96. (LCS-1 | <u>llt</u> 4 | Resul 98.9 Dat QC | t Ur mg, e Analyze Preparati LCS Result 271 | /Kg d: 20 on: 20 Units mg/Kg | 1 13-08-30 13-08-30 Dil. 1 | 100 Spike Amount 250 | 96 Ma Re 10 | ttrix sult 0.8 sult. | 99 Analyz Prepar Rec. | 61.3 zed By: red By: | - 170.4 CW CW Rec. |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO | Rest 96. (LCS-1 | <u>llt</u> 4 | Resul 98.9 Dat QC <u>C</u> | t Ur mg, e Analyze Preparati LCS Result 271 | /Kg d: 20 on: 20 Units mg/Kg | 1 13-08-30 13-08-30 Dil. 1 spike and | 100 Spike Amount 250 spike duplic Matrix | 96 Ma Re 10 | ttrix sult).8 sult. R | 99 Analyz Prepar Rec. 104 | 61.3 zed By: red By: | - 170.4 CW CW Rec. jimit 8 - 129 |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO Percent recovery is based on t | Resu 96. (LCS-1 | Ilt 4 (1) F resu | Resul 98.9 Dat QC LCSD | t Ur mg, e Analyze Preparati LCS Result 271 is based | /Kg d: 20 on: 20 Units mg/Kg on the s Dil. | 1 13-08-30 13-08-30 Dil. 1 spike and Spike | 100 Spike Amount 250 spike duplic Matrix | 96 Ma Re 1(cate res | ttrix sult).8 sult. Ra Lii | 99 Analyz Prepar Rec. 104 ec. | 61.3 zed By: red By: I 53. | - 170.4 CW CW Rec. .imit 8 - 129 |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO Percent recovery is based on t Param DRO | Rest 96. (LCS-1 | Ilt 4 F resu C 1 | Resul 98.9 Dat QC LCSD Result 275 | t Ur mg, e Analyze Preparati LCS Result 271) is based Units mg/Kg | /Kg d: 20 on: 20 Units mg/Kg on the s Dil. 1 | 1 13-08-30 13-08-30 Dil. 1 spike and Spike Amount 250 | 100 Spike Amount 250 spike duplic Matrix Result 10.8 | 96 Ma Re 10 cate res Rec. 106 | utrix sult D.8 sult. Ra Lin 53.8 | 99 Analyz Prepar Rec. 104 ec. mit | 61.3 zed By: red By: I 53. RPD | - 170.4 CW CW Rec. jimit 8 - 129 RPD Limit |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO Percent recovery is based on t Param DRO | Rest 96. (LCS-1 the spike | Ilt 4< | Resul 98.9 Dat QC LCSD Result 275 lt. RPD | t Ur mg, e Analyze Preparati LCS Result 271 is based Units mg/Kg is based | /Kg d: 20 on: 20 Units mg/Kg on the s Dil. 1 | 1 13-08-30 13-08-30 Dil. 1 spike and Spike Amount 250 | 100 Spike Amount 250 spike duplic Matrix Result 10.8 spike duplic | 96 Ma Re 10 Cate res Rec. 106 Cate res | etrix sult).8 sult. Ra Lin 53.8 sult. | 99 Analyz Prepar Rec. 104 ec. mit - 129 | 61.3 zed By: red By: I 53. RPD 2 | - 170.4 CW CW Rec. .imit 8 - 129 Limit 20 |
| n-Tricosane Laboratory Control Spike QC Batch: 104635 Prep Batch: 88651 Param DRO Percent recovery is based on t Param | Rest 96. (LCS-1 | Ilt 4 | Resul 98.9 Dat QC LCSD Result 275 | t Ur mg, e Analyze Preparati LCS Result 271) is based Units mg/Kg) is based | /Kg d: 20 on: 20 Units mg/Kg on the s Dil. 1 on the s | 1 13-08-30 13-08-30 Dil. 1 spike and Spike Amount 250 spike and | 100 Spike Amount 250 spike duplic Matrix Result 10.8 | 96 Ma Re 10 cate res Rec. 106 | utrix sult D.8 sult. E3.8 sult. L | 99 Analyz Prepar Rec. 104 ec. mit | 61.3 zed By: red By: I 53. RPD 2 | - 170.4 CW CW Rec. jimit 8 - 129 RPD Limit |

Matrix Spike (MS-1) Spiked Sample: 339617

| QC Batch: | 104431 | Date Analyzed: | 2013-08-27 | Analyzed By: | CW |
|-------------|--------|-----------------|------------|--------------|----|
| Prep Batch: | 88492 | QC Preparation: | 2013-08-26 | Prepared By: | CW |

