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Work Plan

Cimarex Energy Company: Oracle 21 Federal #004
|30-015-38597|2RP-4183|

September 1, 2017

Prepared By:

TALON/LPE

408 W. Texas Avenue
Artesia, New Mexico 88210

Prepared For:

Cimarex Energy Company
600 N Marienfeld Ste. 600
Midland, TX 79701

Ms. Christine Alderman
Cimarex Energy Company
600 N. Marienfeld Ste. 600
Midland, TX 79701

Subject: **Soil Assessment and Remediation Work Plan**
Cimarex Energy Co.
Oracle 21 Federal #004
[30-015-38597|2RP-4183]

Dear Ms. Alderman,

Cimarex Energy Company (Cimarex) has contracted Talon/LPE (Talon) to perform soil sampling and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

Site Information

The Cimarex Oracle 21 Federal #004 is located approximately twenty-five (25) miles south of Carlsbad, New Mexico. The legal location for this facility is Unit Letter C, Section 21, Township 25S South and Range 26 East in Eddy County, New Mexico. More specifically the latitude and longitude are 32.1216621 North and -104.2998352 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of the Reagan-Gypsum land complex with 0 to 3 percent slopes. Drainage courses in this area are normally dry.

Ground Water and Site Ranking

According to the New Mexico Office of the State Engineer database, the ground water in this area is approximately 118-feet below ground surface (BGS). The referenced ground water data is presented in [Appendix II](#). Therefore the ranking for this site is a **0** based on the following:

| | |
|--------------------------------|--------|
| Depth to ground water | >100' |
| Wellhead Protection Area | >1000' |
| Distance to surface water body | >1000' |

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH and the recommended guideline for Total Chlorides is 1,000 mg/kg.

Incident Description and Initial Remedial Actions

On April 11, 2017, the Bureau of Land Management (BLM) conducted a controlled burn in the area of the Oracle 21 Fed #4. On April 20, 2017 a pumper turned on a transfer pump and noticed produced water spraying in the pasture. Further investigation revealed that the controlled burn conducted by BLM on April 11, 2017 melted the poly flowline. This resulted in the release of approximately 20bbbls of produced water. No fluid was recovered.

On July 6, 2017, Talon mobilized personnel to conduct a site assessment and collect soil samples within the impacted area. The soil samples were analyzed for TPH, BTEX, total chlorides, and detailed salinity. The results of our soil analysis are summarized in the table below.

Laboratory Results

See [Appendix IV](#) for complete report of laboratory results.

| Sample ID | Depth ft | BTEX mg/kg | TPH mg/kg | Chloride mg/kg | pH | EC mmhos/cm | Sodium meq/L | Potassium meq/L | Calcium meq/L | Magnesium meq/L | SAR |
|-----------|----------|------------|-----------|----------------|-----|-------------|--------------|-----------------|---------------|-----------------|-------|
| S-1 | 0 | -- | -- | 16* | -- | | | | | | |
| S-2 | 0 | -- | -- | 16* | | | | | | | |
| S-3 | 0 | <0.300 | <10.0 | 12,053 | 7.0 | 68.80 | 554.556 | 3.364 | 137.433 | 6.672 | 65.33 |
| S-3 | 1 | <0.300 | <10.0 | 709 | 7.3 | 9.21 | 31.320 | 0.358 | 64.888 | 0.830 | 5.46 |
| S-3 | 2 | <0.300 | <10.0 | 283 | 7.5 | 3.76 | 4.169 | 0.204 | 37.587 | 4.443 | 0.91 |
| S-3 | 3 | <0.300 | <10.0 | 144* | 7.6 | 3.93 | 6.620 | 0.291 | 35.903 | 4.047 | 1.48 |
| S-4 | 0 | -- | -- | 32* | -- | -- | -- | -- | -- | -- | -- |
| S-5 | 0 | -- | -- | 16 | -- | -- | -- | -- | -- | -- | -- |
| S-6 | 0 | -- | -- | 32 | | | | | | | |
| S-7 | 0 | -- | -- | 16 | -- | -- | -- | -- | -- | -- | -- |
| S-8 | 0 | -- | -- | 16 | | | | | | | |
| S-9 | 0 | -- | -- | 80 | -- | -- | -- | -- | -- | -- | -- |
| S-10 | 0 | -- | -- | <16.0 | | | | | | | |
| S-11 | 0 | -- | -- | <16.0 | -- | -- | -- | -- | -- | -- | -- |
| S-12 | 0 | -- | -- | <16.0 | | | | | | | |
| S-13 | 0 | -- | -- | <16.0 | -- | -- | -- | -- | -- | -- | -- |
| S-14 | 0 | -- | -- | 32 | | | | | | | |
| S-15 | 0 | -- | -- | 16 | -- | -- | -- | -- | -- | -- | -- |
| S-16 | 0 | <0.300 | <10.0 | 7,799 | 7.3 | 29.80 | 249.065 | 2.549 | 106.777 | 5.138 | 33.30 |
| S-16 | 1 | -- | -- | 2,127 | 7.6 | 18.09 | 111.215 | 2.269 | 63.103 | 28.315 | 16.45 |
| S-16 | 2 | -- | -- | 709 | 7.6 | 7.94 | 29.552 | 2.187 | 36.619 | 17.283 | 5.69 |
| S-16 | 3 | -- | -- | 48* | 7.7 | 4.11 | 6.866 | 1.857 | 30.510 | 12.84 | 1.49 |