| 112MC05595 | | | | c Order: G/Weem | Page Number: 28 of 39 Eddy Co., NM | | | | | | |
|---|------------|-------------|---|----------------------------|---------------------------------------|---|---------------------------|------------|---|-------------------------|---------------------|
| Param | F | 7 | | MS Result | Units | Dil. | Spike Amount | Mat Res | | | Rec. – Jimit |
| DRO | . | | | 264 | mg/Kg | | 250 | 35 | | | - 168.5 |
| Percent recovery is based on the | snike r | resul | | | | | | | | 20 | - 100.0 |
| | opinio i | | | il: baboa | | - | | | | | DDD |
| Param | F | С | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
| DRO | ***** | <u> </u> | 259 | mg/Kg | | 250 | 35.7 | | 29 - 168.5 | 2 | 20 |
| Percent recovery is based on the | | | | | | | | | | | |
| · | MS | | MSD | | | 1 | | MS | MSD | Б | lec. |
| Surrogate | Resul | l+ | Resul | | nits | Dil. | Spike Amount | Rec. | Rec. | | imit |
| n-Tricosane | <u>101</u> | | 103 | | g/Kg | 1 | $\frac{100}{100}$ | 101 | 103 | | - 168.9 |
| | | | | | | | | | | | |
| Matrix Spike (MS-1) Spike QC Batch: 104452 Prep Batch: 88453 | | - | QC | e Analyze Preparat | | 13-08-27 13-08-26 | 0.1 | | Prepa | zed By: red By: | AR |
| Param | F | , | | MS lesult | Units | Dil. | Spike Amount | Mat Res | | | Rec. Jimit |
| Chloride | _ | | | 2510 | mg/Kg | 5 | 2500 | <19 | | | 9 - 121 |
| | spike r | esul | | | | | | | | | |
| Percent recovery is based on the | - P | | ι. KPD | is based | on the s | pike and a | spike dupik | cate resi | ult. | | |
| | _ | | MSD | | | Spike | Matrix | ate resi | Rec. | | RPD |
| Param | _ | | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | Limit |
| Param Chloride | F (| С | MSD Result 2400 | Units mg/Kg | Dil. | Spike Amount 2500 | Matrix Result <19.2 | Rec. 96 | Rec. Limit 78.9 - 121 | RPD 4 | |
| Param Chloride Percent recovery is based on the | F (| C | MSD Result 2400 t. RPD | Units mg/Kg | Dil. | Spike Amount 2500 | Matrix Result <19.2 | Rec. 96 | Rec. Limit 78.9 - 121 | | Limit |
| Param Chloride Percent recovery is based on the Matrix Spike (MS-1) Spike QC Batch: 104453 | F (| C | MSD Result 2400 t. RPD 339589 Date | Units mg/Kg | Dil. 5 on the s ed: 20 | Spike Amount 2500 | Matrix Result <19.2 | Rec. 96 | Rec. Limit 78.9 - 121 alt. Analy | | Limit 20 AR |
| QC Batch: 104453 | F (| C result | MSD Result 2400 t. RPD 339589 Date QC | Units mg/Kg is based | Dil. 5 on the s ed: 20 | Spike Amount 2500 pike and s 13-08-27 | Matrix Result <19.2 | Rec. 96 | Rec. Limit 78.9 - 121 alt. Analy Prepa | 4 zed By: red By: | Limit 20 AR |

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

,

| Report Date: September 3, 2013 112MC05595 | 2013 Work Order: 13082238 Page Number: 29 of 39 COG/Weems #1 TB Eddy Co., NM | | | | | | | | | | | |
|--|---|--------------|-----------------------|--------------|----------|-----------------|------------------|---------|----------------|----------|---------------|---------------|
| | | | MSD | | | Spike | Matrix | | Rec | | | RPD |
| Param | F | | Result | Units | Dil. | Amount | Result | Rec. | Limi | | PD | Limit |
| Chloride | | | 2660 | mg/Kg | <u>5</u> | 2500 | 212 | 98 | 78.9 - | 121 | 5 | 20 |
| Percent recovery is based on the | spiko | e rest | ılt. RPE |) is based | on the | spike and s | spike dupli | cate re | sult. | | | |
| Matrix Spike (MS-1) Spike | d Sa | mple | : 339617 | , | | | | | | | | |
| QC Batch: 104454 | | | Dat | e Analyz | ed: 20 | 013-08-27 | | | 1 | Analyze | d By: | AR. |
| Prep Batch: 88453 | | | | Preparat | | 13-08-26 | | | | Prepareo | | \mathbf{AR} |
| Param | | F | C I | MS Result | Units | Dil. | Spike Amount | Re | atrix esult | Rec. | L | Rec. imit |
| Chloride | | | | 2420 | mg/Kg | 5 | 2500 | < | 19.2 | 97 | 78.9 |) - 121 |
| Percent recovery is based on the | spike | e rest | ılt. RPD |) is based | on the s | spike and s | pike dupli | cate re | sult. | | | |
| | | | MSD | | | Onthe | Madulas | | Π | | | ממת |
| Param | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec Limi | | PD | RPD Limit |
| Chloride | | | 2290 | ng/Kg | | 2500 | <19.2 | 92 | 78.9 - | | $\frac{1}{6}$ | 20 |
| Percent recovery is based on the Matrix Spike (MS-1) Spike | - | | ılt. RPD :: 338954 | | on the s | spike and s | pike dupli | cate re | sult. | | | |
| QC Batch: 104527 | | | | e Analyz | | 13-08-29 | | | | Analyzeo | | KC |
| Prep Batch: 88565 | | | ųС | Preparat | aon: 20 | 13-08-28 | | | ŀ | Prepared | ву: | AK |
| | | | | MS | | | Spike | М | atrix | | | Rec. |
| Param | | F | | Result | Units | Dil. | Amount | | esult | Rec. | | Limit |
| Benzene | | | | 1.97 | mg/Kg | 1 | 2.00 | | .00810 | 98 | |) - 130 |
| Toluene | | | | 1.94 | mg/Kg | 1 | 2.00 | | .00750 | 97 | |) - 130 |
| Ethylbenzene Xylene | | | | 1.94 | mg/Kg | 1 | 2.00 | | .00730 | 97 | |) - 130 |
| | | | 1 | 5.75 | mg/Kg | 1 | 6.00 | <0 | .00700 | 96 | - 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 | \mathbf{F} | \mathbf{C} | Result | Units | Dil. | $\mathbf{A}\mathbf{m}\mathbf{o}\mathbf{u}\mathbf{n}\mathbf{t}$ | Result | Rec. | Limit | RPD | Limit |
| Benzene | | 1 | 2.01 | mg/Kg | 1 | 2.00 | < 0.00810 | 100 | 70 - 130 | 2 | 20 |
| Toluene | | 1 | 2.02 | mg/Kg | 1 | 2.00 | < 0.00750 | 101 | 70 - 130 | 4 | 20 |
| Ethylbenzene | | 1 | 2.03 | mg/Kg | 1 | 2.00 | < 0.00730 | 102 | 70 - 130 | 4 | 20 |
| Xylene | | L | 6.11 | mg/Kg | 1 | 6.00 | < 0.00700 | 102 | 70 - 130 | 6 | 20 |

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

| Report Date: September 3, 2013 112MC05595 | | Vork Orde COG/Wee | Pag | Page Number: 30 of 39 Eddy Co., NM | | | | |
|--|--------|----------------------|-------|---------------------------------------|--------|------|------|----------|
| | MS | MSD | | | Spike | MS | MSD | Rec. |
| Surrogate | Result | Result | Units | Dil. | Amount | Rec. | Rec. | Limit |
| Trifluorotoluene (TFT) | 2.14 | 2.07 | mg/Kg | 1 | 2 | 107 | 104 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 1.99 | 2.04 | mg/Kg | 1 | 2 | 100 | 102 | 70 - 130 |

Matrix Spike (MS-1) Spiked Sample: 338954

| QC Batch: | 104535 | Date Analyzed: | 2013-08-29 | Analyzed By: | \mathbf{KC} |
|-------------|--------|-----------------|------------|--------------|---------------|
| Prep Batch: | 88572 | QC Preparation: | 2013-08-28 | Prepared By: | AK |

| | | | | \mathbf{MS} | | | Spike | Matrix | | Rec. |
|-------|----|---------------|---|---------------|-------|------|--------|--------|------|------------------------|
| Param | | F | С | Result | Units | Dil. | Amount | Result | Rec. | Limit |
| GRO | Qs | \mathbf{Qs} | 1 | 10.0 | mg/Kg | 1 | 20.0 | <2.32 | 50 | 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 | С | Result | Units | Dil. | Amount | Result | Rec. | Limit | R.PD | Limit |
| GRO | Qs | Qs | 1 | 10.4 | mg/Kg | 1 | 20.0 | <2.32 | 52 | 70 - 130 | 4 | 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 |
| Triffuorotoluene (TFT) | 1.50 | 1.39 | mg/Kg | 1 | 2 | 75 | 70 | 70 - 130 |
| 4-Bromofluorobenzene (4-BFB) | 1.87 | 1.76 | mg/Kg | 1 | 2 | 94 | 88 | 70 - 130 |

Matrix Spike (MS-1) Spiked Sample: 339762

| QC Batch: 104631 Prep Batch: 88645 | | Analyzed By: CW Prepared By: CW | | | | | | | | |
|---------------------------------------|--------------|------------------------------------|--------------|----------|-------------|-----------------|------------|------------|----------------------|---------------|
| Param | F | C I | MS Result | Units | Dil. | Spike Amount | Mat Res | | | Rec. Limit |
| DRO | | 3 | 269 | mg/Kg | 1 | 250 | <1 | 0.2 108 | 29 | - 168.5 |
| Percent recovery is based on t | he spike res | ult. RPD | is based | on the s | spike and s | pike dupli | cate res | ult. | | |
| | | MSD | | | Spike | Matrix | | Rec. | | RPD |
| Param | F C | Result | Units | Dil. | Amount | Result | Rec. | Limit | RPD | Limit |
| DRO | 1 | 271 | mg/Kg | 1 | 250 | <10.2 | 104 | 29 - 168.5 | 1 | 20 |

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

| Report Date: September 3, 201 112MC05595 | .3 | | Work Order COG/Wee | () | Page Number: 31 of 39 Eddy Co., NM | | | |
|---|--------------|---------------|-----------------------|------|---------------------------------------|------------|-------------|---------------|
| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
| n-Tricosane | 103 | 98.8 | mg/Kg | 1 | 100 | 103 | 99 | 59.5 - 168.9 |

| Matrix Spike (MS-1) Spik | ed Samp | ole: 339580 | | | | | | | | |
|---|-----------------|------------------|----------------------------|-----------|------------------------------|----------------------------------|-------------------|-----------------------|--------------------|--------------|
| QC Batch: 104635 Prep Batch: 88651 | | | e Analyzed: Preparation | | 3-08-30 3-08-30 | | | | zed By: red By: | |
| | | | MS | | | Spike | Mat | trix | | Rec. |
| Param | \mathbf{F} | I | Result | Units | Dil. | Amount | Res | ult Rec | .] | Limit |
| DRO | | 1 | 231 n | ng/Kg | 1 | 250 | 22 | .3 83 | 29 | - 168.5 |
| Percent recovery is based on the Param | spike ro F C | MSD | is based of Units | - | ike and s Spike Amount | spike duplie Matrix Result | cate rest Rec. | ult. Rec. Limit | RPD | RPD Limit |
| DRO | 1 | 236 | mg/Kg | 1 | 250 | 22.3 | 85 | 29 - 168.5 | 2 | 20 |
| Percent recovery is based on the | spike re MS | sult. RPD MSI | | n the spi | ike and s | spike dupli Spike | cate resi MS | ult. MSD | T | Rec. |
| Surrogate | Result | | | ts T | Dil. | Amount | Rec. | Rec. | | imit |
| n-Tricosane | 91.2 | 89.5 | | | 1 | 100 | 91 | 90 | | - 168.9 |

Report Date: September 3, 2013 112MC05595

Calibration Standards

Standard (CCV-1)

| QC Batch: | 104431 | | Date | Analyzed: | 2013-08-27 | | Analyz | zed By: CW |
|-----------|--------|------|-------|-----------|------------|----------|----------|------------|
| | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 256 | 102 | 80 - 120 | 2013-08-27 |