| Sample ID | Depth ft | BTEX mg/kg | TPH mg/kg | Chloride mg/kg | pH | EC mmhos/cm | Sodium meq/L | Potassium meq/L | Calcium meq/L | Magnesium meq/L | SAR |
|-----------|----------|------------|-----------|----------------|-----|-------------|--------------|-----------------|---------------|-----------------|-------|
| S-17 | 0 | <0.300 | <10.0 | 27,651 | 7.2 | 89.30 | 847.602 | 10.601 | 180.160 | 17.534 | 85.25 |
| S-17 | 1 | -- | -- | 7,373 | 7.3 | 61.00 | 519.961 | 4.584 | 117.523 | 16.598 | 63.49 |
| S-17 | 2 | -- | -- | 3,333 | 7.9 | 33.70 | 305.759 | 2.401 | 203.629 | 19.304 | 28.96 |
| S-17 | 3 | -- | -- | 992 | 8.0 | 10.38 | 57.007 | 1.308 | 38.804 | 30.037 | 9.72 |
| S-17 | 4 | -- | -- | 320* | 8.1 | 7.15 | 22.404 | 1.287 | 31.102 | 33.804 | 3.93 |
| S-17 | 8 | -- | -- | 96* | -- | -- | -- | -- | -- | -- | -- |
| BG-1 | 0 | -- | -- | 70.9 | 7.7 | 2.67 | 1.266 | 0.743 | 33.261 | 1.729 | 0.30 |

(--) Analyte Not Tested

(*) Laboratory Chloride Confirmation

Proposed Remedial Actions

- The impacted area in the vicinity of sample location S-3 will be excavated to a depth of 1-foot BGS.
- The impacted area in the vicinity of sample location S-16 will be excavated to a depth of 2-feet BGS.
- The impacted area in the vicinity of sample location S-17 will be excavated to a depth of 3-feet BGS.
- All of the excavated soil will be hauled to an NMOCD approved solid waste disposal facility.
- The excavation will be backfilled with top soil, contoured to match the surrounding terrain and seeded with BLM #1 seed mixture.

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

TALON/LPE


Sheldon L. Hitchcock
Project Manager


David J. Adkins
District Manager

Attachments

Appendix I Site Plan
Appendix II Groundwater Data
Appendix III Initial C-141
Appendix IV Laboratory Results



APPENDIX I

SITE PLAN

Oracle 21 Fed #4

Cimarex Energy Co.

Legend

-  Impacted Area
-  Sample Location



APPENDIX II

GROUNDWATER DATA



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

| POD Number | POD Sub-Code | basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | Distance | Depth Well | Depth Water | Water Column |
|-------------------------|--------------|-------|--------|------|------|-----|-----|-----|-----|--------|----------|----------|------------|-------------|--------------|
| C 01368 | C | | ED | 1 | 1 | 22 | 25S | 26E | | 567261 | 3554059* | 1218 | 143 | 118 | 25 |

Average Depth to Water: 118 feet

Minimum Depth: 118 feet

Maximum Depth: 118 feet

Record Count: 1

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 566043

Northing (Y): 3554059

Radius: 1500

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

APPENDIX III

INITIAL C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT

State of New Mexico
Energy Minerals and Natural Resources
ARTESIA DISTRICT

Form C-141
Revised August 8, 2011

APR 21 2017

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

APR 21 2017

Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

RECEIVED

RECEIVED

Release Notification and Corrective Action

NAB1711542974

OPERATOR

☒ Initial Report ☐ Final Report

| | | | |
|-----------------|-------------------------------------|---------------|--------------------|
| Name of Company | Cimarex Energy | Contact | Christine Alderman |
| Address | 600 N Marienfeld Ste 600 Midland TX | Telephone No. | 432-853-7059 |
| Facility Name | Oracle 21 Fed #4 | Facility Type | Production |

| | | | | | |
|---------------|-----|---------------|--|---------|--------------|
| Surface Owner | BLM | Mineral Owner | | API No. | 30-015-38597 |
|---------------|-----|---------------|--|---------|--------------|

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| C | 21 | 25S | 26E | 400 | N | 1980 | W | Eddy |

Latitude 32.1216621 Longitude -104.2998352

NATURE OF RELEASE

*please see google earth
map attachment for spiv
pipeline location*

| | | | | | |
|-----------------------------|---|---|-----------|----------------------------|-----------|
| Type of Release | produced water | Volume of Release | 20 bbls | Volume Recovered | 0 bbls |
| Source of Release | Poly flowline | Date and Hour of Occurrence | 4/11/2017 | Date and Hour of Discovery | 4/20/2017 |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | Christine Alderman | Date and Hour | 4/21/2017 | <i>e-mail 12:56pm</i> | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

It appears that BLM did a controlled burn on 4/11/2017 and approximately 600' of 4" poly pipe was impacted by the fire. It was noticed on 4/20/2017 when the pumper turned on the transfer pump and he saw water shoot up in the pasture north of the location. He immediately turned the pump off and went to investigate and discover the burnt piping.