Standard (CCV-2)

| QC Batch: | 104431 | | Date | Analyzed: | 2013-08-27 | | Analyzed By: CW | | |
|-----------|--------|------|-------|-----------|------------|----------|-----------------|------------|--|
| | | | | CCVs | CCVs | CCVs | Percent | | |
| | | | | True | Found | Percent | Recovery | Date | |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed | |
| DRO | | 1 | mg/Kg | 250 | 261 | 104 | 80 - 120 | 2013-08-27 | |

Standard (CCV-3)

| QC Batch: | 104431 | | Date | Analyzed: | 2013-08-27 | | Analyz | zed By: CW |
|-----------|--------|------|-------|-----------|------------|----------|----------|------------|
| | | | | 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 | 2013-08-27 |

Standard (CCV-4)

| QC Batch: | 104431 | | Date | Analyzed: | 2013-08-27 | | Analyz | zed By: CW |
|-----------|--------|------|-------|-----------|------------|----------|----------|------------|
| | | | | CCVs | CCVs | CCVs | Percent | _ |
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 258 | 103 | 80 - 120 | 2013-08-27 |

| Report Date: September 3, 2013 112MC05595 | | | | Work Or COG/V | | Page Number: 33 of 39 Eddy Co., NM | | |
|--|-----------------|------|--------|------------------|------------|---------------------------------------|----------|------------|
| Standard (C | | | | | | | | |
| QC Batch: 10 | 04452 | | Date 4 | Analyzed: | 2013-08-27 | | Analy | zed By: AR |
| | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | True | Found | Percent | Recovery | Date |
| Param | \mathbf{Flag} | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | mg/Kg | 100 | 99.4 | 99 | 85 - 115 | 2013-08-27 |
| Standard (C | CV-2) | | | | | | | |
| QC Batch: 10 | 04452 | | Date A | Analyzed: | 2013-08-27 | | Analy | zed By: AR |
| | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | mg/Kg | 100 | 101 | 101 | 85 - 115 | 2013-08-27 |

Standard (CCV-1)

| QC Batch: | 104453 | | | Date A | Analyzed: | 2013-08-27 | | Analy | zed By: AR |
|-----------|--------|------|------|--------|-----------|------------|----------|----------|------------|
| | | | | | CCVs | CCVs | CCVs | Percent | D. I |
| | | | | | True | Found | Percent | Recovery | Date |
| Param | | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2013-08-27 |

Standard (CCV-2)

| QC Batch: | 104453 | | | Date A | Analyzed: | 2013-08-27 | | Analy | zed By: AR |
|-----------|--------|------|------|--------|-----------|------------|----------|----------|------------|
| | | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | | True | Found | Percent | Recovery | Date |
| Param | | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2013-08-27 |

Standard (CCV-1)

QC Batch: 104454

Date Analyzed: 2013-08-27

Analyzed By: AR

| Report Date: September 3, 2013 112MC05595 | | | | | er: 13082238 ems #1 TB | Page Number: 34 of 39 Eddy Co., NM | | |
|--|------|------|-------|-----------------------|---------------------------|---------------------------------------|-------------------------------|------------------|
| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
| Chloride | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2013-08-27 |

Standard (CCV-2)

| QC Batch: | 104454 | | | Date A | Analyzed: | 2013-08-27 | | Analy | zed By: AR |
|-----------|--------|------|------|--------|-----------|------------|----------|----------|------------|
| | | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | | True | Found | Percent | Recovery | Date |
| Param | | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Chloride | | | | mg/Kg | 100 | 100 | 100 | 85 - 115 | 2013-08-27 |

Standard (CCV-1)

| QC Batch: 104527 | | | Analyzed By: KC | | | | | |
|------------------|------|------|-----------------|--------------|---------------|-----------------|---------------------|------------|
| | | | | CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Benzene | | 1 | mg/kg | 0.100 | 0.102 | 102 | 80 - 120 | 2013-08-29 |
| Toluene | | 1 | mg/kg | 0.100 | 0.0992 | 99 | 80 - 120 | 2013-08-29 |
| Ethylbenzene | | 1 | mg/kg | 0.100 | 0.0951 | 95 | 80 - 120 | 2013-08-29 |
| Xylene | | 1 | mg/kg | 0.300 | 0.288 | 96 | 80 - 120 | 2013-08-29 |

Standard (CCV-2)

| QC Batch: 104527 | | | Analyzed By: KC | | | | | |
|------------------|------|----------|-----------------|--------------|---------------|-----------------|---------------------|------------|
| | | | | CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| Benzene | | 1 | mg/kg | 0.100 | 0.108 | 108 | 80 - 120 | 2013-08-29 |
| Toluene | | 1 | mg/kg | 0.100 | 0.105 | 105 | 80 - 120 | 2013-08-29 |
| Ethylbenzene | | 1 | mg/kg | 0.100 | 0.102 | 102 | 80 - 120 | 2013-08-29 |
| Xylene | | <u> </u> | mg/kg | 0.300 | 0.304 | 101 | 80 - 120 | 2013-08-29 |

| Report Date: September 3, 2013 112MC05595 | | | | Work O COG/V | Page Number: 35 of 39 Eddy Co., NM | | | |
|--|-------|------|----------|-----------------|---------------------------------------|---------------------|---------------------|------------------|
| Standard (C | CV-1) | | | | | | | |
| QC Batch: 10 | 04535 | | Date | Analyzed: | 2013-08-29 | | Analy | zed By: KC |
| _ | | | | CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | mg/Kg | 1.00 | 0.933 | 93 | 80 - 120 | 2013-08-29 |
| Standard (C | CV-2) | | | | | | | · |
| QC Batch: 1 | 04535 | | Date | Analyzed: | 2013-08-29 | | Analy | zed By: KC |
| | | | | CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | mg/Kg | 1.00 | 1.14 | 114 | 80 - 120 | 2013-08-29 |
| | | | | | | | | |
| Standard (C | | | | | | | | |
| QC Batch: 10 | 04535 | | Date | Analyzed: | 2013-08-29 | | Analy | zed By: KC |
| | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| GRO | | 1 | Mg/Kg | 1.00 | 0.911 | 91 | 80 - 120 | 2013-08-29 |
| Standard (C | CV-1) | | | | | | | |
| QC Batch: 10 | 04631 | | Date | Analyzed: | 2013-09-03 | | Analy | zed By: CW |
| | | | | CCVs True | CCVs Found | CCVs | Percent | D-t- |
| | Flag | Cert | Units | Conc. | Found Conc. | Percent Recovery | Recovery Limits | Date Analyzed |
| Param | | 00+0 | C III W. | Conc. | COHO | TUCOVOLY | 171111003 | TTTOT Y SCO |

Standard (CCV-2)

.

QC Batch: 104631

Date Analyzed: 2013-09-03

Analyzed By: CW

| Report Date 112MC05595 | : September 3, | 2013 | | Work O COG/V | Page Number: 36 of 39 Eddy Co., NM | | | |
|---------------------------|----------------|------|------------|-----------------------|---------------------------------------|-----------------------------|-------------------------------|------------------|
| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
| DRO | | 1 | mg/Kg | 250 | 278 | 111 . | 80 - 120 | 2013-09-03 |
| Standard (| , | | D . | 4 , , | | | | |
| QC Batch: | 104631 | | Date | Analyzed: | 2013-09-03 | | Analy | zed By: CW |
| | | | | · CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 275 | 110 | 80 - 120 | 2013-09-03 |

Standard (CCV-4)

| QC Batch: | 104631 | | Date | Analyzed: | 2013-09-03 | | Analy | zed By: CW |
|-----------|--------|-----------------------|-------|-----------|----------------|--------------------------|----------|------------|
| | | | | CCVs | CCVs From d | CCVs | Percent | Data |
| | | | | True | Found | $\operatorname{Percent}$ | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 279 | 112 · | 80 - 120 | 2013-09-03 |

Standard (CCV-1)

| QC Batch: | 104635 | | Date | Analyzed: | 2013-08-30 | | Analyz | zed By: CW |
|-----------|--------|-----------------------|-------|-----------|------------|----------|----------|------------|
| | | | | CCVs | CCVs | CCVs | Percent | |
| | | | | True | Found | Percent | Recovery | Date |
| Param | Flag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed |
| DRO | | 1 | mg/Kg | 250 | 280 | 112 | 80 - 120 | 2013-08-30 |

Standard (CCV-2)

QC Batch: 104635

Date Analyzed: 2013-08-30

Analyzed By: CW

| Report Date: 112MC05595 | 2013 | | | ler: 13082238 eems #1 TB | Page Nu | Page Number: 37 of 39 Eddy Co., NM | | | | |
|----------------------------|------------------|-----------------------|---------|-----------------------------|---------------|---------------------------------------|-------------------------|------------|--|--|
| - | | ~ | | CCVs True | CCVs Found | CCVs Percent | Percent Recovery | Date | | |
| Param | \mathbf{F} lag | Cert | Units | Conc. | Conc. | Recovery | Limits | Analyzed | | |
| DRO | | 1 | m mg/Kg | 250 | 294 | 118 | 80 - 120 | 2013-08-30 | | |

Report Date: September 3, 2013 112MC05595 Work Order: 13082238 COG/Weems #1 TB Page Number: 38 of 39 Eddy Co., NM

Appendix

Report Definitions

| Name | Definition |
|------|----------------------------|
| 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 | T104704392-12-4 | 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

Result Comments

Report Date: September 3, 2013 112MC05595

Work Order: 13082238 COG/Weems #1 TB

Page Number: 39 of 39 Eddy Co., NM

- 1 Surrogate diluted out of the sample.
- 2 Surrogates were diluted out of the sample. 3
- Surrogate diluted out of sample. 4
- Sample run out of hold time.
- 5 Surrogate diluted out of sample.
- 6 Sample run out of hold time.
- 7 Surrogate diluted out of sample.
- 8 Surrogates diluted out of sample.
- 9 Surrogates diluted out of sample.
- 10 Surrogates diluted out of sample.
- 11 Surrogates diluted out of sample.
- 12 Surrogate diluted out of the sample.
- 13Surrogates are diluted out of sample.

Attachments

The scanned attachments will follow this page.