Describe Area Affected and Cleanup Action Taken.*

The pasture area north of the facility. An environmental consultant will be contacted and a work plan will be developed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOC marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|--|--|--|--|
| Signature: <i>Christine Alderman</i> | | OIL CONSERVATION DIVISION | |
| Printed Name: Christine Alderman | | Approved by Environmental Specialist: <i>Crystal Wee</i> | |
| Title: BSH Supervisor | | Approval Date: <i>4/25/17</i> | Expiration Date: <i>NIA</i> |
| E-mail Address: <i>calderman@cimarex.com</i> | | Conditions of Approval: <i>see attached</i> | Attached <input checked="" type="checkbox"/> |
| Date: Phone: 432-853-7059 | | | |

* Attach Additional Sheets If Necessary

2RP- 4183

APPENDIX IV

LABORATORY RESULTS



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489724
Customer Sample ID: S-3 0'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU
College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)
Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|--|--------------|-------|---------|---------------|------|-----|-----|------|-------|-------------------------|
| pH | 7.8 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 6,300 | (-) | umho/cm | V. High | | | | | | |
| Nitrate-N | 2 | (-) | ppm** | | | | | | | |
| Phosphorus | 18 | (50) | ppm | | | | | | | |
| Potassium | 250 | (125) | ppm | | | | | | | |
| Calcium | 19,358 | (180) | ppm | | | | | | | |
| Magnesium | 85 | (50) | ppm | | | | | | | |
| Sulfur | 6,270 | (13) | ppm | | | | | | | |
| Sodium | 5,816 | (-) | ppm | | | | | | | |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | |
| | pH | | | | | | | | | 7.0 |
| | Conductivity | | | | | | | | | 62.80 mmhos/cm |
| | Sodium | | | | | | | | | 12744 ppm 554.556 meq/L |
| | Potassium | | | | | | | | | 132 ppm 3.364 meq/L |
| | Calcium | | | | | | | | | 2754 ppm 137.433 meq/L |
| | Magnesium | | | | | | | | | 81 ppm 6.672 meq/L |
| | SAR | | | | | | | | | 65.33 |
| | SSP | | | | | | | | | 78.99 |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489725
Customer Sample ID: S-3 1'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | | |
|--|--------------|-------|---------|---------------|------|-----|-----|------|-------|---------|-----------------------|------------------------|
| pH | 8.0 | (5.8) | - | Mod. Alkaline | | | | | | | | |
| Conductivity | 2,320 | (-) | umho/cm | V. High | | | | | | | CL* | Fertilizer Recommended |
| Nitrate-N | 2 | (-) | ppm** | | | | | | | | | 35 lbs N/acre |
| Phosphorus | 6 | (50) | ppm | | | | | | | | | 45 lbs P2O5/acre |
| Potassium | 27 | (125) | ppm | | | | | | | | | 30 lbs K2O/acre |
| Calcium | 15,439 | (180) | ppm | | | | | | | | | 0 lbs Ca/acre |
| Magnesium | 41 | (50) | ppm | | | | | | | | | 5 lbs Mg/acre |
| Sulfur | 6,414 | (13) | ppm | | | | | | | | | 0 lbs S/acre |
| Sodium | 370 | (-) | ppm | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | |
| Boron | | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | | | |
| | pH | | | | | | | | | | 7.3 | |
| | Conductivity | | | | | | | | | | 9.21 mmhos/cm | |
| | Sodium | | | | | | | | | | 720 ppm 31.320 meq/L | |
| | Potassium | | | | | | | | | | 14 ppm 0.358 meq/L | |
| | Calcium | | | | | | | | | | 1300 ppm 64.888 meq/L | |
| | Magnesium | | | | | | | | | | 10 ppm 0.830 meq/L | |
| | SAR | | | | | | | | | | 5.46 | |
| | SSP | | | | | | | | | | 32.16 | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489726
Customer Sample ID: S-3 2'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478

979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|--------------|---------|-------|---------|--|------|-----|-----|------|-------|---------|------------------------|
| pH | 8.0 | (5.8) | - | Mod. Alkaline | | | | | | | |
| Conductivity | 1,600 | (-) | umho/cm | High | | | | | | | Fertilizer Recommended |
| Nitrate-N | 17 | (-) | ppm** | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489727
Customer Sample ID: S-3 3'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|--|---------|-------|---------|---------------|------|-----|-----|--------------|-------|------------------------|------------------------|
| pH | 7.9 | (5.8) | - | Mod. Alkaline | | | | | | | |
| Conductivity | 1,670 | (-) | umho/cm | High | | | | | | CL* | Fertilizer Recommended |
| Nitrate-N | 38 | (-) | ppm** | | | | | | | | 0 lbs N/acre |
| Phosphorus | 9 | (50) | ppm | | | | | | | | 45 lbs P2O5/acre |
| Potassium | 88 | (125) | ppm | | | | | | | | 10 lbs K2O/acre |
| Calcium | 28,641 | (180) | ppm | | | | | | | | 0 lbs Ca/acre |
| Magnesium | 224 | (50) | ppm | | | | | | | | 0 lbs Mg/acre |
| Sulfur | 5,618 | (13) | ppm | | | | | | | | 0 lbs S/acre |
| Sodium | 92 | (-) | ppm | | | | | | | | |
| Iron | | | | | | | | | | | |
| Zinc | | | | | | | | | | | |
| Manganese | | | | | | | | | | | |
| Copper | | | | | | | | | | | |
| Boron | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre | |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | | |
| pH | | | | 7.6 | | | | | | | |
| Conductivity | | | | 3.93 mmhos/cm | | | | | | | |
| Sodium | | | | 152 ppm | | | | 6.620 meq/L | | | |
| Potassium | | | | 11 ppm | | | | 0.291 meq/L | | | |
| Calcium | | | | 720 ppm | | | | 35.903 meq/L | | | |
| Magnesium | | | | 49 ppm | | | | 4.047 meq/L | | | |
| SAR | | | | 1.48 | | | | | | | |
| SSP | | | | 14.13 | | | | | | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