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

| | | | / | 30 | 822 | 38 | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--------------|---------------------------------------|------------|---------------|----------------|--|------------------|---|--|-----------------------|----------------|--------------|-------------|-------------------|------------------|------------|------------|------------------------|-------------|--------------------------|-----------|---------------------------------|---------------|-----------|----------------|-------------------------|--------|----------|
| An | alvs | sis F | Re | au | iest | of C | Cha | in of Custo | dv F | ?e | CC | orc | | L | | | | | | | PAC | | | | (| DF: | 2 | |
| | | · | P | | | | | | | | | | | - | | | | (0 | | | | | QUES Aetho | | o.) | | | |
| | | | | | | 910 N. /Iidland | Big S I, Texa | TECH Spring St. as 79705 Fax (432) 682-3946 | | | | | | | 06 (Ext. to C35) | Pb Hg | Pd ≯ | | | | | | | | | pH, TDS | | |
| | ME: 1 | | | | | SITE MA | T | Ke Tavarez | NERS | | | SERV | ATIVE DD | | TX1005 | Ba | B | | | 60/624 | 270/62 | | | | | ns, pH, | | |
| PROJECT N | 0. 055 | 95 | PR | OJEC | TNAME: | eem | s Ħ | 1 TB | CONTAI | (N) | Τ | | | -* | MOD | s Ag As | s Ag As | BS Matatilas | | 8240/82 | i. Vol. 8 | 8 8 | | . 1 | tos) | s/Catio | | |
| LAB I.D. NUMBER | date 2013 | TIME | | COMP. GRAB | | | | Eddy Co, NM IDENTIFICATION | NUMBER OF CONTAINERS | FILTERED (Y/N) HCI | HNO3 | Щ | NONE | BTEX 8021B | TPH B015 MOD | RCRA Metal | TCLP Metal | TCLP Volatiles | RCI | GC.MS Vol. 8240/8260/624 | GC.MS Sem | PCB's 8080/608 Pest. 808/608 | Chloride | Gamma Spe | PLM (Asbestos) | Major Anlon | | |
| 399.54 | 8/14 | | S | X | AH | - } | (0- | -1) | 1 | | | X | | X | | | | | | | | | Ň | | | | | |
| 586 | | | |] | | [| 1- | 1.5) | | | | \mathbb{K} | | | | | | | | | | | X | | | | | |
| 581 | | | | | | | 2- | 2,5) | . 1 | | | X | | | | | | | | | | | N. | | | | | |
| 582 | | | | | | | 13- | 3.5) | 1 | | | χ | | | | | | | | | | | X | | | | | |
| 583 | | | | | | | (4- | 4,5) | ١ | | T | X | | | | Ţ | | T | | | | | X | | | | | |
| 584 | | | | | AH | - 2 | 10 |)-1) | ł | | | X | | X | X | | | | | | | | Y | | | | | |
| ইগ্র | | | | | | | Ĭ1. | -1.5) | 1 | | | Ŷ | | | | | | | | | | | K | | | | | |
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| 581 | | | | | <u> </u> | | (3. | - 3.5) | 1 | | | χ | | | | | | | | | | | N | | | | | |
| 588 | J | | | J | | | (4- | - 4 <i>.5</i>) | ۱ | | | -XL | | | | | | | | | | | X | | | | | |
| | uron | -D | <u>D/(</u> | ليد | | 535 | | Receiver Bry (Signature) | ······································ | | Time: | 15 | :35 | 2 | | AL | | | | | | n | | | Date: Time: | | 14[1]; | <u> </u> |
| RELINQUISHED | | · · · · · · · · · · · · · · · · · · · | | | Date: Time: | | | RECEIVED BY: (Signature) | | | Date: Time: | | | | | FEDE | x | | | BUS | | | | | RBILL 'HER: | | | |
| RELINQUISHED | | | | | Date: Time: | ······································ | | RECEIVED BY: (Signature) | | | Date: Time: | | | | | HANI | | | | UPS | | | | | - | sults b | y: | |
| CONTACT: | lonat | STATE: _ | | PHON | ZIP: | | RE | CEIVED BY: (Signature) | тім | E: | | | | | | TK | e . | To | ⊼√ 6 | an | 22 | Ţ | | | RU Au | SH Ch thorize Yes | d:" | No |
| SAMPLE CONDI 5.2 | | | | | , Itt | TPH | ts > | 1000 Run deeper; If | Benze | | | | STEX | _ | _ | _vŋ | dea | 2pe1 | -; | rur | _ | | chi | | | | | |

Tease fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

| 13082238 | | |
|---|---|-----------|
| Analysis Request of Chain of Custody Rec | Cord PAGE: 2 OF: 2 | |
| | ANALYSIS REQUEST (Circle or Specify Method No.) | |
| TETRATECH 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946 | 005 (Ext to C35) C4 Cr Pb Hg Se C4 Vr Pd Hg Se C5 C4 Vr Pd Hg Se | |
| CLIENT NAME: COG SITE MANAGER: TAVAREZ | PRESERVATIVE METHOD DH' 11 (ous, PH, 12 (ous, PH, 12 (ous, PH, 12 (ous, PH, 12 (ous, PH, 12) (ous, P | |
| CLIENT NAME: COG PROJECT NO.: 112 MCO 5595 COG - Weems #2 TB Eddy Co. NM NUMBER 2013 NUMBER 2013 SAMPLE IDENTIFICATION | B Ag als Ag als Ag als Ag bec. bec. bec. bec. | |
| | HN03 ICE NONE NONE NONE NONE NONE RCI RCI RCI RCI RCI RCI Pest. 808/vola RCI RCI RCI RCI RCI RCI RCI Pest. 808/vola RCI RCI RCI RCI RCI RCI RCI RCI RCI RCI | \square |
| 509 8/14 S XAH-2 (5-5,5) 1 | | \square |
| 590 1 1 (6-6,5) 1 | | |
| 591 | | |
| 592 (1-1.5) | X | \square |
| 593 (2-2.5) | | T |
| 594 (3-3,5) | | \Box |
| 595 [[] [] [] [] [] [] [] [] [] | | |
| 596 [5-5,5] | | |
| $597 \sqrt{10} \sqrt{10} \sqrt{10} \sqrt{10}$ | X | |
| | | |
| advas Dan Time: 1935 1. Mm Tin | Date: 0122112 SAMPLED BY: (Print & Initial) Date: \$/14/13 Time: 15.35 Alon Maclanahon Time: | _ |
| Time: | Date: SAMPLE SHIPPED BY: (Circle) AIRBILL #: Time: FEDEX BUS OTHER: | |
| Time: 1 Time: | Date: OTHER: OTHER: Time: TETRA TECH CONTACT PERSON: Results by: | = |
| RECEIVING LABORATORY: Midlond Trace Athalysis RECEIVED BY: (Signature) ADDRESS: Midlond STATE: ZIP: DATE: TIME: CONTACT: PHONE: DATE: TIME: TIME: | Ike Tavarez RUSH Charges Authorized: Yes No | |
| ADDNESS ADDNESS ZIP: | Ex>50 run deeper ; run all charides | |

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.



November 12, 2013

IKE TAVAREZ TETRA TECH 1910 N. BIG SPRING STREET MIDLAND, TX 79705

RE: WEEMS #1TB

Enclosed are the results of analyses for samples received by the laboratory on 11/11/13 12:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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.

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,

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

| Received: | 11/11/2013 | Sampling Date: | 11/11/2013 |
|-------------------|------------|---------------------|---------------|
| Reported: | 11/12/2013 | Sampling Type: | Soil |
| Project Name: | WEEMS #1TB | Sampling Condition: | Cool & Intact |
| Project Number: | 112MC05595 | Sample Received By: | Jodi Henson |
| Project Location: | NONE GIVEN | | |

Sample ID: T-1 (AH2) 0' (4'EB) (H302741-01)

| BTEX 8021B | mg, | /kg | Analyze | d By: MS | | | | | S-04 |
|--------------------------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | 8S | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <5.00 | 5.00 | 11/11/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | 57.5 | 5.00 | 11/11/2013 | ND | 1.99 | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | 29.4 | 5.00 | 11/11/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | 349 | 15.0 | 11/11/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | 436 | 30.0 | 11/11/2013 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 132 | % 89.4-12 | 6 | | | | | | |
| TPH 8015M | mg | /kg | Analyze | d By: MS | | | | | S-04 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 6840 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | 8670 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 223 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 173 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 9



| | | TETRA TE | СН | | |
|-------------------|------------|-----------|------------------|---------------------|---------------|
| | | IKE TAVA | REZ | | |
| | | 1910 N. B | IG SPRING STREET | | |
| | | MIDLAND | TX, 79705 | | |
| | | Fax To: | (432) 682-3946 | | |
| Received: | 11/11/2013 | | | Sampling Date: | 11/11/2013 |
| Reported: | 11/12/2013 | | | Sampling Type: | Soil |
| Project Name: | WEEMS #1TB | | | Sampling Condition: | Cool & Intact |
| Project Number: | 112MC05595 | | | Sample Received By: | Jodi Henson |
| Project Location: | NONE GIVEN | | | | |

Sample ID: T-1 (AH2) 2' (4'EB) (H302741-02)

| βTEX 8021B | mg | /kg | Analyze | d By: MS | | | | S-04 | |
|--------------------------------------|--------|-----------------|------------|--------------|------|------------|---------------|---|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.500 | 0.500 | 11/11/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | 1.03 | 0.500 | 11/11/2013 | 11/2013 ND | | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | 2.25 | 0.500 | 11/11/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | 15.2 | 1.50 | 11/11/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | 18.4 | 3.00 | 11/11/2013 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 154 | % 89.4-12 | 6 | | | | | | |
| TPH 8015M | mg, | 'kg | Analyze | d By: MS | | | | | S-04 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 444 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | 1510 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 143 9 | % 65.2-14 | 0 | | | | | a da anti a constante da seconda s | |
| Surrogate: 1-Chlorooctadecane | 1149 | 63.6-15 | 4 | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager



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

| Received: | 11/11/2013 | Sampling Date: | 11/11/2013 |
|-------------------|------------|---------------------|---------------|
| Reported: | 11/12/2013 | Sampling Type: | Soil |
| Project Name: | WEEMS #1TB | Sampling Condition: | Cool & Intact |
| Project Number: | 112MC05595 | Sample Received By: | Jodi Henson |
| Project Location: | NONE GIVEN | | |

Sample ID: T-1 (AH2) 4' (4'EB) (H302741-03)

| BTEX 8021B | mg/ | /kg | Analyze | d By: MS | | | | | |
|--------------------------------------|----------------------|-----------------|------------|--------------|------|------------|----------------------|-------|-----------|
| Analyte | Result Reporting Lim | | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.99 | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/12/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | <0.150 | 0.150 | 11/12/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | <0.300 | 0.300 | 11/12/2013 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 107 | % 89.4-12 | 6 | | | | | | |
| TPH 8015M | mg, | /kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | <10.0 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 90.5 | % 65.2-14 | 0 | | | | 9. 1 may 200 10 10 1 | | |
| Surrogate: 1-Chlorooctadecane | 99.3 | % 63.6-15 | 4 | | | | | | |

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Page 4 of 9



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| | Received: | 11/11/2013 | Sampling Date: | 11/11/2013 |
|---|-------------------|------------|---------------------|---------------|
| • | Reported: | 11/12/2013 | Sampling Type: | Soil |
| | Project Name: | WEEMS #1TB | Sampling Condition: | Cool & Intact |
| | Project Number: | 112MC05595 | Sample Received By: | Jodi Henson |
| | Project Location: | NONE GIVEN | | |
| | | | | |

Sample ID: T-1 (AH2) 6' (4'EB) (H302741-04)

| BTEX 8021B | mg, | /kg | Analyze | d By: MS | | | | | |
|--------------------------------------|------------------------|-----------------|------------|--------------|------|------------|---------------|-------|---|
| Anałyte | Result Reporting Limit | | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.99 | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/12/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | <0.150 | 0.150 | 11/12/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | <0.300 | 0.300 | 11/12/2013 | ND | | | | - | |
| Surrogate: 4-Bromofluorobenzene (PIL | 106 | % 89.4-12 | 6 | | | | | | a mangan ng pang ng pan |
| TPH 8015M | mg/ | /kg | Analyze | d By: MS | | , | ···· | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | <10.0 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 91.9 | % 65.2-14 |) | | | | | | |
| Surrogate: 1-Chlorooctadecane | 99.4 | % 63.6-15 | <i>4</i> . | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager



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

| Received: | 11/11/2013 | Sampling Date: | 11/11/2013 |
|-------------------|------------|---------------------|---------------|
| Reported: | 11/12/2013 | Sampling Type: | Soil |
| Project Name: | WEEMS #1TB | Sampling Condition: | Cool & Intact |
| Project Number: | 112MC05595 | Sample Received By: | Jodi Henson |
| Project Location: | NONE GIVEN | | |

Sample ID: T-1 (AH2) 8' (4'EB) (H302741-05)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|------------------------|-----------------|------------|--------------|------|------------|---------------|-------|--|
| Analyte ' | Result Reporting Limit | | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | 0.084 | 0.050 | 11/12/2013 | ND | 1.99 | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/12/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | <0.150 | 0.150 | 11/12/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | <0.300 | 0.300 | 11/12/2013 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 107 | % 89.4-12 | 6 | | | | 4445-1 | | et maar het het het het het gemaan gevon maargem |
| TPH 8015M | mg/ | kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | <10.0 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 101 9 | 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 1129 | 63.6-15 | 4 | | | | | | • |

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Page 6 of 9



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

| Received: | 11/11/2013 | Sampling Date: | 11/11/2013 |
|-------------------|------------|---------------------|---------------|
| Reported: | 11/12/2013 | Sampling Type: | Soil |
| Project Name: | WEEMS #1TB | Sampling Condition: | Cool & Intact |
| Project Number: | 112MC05595 | Sample Received By: | Jodi Henson |
| Project Location: | NONE GIVEN | | |

Sample ID: T-1 (AH2) 10' (4'EB) (H302741-06)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|--------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.97 | 98.4 | 2.00 | 0.377 | |
| Toluene* | <0.050 | 0.050 | 11/12/2013 | ND | 1.99 | 99.7 | 2.00 | 1.22 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/12/2013 | ND | 2.00 | 99.8 | 2.00 | 1.66 | |
| Total Xylenes* | <0.150 | 0.150 | 11/12/2013 | ND | 5.91 | 98.6 | 6.00 | 2.32 | |
| Total BTEX | <0.300 | 0.300 | 11/12/2013 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 107 | % 89.4-12 | 6 | | | | | | |
| TPH 8015M | mg/ | kg | Analyze | d By: MS | · | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 11/11/2013 | ND | 170 | 84.9 | 200 | 11.6 | |
| DRO >C10-C28 | <10.0 | 10.0 | 11/11/2013 | ND | 169 | 84.5 | 200 | 6.55 | |
| Surrogate: 1-Chlorooctane | 98.0 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 109 9 | 63.6-15 | 4 | | | | | | |

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Page 7 of 9



Notes and Definitions

| S-04 | The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. |
|------|--|
| 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 SM4500Cl-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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Page 8 of 9

| † Cardinal o | Delivered By: Sampler - UPS | | Relinquished By: | A Consumbiliary | analyses. All claims including thos service. In no event shall Cardinal afflates or successors arising out | PLEASE NOTE: Liability and | | | 6 | 8 | ę | W | 2 | | H302741 | Lab I.D. | | | Sampler Name: | Project Location: | Project Name: | Project #: Weens | Phone #: (1/32 | City: | Address: | Project Manager: | Company Name: | | |
|---|--------------------------------|---------------------|------------------|-----------------|---|--|------------------|---|-------------|--------------|-------------|--------------|------------|------------------|--|---------------|---------|-----------|---------------|-------------------|---------------|------------------|----------------|-------------|----------|------------------|------------------|--|----------------------------|
| Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-3826 | (Circle One) - Bus - Other: | | - | D | aralyses. All claims including those for negigence and any other cause whatsoever shall be doemed where in writing and received by Cardinal within 30 days etter competion of the expletable arrives. In no event shall cardinal be liable for incidental damages, including without limitation, business interruptions, less of use, or loss of profits including client, its subsidiares, artification or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. | PLEASE NOTE: Lability and Damages. Cardinal's lability and client's exclusive remedy for any claim afsing whether based in contract or lost shall be limited to the amount pad by the client for the | | | TI (AND) II | T-1(1442) 8' | T-1 (AHA)6' | T-1 (AH2) 4' | T-1(A42)2' | T-&1/AH2) | | Sample I.D. | | 19- | R | 5 | 112105595 | The HIR | 250-0680 | | | IK Towned | 604 | 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 | |
| changes. Please fax | 5.4.2 | | Date: Re | Time: / 72 | cause whatsoever shall be deeme equental damages, including withoute e of services hereunder by Candinal | ient's exclusive remedy for any dai | | ~ | 9 S3. P. | (4-EB) 6 | 1 (83, 4) | (4'EB) 6 | 14'24) 6 | 2' 14'EB) 6 | (G)RAB | |)OMP. | | | | | Project Owner: | Fax #: | State: Zip: | | 67 | | Hobbs, NM 88240 ((575) 393-2476 | |
| t written changes to | Cool Infact | | deived By: | ndi 1 | d waived unless made in writing an ut fimitation, business interruptions, I, regardless of whether such dasim | m arising whether based in contract | | | | | | | | | # CONT GROUN WASTEN SOIL OIL SLUDGE | DWAT WATEF | ER R | H MATRIX | | i | | (olin | | | | | | - | |
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| | wavez a tetratech. com | in a tetra tech lan | | Add'l Fax #: | | | | | | | | | | | | | | | | - | P . | | | | | - 1 | ANALYSIS REQUEST | | STODY AND ANALYSIS REQUEST |
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Page 9 of 9

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