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<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489728
Customer Sample ID: S-16 0'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|-----------------------|---------|-------|---------|---------------|------|-----|-----|------|-------|---------|------------------------|
| pH | 7.9 | (5.8) | - | Mod. Alkaline | | | | | | | |
| Conductivity | 4,110 | (-) | umho/cm | V. High | | | | | | | CL* |
| Nitrate-N | 3 | (-) | ppm** | | | | | | | | Fertilizer Recommended |
| Phosphorus | 15 | (50) | ppm | | | | | | | | 30 lbs N/acre |
| Potassium | 223 | (125) | ppm | | | | | | | | 35 lbs P2O5/acre |
| Calcium | 17,711 | (180) | ppm | | | | | | | | 0 lbs K2O/acre |
| Magnesium | 80 | (50) | ppm | | | | | | | | 0 lbs Ca/acre |
| Sulfur | 6,052 | (13) | ppm | | | | | | | | 0 lbs Mg/acre |
| Sodium | 2,205 | (-) | ppm | | | | | | | | 0 lbs S/acre |
| Iron | | | | | | | | | | | |
| Zinc | | | | | | | | | | | |
| Manganese | | | | | | | | | | | |
| Copper | | | | | | | | | | | |
| Boron | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | | 0.00 tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | |
|--|-------|----------|---------------|
| pH | 7.3 | | |
| Conductivity | 29.80 | mmhos/cm | |
| Sodium | 5724 | ppm | 249.065 meq/L |
| Potassium | 100 | ppm | 2.549 meq/L |
| Calcium | 2140 | ppm | 106.777 meq/L |
| Magnesium | 62 | ppm | 5.138 meq/L |
| SAR | 33.30 | | |
| SSP | 68.51 | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489729
Customer Sample ID: S-16 1'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|--|---------|-------|---------|----------------|---------------|-----|-----|------|-------|------------------------|
| pH | 8.3 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 3,450 | (-) | umho/cm | V. High | | | | | | |
| Nitrate-N | 3 | (-) | ppm** | CL* | | | | | | Fertilizer Recommended |
| Phosphorus | 4 | (50) | ppm | | | | | | | 30 lbs N/acre |
| Potassium | 115 | (125) | ppm | | | | | | | 50 lbs P2O5/acre |
| Calcium | 25,173 | (180) | ppm | | | | | | | 0 lbs K2O/acre |
| Magnesium | 319 | (50) | ppm | | | | | | | 0 lbs Ca/acre |
| Sulfur | 6,198 | (13) | ppm | | | | | | | 0 lbs Mg/acre |
| Sodium | 1,020 | (-) | ppm | | | | | | | 0 lbs S/acre |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | |
| pH | | | | 7.6 | | | | | | |
| Conductivity | | | | 18.09 mmhos/cm | | | | | | |
| Sodium | | | | 2556 ppm | 111.215 meq/L | | | | | |
| Potassium | | | | 89 ppm | 2.269 meq/L | | | | | |
| Calcium | | | | 1265 ppm | 63.103 meq/L | | | | | |
| Magnesium | | | | 344 ppm | 28.315 meq/L | | | | | |
| SAR | | | | 16.45 | | | | | | |
| SSP | | | | 54.28 | | | | | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

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<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489730
Customer Sample ID: S-16 2'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|--------------|-------|---------|---------------|------|-----|-----|------|-------|---------|-------------------------------|
| pH | 8.3 | (5.8) | - | Mod. Alkaline | | | | | | | |
| Conductivity | 2,260 | (-) | umho/cm | High | | | | | CL* | | Fertilizer Recommended |
| Nitrate-N | 4 | (-) | ppm** | | | | | | | | 30 lbs N/acre |
| Phosphorus | 5 | (50) | ppm | | | | | | | | 50 lbs P2O5/acre |
| Potassium | 142 | (125) | ppm | | | | | | | | 0 lbs K2O/acre |
| Calcium | 27,385 | (180) | ppm | | | | | | | | 0 lbs Ca/acre |
| Magnesium | 377 | (50) | ppm | | | | | | | | 0 lbs Mg/acre |
| Sulfur | 5,921 | (13) | ppm | | | | | | | | 0 lbs S/acre |
| Sodium | 328 | (-) | ppm | | | | | | | | |
| Iron | | | | | | | | | | | |
| Zinc | | | | | | | | | | | |
| Manganese | | | | | | | | | | | |
| Copper | | | | | | | | | | | |
| Boron | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | | |
| | pH | | | | | | | | | | 7.6 |
| | Conductivity | | | | | | | | | | 7.94 mmhos/cm |
| | Sodium | | | | | | | | | | 679 ppm 29.552 meq/L |
| | Potassium | | | | | | | | | | 86 ppm 2.187 meq/L |
| | Calcium | | | | | | | | | | 734 ppm 36.619 meq/L |
| | Magnesium | | | | | | | | | | 210 ppm 17.283 meq/L |
| | SAR | | | | | | | | | | 5.69 |
| | SSP | | | | | | | | | | 34.51 |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489731
Customer Sample ID: S-16 3'

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

Crop Grown: BLUESTEM (ESTABLISHMENT)

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|--|--------------|-------|---------|---------------|------|-----|-----|------|-------|---------|------------------------|
| pH | 8.1 | (5.8) | - | Mod. Alkaline | | | | | | | |
| Conductivity | 1,740 | (-) | umho/cm | High | | | | | CL* | | Fertilizer Recommended |
| Nitrate-N | 4 | (-) | ppm** | | | | | | | | 30 lbs N/acre |
| Phosphorus | 4 | (50) | ppm | | | | | | | | 50 lbs P2O5/acre |
| Potassium | 206 | (125) | ppm | | | | | | | | 0 lbs K2O/acre |
| Calcium | 29,762 | (180) | ppm | | | | | | | | 0 lbs Ca/acre |
| Magnesium | 432 | (50) | ppm | | | | | | | | 0 lbs Mg/acre |
| Sulfur | 5,552 | (13) | ppm | | | | | | | | 0 lbs S/acre |
| Sodium | 109 | (-) | ppm | | | | | | | | |
| Iron | | | | | | | | | | | |
| Zinc | | | | | | | | | | | |
| Manganese | | | | | | | | | | | |
| Copper | | | | | | | | | | | |
| Boron | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | | |
| | pH | | | | | | | | | | 7.7 |
| | Conductivity | | | | | | | | | | 4.11 mmhos/cm |
| | Sodium | | | | | | | | | | 158 ppm 6.866 meq/L |
| | Potassium | | | | | | | | | | 73 ppm 1.857 meq/L |
| | Calcium | | | | | | | | | | 611 ppm 30.510 meq/L |
| | Magnesium | | | | | | | | | | 147 ppm 12.084 meq/L |
| | SAR | | | | | | | | | | 1.49 |
| | SSP | | | | | | | | | | 13.38 |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489732
Customer Sample ID: S-17 0'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|--|--------------|-------|----------|-------------------|------|-----|-----|------|-------|------------------------|
| pH | 7.6 | (5.8) | - | Slightly Alkaline | | | | | | |
| Conductivity | 7,360 | (-) | umho/cm | V. High | | | | | | |
| Nitrate-N | 2 | (-) | ppm** | | | | | CL* | | |
| Phosphorus | 12 | (50) | ppm | | | | | | | |
| Potassium | 395 | (125) | ppm | | | | | | | |
| Calcium | 25,177 | (180) | ppm | | | | | | | |
| Magnesium | 166 | (50) | ppm | | | | | | | |
| Sulfur | 6,290 | (13) | ppm | | | | | | | |
| Sodium | 8,997 | (-) | ppm | | | | | | | |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | |
| | pH | 7.2 | | | | | | | | |
| | Conductivity | 89.30 | mmhos/cm | | | | | | | |
| | Sodium | 19478 | ppm | | | | | | | 847.602 meq/L |
| | Potassium | 414 | ppm | | | | | | | 10.601 meq/L |
| | Calcium | 3610 | ppm | | | | | | | 180.160 meq/L |
| | Magnesium | 213 | ppm | | | | | | | 17.534 meq/L |
| | SAR | 85.25 | | | | | | | | |
| | SSP | 80.27 | | | | | | | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489733
Customer Sample ID: S-17 1'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|--|--------------|-------|---------|---------------|------|-----|-----|------|-------|-------------------------|
| pH | 7.7 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 5,720 | (-) | umho/cm | V. High | | | | | | |
| Nitrate-N | 2 | (-) | ppm** | | | | | | | |
| Phosphorus | 4 | (50) | ppm | | | | | | | |
| Potassium | 151 | (125) | ppm | | | | | | | |
| Calcium | 18,255 | (180) | ppm | | | | | | | |
| Magnesium | 200 | (50) | ppm | | | | | | | |
| Sulfur | 6,398 | (13) | ppm | | | | | | | |
| Sodium | 4,935 | (-) | ppm | | | | | | | |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | |
| | pH | | | | | | | | | 7.3 |
| | Conductivity | | | | | | | | | 61.00 mmhos/cm |
| | Sodium | | | | | | | | | 11949 ppm 519.961 meq/L |
| | Potassium | | | | | | | | | 179 ppm 4.584 meq/L |
| | Calcium | | | | | | | | | 2355 ppm 117.523 meq/L |
| | Magnesium | | | | | | | | | 202 ppm 16.598 meq/L |
| | SAR | | | | | | | | | 63.49 |
| | SSP | | | | | | | | | 78.94 |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489734
Customer Sample ID: S-17 2'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478

979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|-----------------------|---------|-------|---------|---------------|------|-----|-----|------|-------|------------------------|
| pH | 8.3 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 5,140 | (-) | umho/cm | V. High | | | | | | Fertilizer Recommended |
| Nitrate-N | 2 | (-) | ppm** | | | | | | | 35 lbs N/acre |
| Phosphorus | 2 | (50) | ppm | | | | | | | 50 lbs P2O5/acre |
| Potassium | 114 | (125) | ppm | | | | | | | 0 lbs K2O/acre |
| Calcium | 32,538 | (180) | ppm | | | | | | | 0 lbs Ca/acre |
| Magnesium | 374 | (50) | ppm | | | | | | | 0 lbs Mg/acre |
| Sulfur | 6,417 | (13) | ppm | | | | | | | 0 lbs S/acre |
| Sodium | 2,892 | (-) | ppm | | | | | | | |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |

Detailed Salinity Test (Saturated Paste Extract)

| | | |
|--------------|-------|-------------------|
| pH | 7.9 | |
| Conductivity | 33.70 | mmhos/cm |
| Sodium | 7026 | ppm 305.758 meq/L |
| Potassium | 94 | ppm 2.401 meq/L |
| Calcium | 4081 | ppm 203.629 meq/L |
| Magnesium | 235 | ppm 19.304 meq/L |
| SAR | 28.96 | |
| SSP | 57.57 | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489735
Customer Sample ID: S-17 3'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|-----------------------|---------|-------|---------|---------------|------|-----|-----|------|-------|------------------------|
| pH | 8.6 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 2,600 | (-) | umho/cm | V. High | | | | | | CL* |
| Nitrate-N | 4 | (-) | ppm** | | | | | | | Fertilizer Recommended |
| Phosphorus | 2 | (50) | ppm | | | | | | | 30 lbs N/acre |
| Potassium | 57 | (125) | ppm | | | | | | | 50 lbs P2O5/acre |
| Calcium | 23,621 | (180) | ppm | | | | | | | 20 lbs K2O/acre |
| Magnesium | 363 | (50) | ppm | | | | | | | 0 lbs Ca/acre |
| Sulfur | 6,175 | (13) | ppm | | | | | | | 0 lbs Mg/acre |
| Sodium | 557 | (-) | ppm | | | | | | | 0 lbs S/acre |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre |

Detailed Salinity Test (Saturated Paste Extract)

| | | |
|--------------|----------------|--------------|
| pH | 8.0 | |
| Conductivity | 10.38 mmhos/cm | |
| Sodium | 1310 ppm | 57.007 meq/L |
| Potassium | 51 ppm | 1.308 meq/L |
| Calcium | 778 ppm | 38.804 meq/L |
| Magnesium | 365 ppm | 30.037 meq/L |
| SAR | 9.72 | |
| SSP | 44.83 | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

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<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489736
Customer Sample ID: S-17 4'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | | |
|--|---------|-------|---------|---------------|------|-----|-----|--------------|-------|------------------------|------------------------|------------------|
| pH | 8.6 | (5.8) | - | Mod. Alkaline | | | | | | | | |
| Conductivity | 1,900 | (-) | umho/cm | High | | | | | | | Fertilizer Recommended | |
| Nitrate-N | 7 | (-) | ppm** | | | | | | CL* | | | 25 lbs N/acre |
| Phosphorus | 3 | (50) | ppm | | | | | | | | | 50 lbs P2O5/acre |
| Potassium | 74 | (125) | ppm | | | | | | | | | 15 lbs K2O/acre |
| Calcium | 22,672 | (180) | ppm | | | | | | | | | 0 lbs Ca/acre |
| Magnesium | 449 | (50) | ppm | | | | | | | | | 0 lbs Mg/acre |
| Sulfur | 5,999 | (13) | ppm | | | | | | | | | 0 lbs S/acre |
| Sodium | 192 | (-) | ppm | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | |
| Boron | | | | | | | | | | | | |
| Limestone Requirement | | | | | | | | | | 0.00 tons 100ECCE/acre | | |
| Detailed Salinity Test (Saturated Paste Extract) | | | | | | | | | | | | |
| pH | | | | 8.1 | | | | | | | | |
| Conductivity | | | | 7.15 mmhos/cm | | | | | | | | |
| Sodium | | | | 515 ppm | | | | 22.404 meq/L | | | | |
| Potassium | | | | 50 ppm | | | | 1.287 meq/L | | | | |
| Calcium | | | | 623 ppm | | | | 31.102 meq/L | | | | |
| Magnesium | | | | 411 ppm | | | | 33.804 meq/L | | | | |
| SAR | | | | 3.93 | | | | | | | | |
| SSP | | | | 25.29 | | | | | | | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

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Report generated for:
Sheldon Hitchcock
Talon/LPE Oracle 21 Fed #4
408 W Texas Ave
Artesia, NM 88210

Outside TX County
Laboratory Number: 489737
Customer Sample ID: B6-1 0'

Crop Grown: BLUESTEM (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478

979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 7/24/2017

Printed on: 8/10/2017

Area Represented: 1 acres

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|-----------------------|---------|-------|---------|------------------------|------|-----|-----|------|-------|---------|
| pH | 8.0 | (5.8) | - | Mod. Alkaline | | | | | | |
| Conductivity | 1,390 | (-) | umho/cm | Moderate | | | | | | |
| Nitrate-N | 6 | (-) | ppm** | CL* | | | | | | |
| Phosphorus | 32 | (50) | ppm | | | | | | | |
| Potassium | 369 | (125) | ppm | | | | | | | |
| Calcium | 9,984 | (180) | ppm | | | | | | | |
| Magnesium | 174 | (50) | ppm | | | | | | | |
| Sulfur | 957 | (13) | ppm | | | | | | | |
| Sodium | 16 | (-) | ppm | | | | | | | |
| Iron | | | | | | | | | | |
| Zinc | | | | | | | | | | |
| Manganese | | | | | | | | | | |
| Copper | | | | | | | | | | |
| Boron | | | | | | | | | | |
| Limestone Requirement | | | | 0.00 tons 100ECCE/acre | | | | | | |

| Detailed Salinity Test (Saturated Paste Extract) | | | |
|--|---------------|--------------|--|
| pH | 7.7 | | |
| Conductivity | 2.67 mmhos/cm | | |
| Sodium | 29 ppm | 1.266 meq/L | |
| Potassium | 29 ppm | 0.743 meq/L | |
| Calcium | 667 ppm | 33.261 meq/L | |
| Magnesium | 21 ppm | 1.729 meq/L | |
| SAR | 0.30 | | |
| SSP | 3.42 | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Conductivity: Salinity levels are becoming elevated, monitor levels or remove salts with 10-15 inches of clean leach water.

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<http://soiltesting.tamu.edu/webpages/calculator.html>

July 25, 2017

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ORACLE 21 FED #4

Enclosed are the results of analyses for samples received by the laboratory on 07/20/17 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/qa/lab_accred_certif.html.


Cardinal Laboratories is accredited 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,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-1 0' (H701896-01)

| Chloride, SM4500Cl-B | | mg/kg | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-2 0' (H701896-02)

| Chloride, SM4500Cl-B | | mg/kg | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-3 0' (H701896-03)

| BTX 8021B | | mg/kg | Analyzed By: MS | | | | | | |
|----------------|--------|-----------------|-----------------|--------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.70 | 84.9 | 2.00 | 0.501 | |
| Toluene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.78 | 89.1 | 2.00 | 0.229 | |
| Ethylbenzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.97 | 98.6 | 2.00 | 0.535 | |
| Total Xylenes* | <0.150 | 0.150 | 07/21/2017 | ND | 5.90 | 98.4 | 6.00 | 0.304 | |
| Total BTX | <0.300 | 0.300 | 07/21/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 72-148

| TPH 8015M | | mg/kg | Analyzed By: MS | | | | | | |
|--------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 07/24/2017 | ND | 183 | 91.6 | 200 | 1.25 | |
| DRO >C10-C28 | <10.0 | 10.0 | 07/24/2017 | ND | 189 | 94.3 | 200 | 0.539 | |

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-3 0' (H701896-03)

| TPH 8015M | | | mg/kg Analyzed By: MS | | | | | | | |
|-------------------------------|--------|-----------------|-----------------------|--------------|----|------------|---------------|-----|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Surrogate: 1-Chlorooctane | 81.1 % | 28.3-164 | | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 76.9 % | 34.7-157 | | | | | | | | |

Sample ID: S-3 3' (H701896-04)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-4 0' (H701896-05)

| Chloride, SM4500Cl-B | | | mg/kg Analyzed By: AC | | | | | | | |
|----------------------|--------|-----------------|-----------------------|--------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | | |

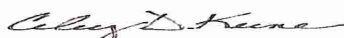
Sample ID: S-5 0' (H701896-06)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-6 0' (H701896-07)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-7 0' (H701896-08)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-8 0' (H701896-09)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-9 0' (H701896-10)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 80.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

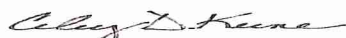
Sample ID: S-10 0' (H701896-11)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | <16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-11 0' (H701896-12)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | <16.0 | 16.0 | 07/21/2017 | ND | 432 | 108 | 400 | 3.64 | |

Sample ID: S-12 0' (H701896-13)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | <16.0 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

Sample ID: S-13 0' (H701896-14)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | <16.0 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

Sample ID: S-14 0' (H701896-15)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

Sample ID: S-15 0' (H701896-16)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 16.0 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-16 0' (H701896-17)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.70 | 84.9 | 2.00 | 0.501 | |
| Toluene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.78 | 89.1 | 2.00 | 0.229 | |
| Ethylbenzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.97 | 98.6 | 2.00 | 0.535 | |
| Total Xylenes* | <0.150 | 0.150 | 07/21/2017 | ND | 5.90 | 98.4 | 6.00 | 0.304 | |
| Total BTEX | <0.300 | 0.300 | 07/21/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 72-148

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 07/24/2017 | ND | 183 | 91.6 | 200 | 1.25 | |
| DRO >C10-C28 | <10.0 | 10.0 | 07/24/2017 | ND | 189 | 94.3 | 200 | 0.539 | |

Surrogate: 1-Chlorooctane 78.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 73.2 % 34.7-157

Sample ID: S-16 3' (H701896-18)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/20/2017
Reported: 07/25/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-17 0' (H701896-19)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.70 | 84.9 | 2.00 | 0.501 | |
| Toluene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.78 | 89.1 | 2.00 | 0.229 | |
| Ethylbenzene* | <0.050 | 0.050 | 07/21/2017 | ND | 1.97 | 98.6 | 2.00 | 0.535 | |
| Total Xylenes* | <0.150 | 0.150 | 07/21/2017 | ND | 5.90 | 98.4 | 6.00 | 0.304 | |
| Total BTEX | <0.300 | 0.300 | 07/21/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 72-148

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 07/24/2017 | ND | 183 | 91.6 | 200 | 1.25 | |
| DRO >C10-C28 | <10.0 | 10.0 | 07/24/2017 | ND | 189 | 94.3 | 200 | 0.539 | |

Surrogate: 1-Chlorooctane 81.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 77.3 % 34.7-157

Sample ID: S-17 4' (H701896-20)

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 320 | 16.0 | 07/21/2017 | ND | 448 | 112 | 400 | 0.00 | |

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Celey D. Keene, Lab Director/Quality Manager


Notes and Definitions

| | |
|-------|--|
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| 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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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 9 of 10

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|--------------------------|--|-------------------|--|------------------|--|--------|--|----------|--|----------|--|-------|--|------|--|-----|--|------|--|-----------|--|
| Company Name: Talon/LPE | | P.O. #: | | BILL TO | | ANALYSIS REQUEST | | | | | | | | | | | | | | | | | |
| Project Manager: S. Hitchcock | | Company: Cimarex | | | | | | | | | | | | | | | | | | | | | |
| Address: 408 W. Texas Ave. | | Attn: Christine Alderman | | | | | | | | | | | | | | | | | | | | | |
| City: Artesia | | Address: | | | | | | | | | | | | | | | | | | | | | |
| State: NM zip: 88210 | | | | | | | | | | | | | | | | | | | | | | | |
| Phone #: 575-746-8768 | | City: | | | | | | | | | | | | | | | | | | | | | |
| Fax #: 575-746-8905 | | State: | | | | | | | | | | | | | | | | | | | | | |
| Project #: 701162.092.01 | | Zip: | | | | | | | | | | | | | | | | | | | | | |
| Project Name: Oracle 21 Fed #4 | | Phone #: | | | | | | | | | | | | | | | | | | | | | |
| Project Location: C-21-25S-26E | | Fax #: | | | | | | | | | | | | | | | | | | | | | |
| Sampler Name: S. Hitchcock | | | | | | | | | | | | | | | | | | | | | | | |
| FOR LAB USE ONLY | | | | | | | | | | | | | | | | | | | | | | | |
| Lab I.D. | | Sample I.D. | | (G)RAB OR (C)OMP. | | # CONTAINERS | | MATRIX | | PRESERV. | | SAMPLING | | DATE | | TIME | | TPH | | BTEx | | Chlorides | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| H701884 | | 5-1 0' | | G | | 1 | | | | | | 7/12/17 | | 9:06 | | | | | | | | | |
| 2 | | 5-2 0' | | G | | 1 | | | | | | | | 9:02 | | | | | | | | | |
| 3 | | 5-3 0' | | G | | 1 | | | | | | | | 9:04 | | | | | | | | | |
| 4 | | 5-3 3' | | G | | 1 | | | | | | | | 11:00 | | | | | | | | | |
| 5 | | 5-4 0' | | G | | 1 | | | | | | | | 9:06 | | | | | | | | | |
| 6 | | 5-5 0' | | G | | 1 | | | | | | | | 9:08 | | | | | | | | | |
| 7 | | 5-6 0' | | G | | 1 | | | | | | | | 9:10 | | | | | | | | | |
| 8 | | 5-7 0' | | G | | 1 | | | | | | | | 9:12 | | | | | | | | | |
| 9 | | 5-8 0' | | G | | 1 | | | | | | | | 9:14 | | | | | | | | | |
| 10 | | 5-9 0' | | G | | 1 | | | | | | | | 9:16 | | | | | | | | | |

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| | | | | | | | |
|---|--|---|--|---|--|---|--|
| Relinquished By: _____ | | Date: 7-19-17 | | Received By: _____ | | Date: 7-20-17 | |
| Relinquished By: _____ | | Time: 1:00 | | Received By: _____ | | Time: 3:05 | |
| Delivered By: (Circle One) _____ | | 4:48 | | Sample Condition | | CHECKED BY: (Initials) _____ | |
| Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| Fax Result: _____ | | Yes <input type="checkbox"/> No <input type="checkbox"/> | | Add'l Phone #: _____ | | Add'l Fax #: _____ | |
| REMARKS: _____ | | | | | | | |

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

| | | |
|--------------------------------|------------------------|--------------------------|
| Company Name: Talon/LPE | | P.O. #: |
| Project Manager: S. Hitchcock | | Company: Cimarex |
| Address: 408 W. Texas Ave. | | Attn: Christine Alderman |
| City: Artesia | State: NM zip: 88210 | Address: |
| Phone #: 575-746-8768 | Fax #: 575-746-8905 | City: |
| Project #: 701162.092.01 | Project Owner: Cimarex | State: |
| Project Name: Oracle 21 Fed #4 | | Zip: |
| Project Location: C-21-25S-26E | | Phone #: |
| Sampler Name: S. Hitchcock | | Fax #: |

FOR LAB USE ONLY

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| 17101896 | 11 | 5-10 0' | G | 1 | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX | | | | | | PRESERV. | SAMPLING | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 5-10 0' | 5-11 0' | 5-12 0' | 5-13 0' | 5-14 0' | 5-15 0' | 5-16 0' | 5-16 3' | 5-17 0' | 5-17 4' | G | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

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Relinquished By:

Date:

Received By:

Time:

Relinquished By:

Date:

Received By:

Time:

Delivered By: (Circle One) 4.92

Time:

Received By:

CHECKED BY:

Sampler - UPS - Bus - Other:

Time:

Received By:

CHECKED BY:

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

1652022

July 28, 2017

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ORACLE 21 FED #4

Enclosed are the results of analyses for samples received by the laboratory on 07/25/17 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited 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,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 07/25/2017
Reported: 07/28/2017
Project Name: ORACLE 21 FED #4
Project Number: 701162.092.01
Project Location: CIMAREX- C-21-25S-26E

Sampling Date: 07/06/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S-17 8' (H701941-01)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|----------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Chloride | 96.0 | 16.0 | 07/26/2017 | ND | 432 | 108 | 400 | 0.00 | |

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

| | |
|-----|--|
| ND | Analyte NOT DETECTED at or above the reporting limit |
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by 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 |

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

151041

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: Cimarex

Attn: Christine Fleckenstein

Address:

City:

State:

Phone #:

Fax #:

Project Manager: S. Hitchcock

Address: 408 W. Texas Ave.

City: Artesia

Phone #: 575-746-8768

Fax #: 575-746-8905

Project #: 701162, 09201

Project Owner: Cimarex

Project Name: Cimarex 21 Fed #4

Project Location: C-21-255-26E

Sampler Name: S. Hitchcock

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H701941

5-17 8

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER : None

DATE TIME
7/6/17 12:50

Chlorides

Relinquished By:

Relinquished By:

Date: 7-25-17

Time: 14:15

Date: 7-25-17

Time: 4:30

Received By:

Received By:

Phone Result:

REMARKS:

Yes No

Yes No

Add'l Phone #:

Add'l Fax #:

Sample Condition

Cool Intact

Yes No

Yes No

CHECKED BY:

(Initials)

Delivered By: (Circle One)

Sampler - UPS - Bus - Other: