



11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

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*Transmittal Letter*

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November 11, 2021

RE: Closure report not recorded in OCD Imaging  
Incident ID: nCH1903355030  
AEP #: 12082018-1530-dc  
Location: Release along layflat west of Dagger State Unit 2H  
Frac for AO 6 501/502

NMOCD:

During an internal audit of closure report status Advance Energy Partners (AEP) identified eight closure reports not recorded in OCD Imaging. AEP is resubmitting these closure reports via the online fee portal.

The remediation and closure report for Incident 12082018-1530-dc was completed on March 07, 2019. Since the completion of the remediation and closure report, AEP conducted a depth-to-water determination program discussed below.

**Depth to Water Determination**

In September/October 2021, Advance Energy initiated a depth-to-water boring program to determine whether depth-to-water is present in the upper 100-feet of the surface soil profile. Nine (9) boreholes were advanced between 103 to 106-feet below ground surface, rested for at least 72-hours, and gauged for the presence of groundwater. The nearest boring is located 0.41-feet south-southeast of the release. The boring is identified as MISC-402 (CP-1881). No groundwater was detected within the upper 100-feet. Plate 2 (revised) is an updated depth-to-water map. The driller log is attached.

As presented in the attached closure report, soil sample confirmation samples for the remediated area meets Closure Criteria per Table 1 of 19.15.29 and 19.15.29.13 NMAC for areas off-site. The Closure Criteria is reproduced below.

- Upper 4-feet
  - Chloride < 600 mg/kg
  - TPH (GRO + DRO + MRO) < 100 mg/kg
  - BTEX < 50 mg/kg
  - Benzene < 10 mg/kg
- Below 4-feet
  - Chloride < 20,000 mg/kg
  - TPH (GRO + DRO + MRO) < 2,500 mg/kg
  - TPH (GRO + DRO) < 1,000 mg/kg
  - BTEX < 50 mg/kg
  - Benzene < 10 mg/kg

AEP respectfully asks NMOCD for closure of the regulatory file. The C-141 Closure Form is attached.

Sincerely,



Andrew Parker  
Environmental Scientist

11/11/2021

## Andrew Parker

---

**From:** Andrew Parker <andrew@rthicksconsult.com>  
**Sent:** Friday, March 8, 2019 3:07 PM  
**To:** bradford.billings@state.nm.us; ocd-district1spills@state.nm.us  
**Cc:** 'David Harwell'; Mann, Ryan  
**Subject:** 1RP-5313 Closure Report - Advance Energy Partners DSU #2H  
**Attachments:** Closure Report 1RP-5313 Compiled.pdf

Mr. Billings:

Attached is the characterization, remediation, and closure report for 1RP-5313 DSU #2H produced water release. Please consider this submittal as the final closure report that meets the 90-day submittal period. The release occurred on December 8, 2018.

Please contact me with any questions.

Thank you,

Andrew Parker  
R.T. Hicks Consultants  
Durango Field Office  
970-570-9535

|                |               |
|----------------|---------------|
| Incident ID    | nCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID |               |

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

|  |   |
|--|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? (Plates 2 and 3)   | <u>368</u> (ft bgs)   |
| Did this release impact groundwater or surface water?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? (Plate 5)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? (Plates 5)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? (Plate 6)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? (Plates 4) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? (Plates 4)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? (Plate 4)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? (Plate 7)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? (Plate 8)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? (Plate 9)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? (Plate 10)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

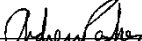
State of New Mexico  
Oil Conservation Division

Page 4

|                |               |
|----------------|---------------|
| Incident ID    | nCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID |               |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Andrew Parker Title: Env. Scientist

Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

|                |               |
|----------------|---------------|
| Incident ID    | nCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID |               |

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Andrew Parker Title: Env. Scientist

Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

|                |               |
|----------------|---------------|
| Incident ID    | nCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID |               |

## Closure

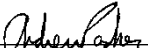
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Andrew Parker Title: Env. Scientist


Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

### OCD Only

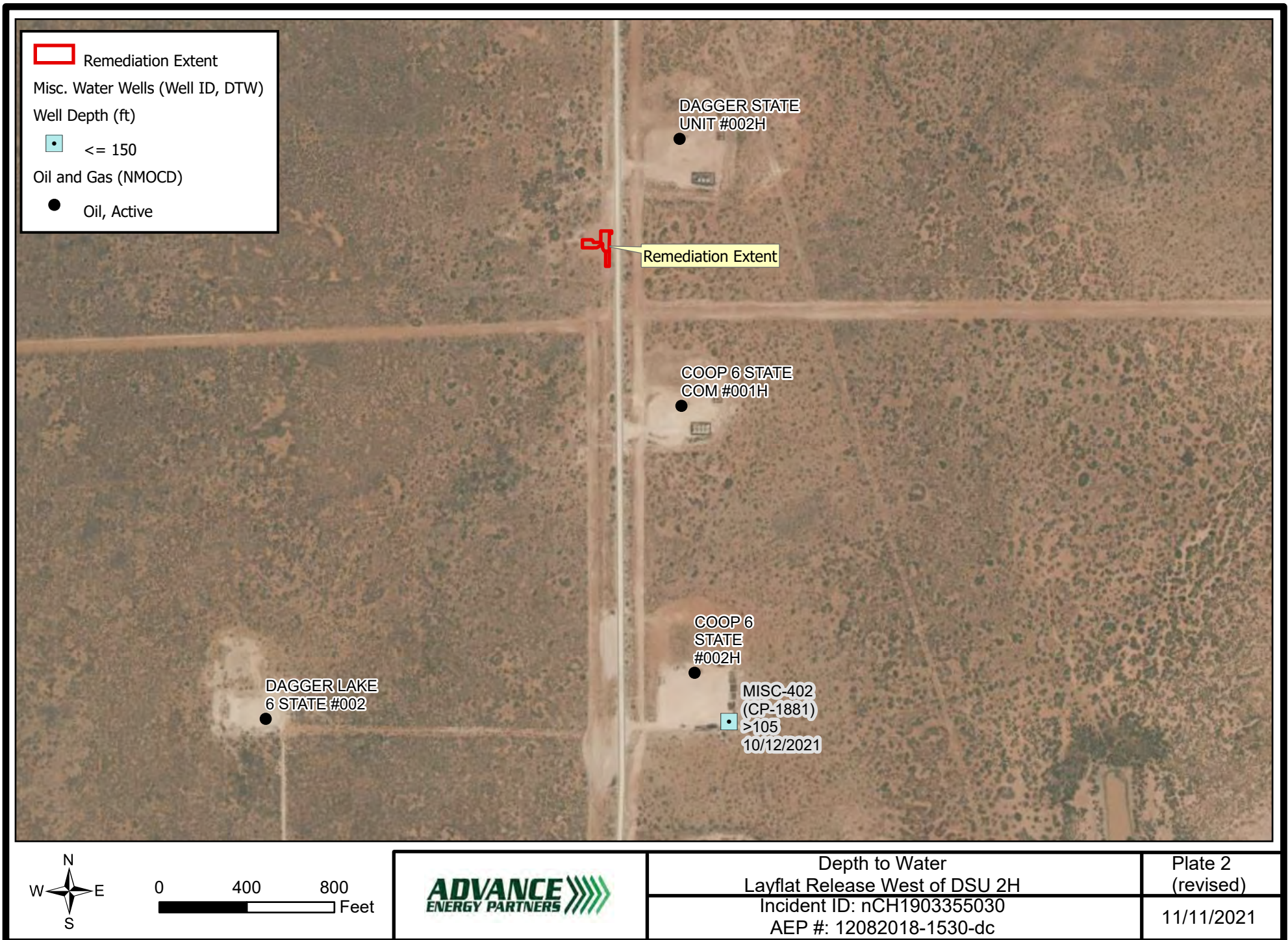
Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:  Date: 01/18/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv









2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

10/29/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record CP-1881 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, CP-1881 Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

USE DII NOV 1 2021 PM4:43



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

|   |   |                              |   |   |   |  |                                      |                          |
|---|---|------------------------------|---|---|---|--|--------------------------------------|--------------------------|
| 1. GENERAL AND WELL LOCATION  | OSE POD NO. (WELL NO.)<br>POD1 (TW-1)   |                              | WELL TAG ID NO.<br>n/a                                  |   | OSE FILE NO(S).<br>CP-1881                              |  |                                      |                          |
|   | WELL OWNER NAME(S)<br>Advanced Energy Partners  |                              |   |   | PHONE (OPTIONAL)<br>832.672.4700                        |  |                                      |                          |
|   | WELL OWNER MAILING ADDRESS<br>11490 Westheimer Rd. Stuit 950  |                              |   |   | CITY<br>Houston   | STATE<br>TX  | ZIP<br>77077                         |                          |
|   | WELL LOCATION (FROM GPS)  | DEGREES<br>LATITUDE<br>32    | MINUTES<br>25   | SECONDS<br>22 N   | * ACCURACY REQUIRED: ONE TENTH OF A SECOND              |  |                                      |                          |
|   |   | LONGITUDE<br>103             | 36  | 12 W  | * DATUM REQUIRED: WGS 84                                |  |                                      |                          |
| DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE<br>NE SE NE Sec. 06 T22S R33E |   |                              |   |   |   |  |                                      |                          |
| 2. DRILLING & CASING INFORMATION  | LICENSE NO.<br>1249   |                              | NAME OF LICENSED DRILLER<br>Jackie D. Atkins            |   |   | NAME OF WELL DRILLING COMPANY<br>Atkins Engineering Associates, Inc. |                                      |                          |
|   | DRILLING STARTED<br>10/12/2021  | DRILLING ENDED<br>10/12/2021 | DEPTH OF COMPLETED WELL (FT)<br>temporary well material |   | BORE HOLE DEPTH (FT)<br>105                             | DEPTH WATER FIRST ENCOUNTERED (FT)<br>n/a                            |                                      |                          |
|   | COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)   |                              |   |   |   | STATIC WATER LEVEL IN COMPLETED WELL (FT)<br>n/a                     |                                      |                          |
|   | DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:  |                              |   |   |   |  |                                      |                          |
|   | DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger |                              |   |   |   |  |                                      |                          |
|   | DEPTH (feet bgl)<br>FROM TO   |                              | BORE HOLE<br>DIAM.<br>(inches)                          | CASING MATERIAL AND/OR<br>GRADE<br>(include each casing string, and<br>note sections of screen) | CASING<br>CONNECTION<br>TYPE<br>(add coupling diameter) | CASING<br>INSIDE DIAM.<br>(inches)                                   | CASING WALL<br>THICKNESS<br>(inches) | SLOT<br>SIZE<br>(inches) |
|   | 0 105   |                              | ±6.5  | Boring- HSA   | --  | --   | --                                   | --                       |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
| 3. ANNULAR MATERIAL   | DEPTH (feet bgl)<br>FROM TO   |                              | BORE HOLE<br>DIAM. (inches)                             | LIST ANNULAR SEAL MATERIAL AND<br>GRAVEL PACK SIZE-RANGE BY INTERVAL                            |   | AMOUNT<br>(cubic feet)   | METHOD OF<br>PLACEMENT               |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |
|   |   |                              |   |   |   |  |                                      |                          |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

|          |                 |             |
|----------|-----------------|-------------|
| FILE NO. | POD NO.         | TRN NO.     |
| LOCATION | WELL TAG ID NO. | PAGE 1 OF 2 |

|   | DEPTH (feet bgl)  |           | THICKNESS<br>(feet)   | COLOR AND TYPE OF MATERIAL ENCOUNTERED -<br>INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES<br>(attach supplemental sheets to fully describe all units) | WATER<br>BEARING?<br>(YES / NO) | ESTIMATED<br>YIELD FOR<br>WATER-<br>BEARING<br>ZONES (gpm) |  |
|---|---|-----------|---|--|---------------------------------|--|--|
|   | FROM  | TO        |   |  |                                 |  |  |
| <b>4. HYDROGEOLOGIC LOG OF WELL</b>   | 0   | 14        | 14  | Sand, fine-grained, poorly graded with Caliche, Brown  | Y    ✓ N                        |  |  |
|   | 14  | 19        | 5   | Caliche, consolidated with fin-grained sand, White/Tan   | Y    ✓ N                        |  |  |
|   | 19  | 24        | 5   | Sand, fine-grained, poorly graded with Caliche, Reddish Brown  | Y    ✓ N                        |  |  |
|   | 24  | 44        | 20  | Sand, fine-grained, poorly graded with clay, Reddish Brown   | Y    ✓ N                        |  |  |
|   | 44  | 64        | 20  | Sand, fine-grained, poorly graded with clay, Brown Tan   | Y    ✓ N                        |  |  |
|   | 64  | 105       | 41  | Sand, fine-grained, poorly graded with clay, Brown   | Y    ✓ N                        |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   |   |           |   |  | Y    N                          |  |  |
|   | METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:<br><input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:   |           |   |  |                                 | TOTAL ESTIMATED<br>WELL YIELD (gpm):                 0.00  |  |
|   | <b>5. TEST; RIG SUPERVISION</b>   | WELL TEST | TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD. |  |                                 |  |  |
| MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. |   |           |   |  |                                 |  |  |
| PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:<br>Shane Eldridge, Carmelo Trevino, Cameron Pruitt  |   |           |   |  |                                 |  |  |
| <b>6. SIGNATURE</b>   | THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING: |           |   |  |                                 |  |  |
|   | SIGNATURE OF DRILLER / PRINT SIGNEE NAME  |           |   | DATE   |                                 |  |  |

|                      |                |  |  |
|----------------------|----------------|--|--|
| FOR OSE INTERNAL USE |                | WR-20 WELL RECORD & LOG (Version 06/30/2017) |  |
| FILE NO.             | POD NO.        | TRN NO.                                      |  |
| LOCATION             | WELL TAG ID NO | PAGE 2 OF 2                                  |  |






# CP-1881\_OSE\_Well Record and Log-forsign

Final Audit Report

2021-10-29

|                 |  |
|-----------------|--|
| Created:        | 2021-10-29                                   |
| By:             | Lucas Middleton (lucas@atkinseng.com)        |
| Status:         | Signed                                       |
| Transaction ID: | CBJCHBCAABAAQ3vIH-svpKXba6sweCTSv6bY9FHI1cHt |

## "CP-1881\_OSE\_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-10-29 - 3:53:42 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-10-29 - 3:54:01 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-10-29 - 4:18:46 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-10-29 - 4:19:17 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2021-10-29 - 4:19:17 PM GMT

OSE DIT NOU 1 2021 PM 4:44



Adobe Sign



# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-1881-POD1

Well owner: Advanced Energy Partners

Phone No.: 832.672.4700

Mailing address: 11490 Westheimer Rd. Suite 950

City: Houston

State: Texas

Zip code: 77077

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Lupe Leyba
- 4) Date well plugging began: 10/14/2021 Date well plugging concluded: 10/14/2021
- 5) GPS Well Location: Latitude: 32 deg, 25 min, 22 sec  
Longitude: 103 deg, 36 min, 12 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 105 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 07/08/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DT NOV 1 2021 PM 4:44



- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

| <u>Depth</u><br>(ft bgl) | <u>Plugging Material Used</u><br>(include any additives used) | <u>Volume of Material Placed</u><br>(gallons) | <u>Theoretical Volume of Borehole/ Casing</u><br>(gallons) | <u>Placement Method</u><br>(tremie pipe, other) | <u>Comments</u><br>("casing perforated first", "open annular space also plugged", etc.) |
|--------------------------|---|---|--|---|---|
| 0-10'                    | Hydrated Bentonite  | 15.6 gallons                                  | 15 gallons   | Augers  |   |
| 10'-110'                 | Drill Cuttings  | Approx. 151 gallons                           | 151 gallons  | Boring  |   |

| MULTIPLY    |   | BY     |   | AND OBTAIN |
|-------------|---|--------|---|------------|
| cubic feet  | x | 7.4805 | = | gallons    |
| cubic yards | x | 201.97 | = | gallons    |

### III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

*Jack Atkins*

Signature of Well Driller

10/27/2021

Date






# DATE\_\_WD-11 Plugging Record-forsign

Final Audit Report

2021-10-29

|                 |  |
|-----------------|--|
| Created:        | 2021-10-29                                   |
| By:             | Lucas Middleton (lucas@atkinseng.com)        |
| Status:         | Signed                                       |
| Transaction ID: | CBJCHBCAABAAIR6dClvgQcGMZKORwRcBWHfk6EYZjwn4 |

## "DATE\_\_WD-11 Plugging Record-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-10-29 - 3:51:59 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-10-29 - 3:54:13 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-10-29 - 4:18:25 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-10-29 - 4:18:39 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
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Adobe Sign

March 7, 2019

## **1RP-5313 Characterization & Closure Report Dagger State Unit No. 002H**



*Sample Trenching at Point of Release*

**Prepared for  
Advance Energy Partners Hat Mesa LLC  
Houston, Texas**

**Prepared by  
R.T. Hicks Consultants, Ltd.  
Albuquerque, New Mexico**

## R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996  
Artesia ▲ Carlsbad ▲ Durango ▲ Midland

March 7, 2018

NMOCD District 1 (vacant)  
District 1 - HOBBS  
1625 N. French Drive  
Hobbs, New Mexico 88240  
(575) 370-3180 Ext. 111  
Via Email:  
ocd-district1spills@state.nm.us

Bradford Billings  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
Via Email:  
bradford.billings@state.nm.us; emnrd-

RE: 1RP-5313 – Dagger State Unit No. 002H  
Advance Energy Partners Hat Mesa, LLC  
Characterization and Closure Report

NMOCD:

R.T. Hicks Consultants submits this characterization and closure report on the behalf of Advance Energy Partners Hat Mesa, LLC (Advance Energy).

Characterization and remediation began on December 08, 2018 and was completed by February 22, 2019. The C-141 including the Characterization and Closure Forms is attached. We respectfully ask NMOCD for closure of the regulatory file.

Hick Consultants relied on 19.15.29 NMAC for characterization, remediation, and closure reporting for the Dagger State Unit No. 002H (DSU 2H) treated produced water transfer line release.

The report is divided into three sections:

- I. Initial Response
- II. Characterization
- III. Remediation and Closure

### *Plates*

- Plate 1 – Site Map
- Plates 2 through 10 – As labeled on the C-141 Characterization Checklist
- Plate 11 – Initial Characterization EM Survey and Sample Results
- Plate 12 – Excavation Extent Relative to Initial Release Extent
- Plate 13 - Excavation Confirmation Sample Results

March 7, 2019  
Page 10

DSU 2H Release

*Tables*

- Table 1 – Nearby OSE Well Summary
- Table 2 – EM Survey and Initial Sampling Data
- Table 3 – Final Excavation Confirmation Sampling Data

*Appendices*

- Appendix A – OSE Well Logs
- Appendix B – EM Survey Calibration Data
- Appendix C - Laboratory Certificate of Analyses

R.T. Hicks Consultants, LTD



March 7, 2019  
Page 10

DSU 2H Release

## I. Initial Response

The release occurred on December 08, 2018 along a treated produced water transfer line (Plate 1) located at N 32.428738, W 103.604459 (NAD 83) on State Land. Flow was shutoff within 10 minutes of release as Select Energy personnel was on location at the time of the initial release. The layflat line was repaired within 40 minutes. Initial volume of release was estimated at less than 20 barrels. The release did not impact surface or groundwater.

The release occurred on silty sand surface soils. Free standing liquid quickly soaked into the sand. Within 15 hours, removal of surface soils within the upper 2-feet of soil column along the east-west extent of the release was excavated and temporarily stockpiled. Near surface soils along north-south release extent (Figure 1), which is along a buried pipeline, was excavated to a depth of a few inches.



**Figure 1: Initial release response excavation along the north-south pipeline. Stockpiled soil is visible photo left. GPS: 32.4284833 N, -103.6045694 W**

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

## II. Characterization

The following sections address items as described in 19.15.29.11.A, paragraphs 1- 4. Please refer to the C-141 characterization checklist for additional setback criteria and verification (Plates 2-10).

### 1. Site Map

Horizontal extent was determined by wet soil from the release and an electromagnetic survey (EM Survey) with a field reading of 20 mS/m (30 mS/m at 25° C.)<sup>1</sup>. Plate 1 shows the release extent relative to the release point, produced water transfer line, and a subsurface pipeline. A north-south access road easement bounds the release to east.

### 2. Depth to Ground Water

Most recent depth to water data was queried from the USGS and New Mexico Office of the State Engineer (OSE) online databases (Plate 2). Spatial analysis shows:

- The nearest water well is located 1.9-miles northeast of the release (OSE CP-00854) with a depth to water of 600-feet.
- The next two nearest water wells are located
  - 2.1-miles north-northeast (USGS-14980) with a depth to water of 178.75-feet.
  - 2.2-miles east-northeast (OSE CP-01356) with a depth to water of 555 feet.

Review of well logs available from the New Mexico Office of the State Engineer (OSE) online database (see Table 1, below) shows that the depth to the top of the water-bearing zone exceeds 700 feet below land surface, as shown in the “top of water bearing strata” column. Appendix A contains well logs available online from the OSE.

**Table 1: OSE Water Well Log Data Summary**

| POD Number     | Date      | Top of Water Bearing Strata | Bottom of Water Bearing Strata | Depth to Water | Source   | Height Above Confining Layer |
|----------------|-----------|-----------------------------|--------------------------------|----------------|----------|------------------------------|
|                |           | Feet                        | Feet                           | Feet           |          | Feet                         |
| CP 00854       | 6/22/1996 | 755                         | 890                            | 600            | Artesian | 155                          |
| CP 01349 POD 1 | 7/18/2014 | 990                         | 1188                           | 572            | Artesian | 418                          |
| CP 01355 POD 1 | 7/29/2014 | 925                         | 1185                           | 582            | Artesian | 343                          |
| CP 01356 POD 1 | 8/9/2014  | 765                         | 1092                           | 555            | Artesian | 210                          |
| CP 01357 POD 1 | 8/26/2014 | 945                         | 1286                           | 578            | Artesian | 367                          |

<sup>1</sup> See Appendix B for a discussion on EM Survey and calibration curves.

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

OSE well logs show that the nearby wells have a minimum of 155 feet of pressure head above the confining layer. It is important to recognize that at CP-00854 ground water is at a depth of 755 feet and confining pressure causes the water column to rise 155 feet for a perceived depth to water of 600 feet bgs.

We recognize that thin water-bearing units above the regional water-bearing zone may not have been recorded by the well drillers. However, more shallow water-bearing zones would be sandstone units within the Dockum Group redbeds and, like the regional water-bearing zone, would be under artesian pressure.

Ground water flow is to the southwest as demonstrated on the potentiometric map (Plate 3). We relied on the USGS water wells to generate the potentiometric surface. Regionally, USGS water wells show that ground water is within the Santa Rosa and Chinle Formation.

The potentiometric surface indicates that the depth to water, which is under artesian flow, is approximately 368 feet below ground surface, where  
 $368 \text{ feet} = 3688 \text{ ft surface elevation} - 3320 \text{ ft potentiometric surface}.$

### **3. Wellhead Protection Area**

Plate 4 shows that the release extent is not:

- Within incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within ½-mile private and domestic water sources (wells and springs).
- Within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes
- Within 1000 feet of any other fresh water well or spring

### **4. Distance to Nearest Significant Water Course**

Plate 5 shows that the release extent is not:

- Within ½ mile of any significant water course.
- Within 300 feet of a continuously flowing watercourse or any other significant watercourse.
- Within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

### **5. Soil/Waste Characteristics**

The release occurred in an area where depth to water is greater than 100 ft below ground surface (bgs) and within:

- A pipeline ROW that is considered in-use for oil and gas operations, and

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

- Pasture land not in-use for oil and gas operations.

Advance Energy elected to reclaim (not in-use) all impacted soils rather than to restore the surface for areas in-use.

According to Table 1 19.15.29 NMAC, closure criteria limits are as follows:

| <b>Table 1<br/>19.15.29 NMAC</b> |                                 | <b>Chloride</b> | <b>GRO+DRO</b> | <b>TPH+Ext</b> | <b>BTEX</b> | <b>Benzene</b> |
|----------------------------------|---------------------------------|-----------------|----------------|----------------|-------------|----------------|
| <b>DTW &gt; 100ft</b>            |                                 | (mg/kg)         | (mg/kg)        | (mg/kg)        | (mg/kg)     | (mg/kg)        |
| <b>Closure Criteria</b>          | <b>0-4 ft<br/>(not in-use)</b>  | <b>600</b>      | <b>1,000</b>   | <b>2,500</b>   | <b>50</b>   | <b>10</b>      |
| <b>Closure Criteria</b>          | <b>&gt;4 ft or<br/>"in-use"</b> | <b>20,000</b>   | <b>1,000</b>   | <b>2,500</b>   | <b>50</b>   | <b>10</b>      |

Soil sampling and an electromagnetic survey (EM Survey) was employed to delineate the release extent. As discussed in Appendix B and verified on Plate 11, an electrical conductivity (EC) reading from the EM Survey shows that an EC reading of >30 mS/m (temperature corrected to 25 deg. C. (TC)) correlates with a chloride concentration > 600 mg/kg. Therefore, an EC reading of >30 mS/m was used to delineate the horizontal extent.

Initial soil samples were obtained either via a grab sample or using a backhoe (trench sample, Figure 2) for testing of chloride. Soil samples were either field titrated or submitted for laboratory analysis. Table 2 shows the analytical results of the initial characterization sampling. Soil samples listed in Table 2 are categorized under their corresponding grid number as shown on Plate 12. Plate 12 also shows the initial release extent relative to the excavation extent during remedial actions.

The Laboratory Certificate of Analyses is located in Appendix C.



Initial sampling showed that chloride in the upper 4-feet exceeded the 600 mg/kg closure limit. "S3 Trench" showed the highest chloride concentration of 18,000 mg/kg from 6 to 7 feet bgs; at 9-feet bgs, chloride

**Figure 2: Sample Trench 7. Total depth 6-ft. Photo viewing west. GPS: 32.4286333 N , -103.6049194 W**

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

decreased to 64 mg/kg. No soil sample exceeded the 20,000 mg/kg chloride closure limit.

Trench sampling and excavation showed the lithology as:

0 - 4.5 ft : Silty Sand, medium brown, loose.

5 - 9 ft : Caliche, white, dense.

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March 7, 2019  
Page 10

DSU 2H Release

### III. Remediation and Closure

#### 1. Excavation Protocol

Excavation extent of impacted soils was determined by chloride concentrations via laboratory confirmation via EPA Method 200.1 or SM4500. TPH, BTEX, and Benzene were below Closure Criteria Limits and are not discussed further.

All surfaces were remediated in accordance with 19.15.29.13 NMAC. Advance Energy elected to reclaim surface soils within the pipeline right-of-way rather than to defer and restore the area as in-use (Figure 3). Surface soils that were reclaimed to Table 1 19.15.29

NMAC limits with the upper 4-feet of soil containing less than 600 mg/kg chloride. Below 4-feet, chloride limit is 20,000 mg/kg.

Five-point composite soil samples were collected at the north, south, east, and west walls of the excavation from 0 to 4 feet. If soil sample results exceeded 600 mg/kg chloride at

the excavation walls, the excavation wall was extended horizontally and resampled. Horizontal excavation continued until subsequent sampling showed chloride below 600 mg/kg in the upper 4-feet. Excavation depth was determined by 5-point composite sampling of the base. Vertical excavation continued until the base of the excavation exhibited chloride less than 600 mg/kg at 4.5 feet bgs. At all grid locations, excavation depth was at least 4.5-feet bgs, with the exception of Grid 1 where the base at 2-feet exhibit 48 mg/kg chloride (Plate 11). Excavated soil was transported to Lea Land, Inc. or R-360 for proper disposal. Clean backfill soil was purchased from the land owner under a Surface Use Agreement.



**Figure 3: Excavation along the pipeline ROW. The pipeline is 4.5 feet below ground surface. Photograph is viewing north from the southern edge of Grid 4. Grid 5 is visible photo top right. GPS 32.428561 N, -103.6045389 W.**

#### 2. Remediation Activities

The excavation extent is irregular in shape and covers a surface area of 802 yards with a volume of 3,608 cu. yds. Five-point composite confirmation sampling shows that the north, south, east, and west walls of each grid from 0 to 4 ft below ground surface (bgs) are less than 600 mg/kg chloride – with a maximum concentration of 544 mg/kg at Grid 6 South Wall. Five-point composite sample at

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

the base (4.5 ft gbs) of each grid shows that chloride is below 20,000 mg/kg – with a maximum concentration of 11,200 mg/kg at Grid 4.

Table 3 is a summary of analytical results showing final confirmation for the excavation walls and bases.

Figures 4 and 5, below, are photographs of the excavation prior to backfilling.



**Figure 4: Photo of complete excavation prior to backfilling. Photo is viewing east from Grid 8 west wall. Excavation depth is 4.5-feet. GPS: 32.4286333 N, -103.6049278 W**



**Figure 5: Photograph of excavation along pipeline. Pipeline is at the excavation wall, photo right. Photo is viewing south from the north edge of Grid 2. GPS: 32.4285778 N, -103.6049417 W**

R.T. Hicks Consultants, LTD

March 7, 2019  
Page 10

DSU 2H Release

The excavation was backfilled with clean fill dirt (Figure 6). Final surface seeding and contouring will occur during the next favorable growing season in Spring 2019.



**Figure 6: Backfilled excavation. Photo is viewing north from the south end of Grid 1. GPS: 32.4281806 N, -103.6044833 W**

Please contact me with any questions at [andrew@rthicksconsult.com](mailto:andrew@rthicksconsult.com) or 970-570-9535.

Sincerely,  
R.T. Hicks Consultants, Ltd.



Andrew Parker  
Sr. Env. Specialist

Copy: David Harwell (DHarwell@advanceenergypartners.com)  
Advance Energy Partners Hat Mesa, LLC  
Ryan Mann (rmann@slo.state.nm.us); State Land Office

R.T. Hicks Consultants, LTD

# **C-141**

## **Including Closure Form**

**R.T. Hicks Consultants, Ltd.**  
901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

|                |               |
|----------------|---------------|
| Incident ID    | NCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID | pCH1903356077 |

## Release Notification

### Responsible Party

|   |                                 |  |
|---|---------------------------------|--|
| Responsible Party: Advance Energy Partners Hat Mesa, LLC                    | OGRID                           | 372417                                 |
| Contact Name: David Harwell   | Contact Telephone: 832-672-4604 |  |
| Contact email: DHarwell@advanceenergypartners.com                           | Incident #                      | NCH1903355030 BSU 2H @<br>30-025-41178 |
| Contact mailing address: 11490 Westheimer Rd. STE 950,<br>Houston, TX 77077 |                                 |  |

### Location of Release Source

Latitude N 32.428738 Longitude W 103.604459  
(NAD 83 in decimal degrees to 5 decimal places)

|   |                                   |
|---|-----------------------------------|
| Site Name: BSU 2H                               | Site Type: Transfer pipe          |
| Date Release Discovered : Dec. 08, 2018 (15:30) | API# (if applicable) 30-025-41178 |

| Unit Letter | Section | Township | Range | County     |
|-------------|---------|----------|-------|------------|
| P           | 31      | 21 S.    | 33 E. | Lea County |

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

|  |  |   |
|--|--|---|
| <input type="checkbox"/> Crude Oil                 | Volume Released (bbls)   | Volume Recovered (bbls)   |
| <input checked="" type="checkbox"/> Produced Water | Volume Released (bbls): 20   | Volume Recovered (bbls)   |
| Treated PW   | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate                | Volume Released (bbls)   | Volume Recovered (bbls)   |
| <input type="checkbox"/> Natural Gas               | Volume Released (Mcf)  | Volume Recovered (Mcf)  |
| <input type="checkbox"/> Other (describe)          | Volume/Weight Released (provide units)   | Volume/Weight Recovered (provide units)                             |

#### Cause of Release

Puncture/tare in layflat treated produced water transfer line. Transfer line originates at the Dagger State frac pond and terminates at the 806 Frac on the 501/502 pad. Flow was shutoff within 10 minutes of release as Select Energy personnel was on location at the time of the initial release. The layflat line was repaired with 40 minutes.



State of New Mexico  
Oil Conservation Division

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

|   |  |
|---|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?                          |  |

**Initial Response**

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

|  |                                 |
|--|---------------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped.<br><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.<br><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.<br><input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.  |                                 |
| If all the actions described above have <u>not</u> been undertaken, explain why:<br>The release was in silty sand surface soils. Free standing liquid quickly soaked into the sand. Within 15 hours, removal of surface soils within the upper 2-feet of soil column along the east-west extent of the release was excavated and temporarily stockpiled. Near surface soils along north-south release extent, which is along a buried pipeline, was excavated to a depth of a few inches. A one-call is in progress and excavation of impacted soil will resume within the next few days.<br>[SEE ATTACHED MAP]<br>Release characterization and remediation will occur under NMAC 19.15.29.  |                                 |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  |                                 |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. |                                 |
| Printed Name: <u>David Harwell</u>   | Title: <u>Vice President</u>    |
| Signature: <u>David Harwell</u>  | Date: <u>Dec 12 2018</u>        |
| email: <u>DHarwell@advanceenergypartners.com</u>   | Telephone: <u>832-672-460 4</u> |
| <b>OCD Only</b><br>Received by: <u>By CHernandez at 3:38 pm, Feb 02, 2019</u>  |                                 |

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

|  |   |
|--|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? (Plates 2 and 3)   | <u>368</u> (ft bgs)   |
| Did this release impact groundwater or surface water?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? (Plate 5)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? (Plates 5)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? (Plate 6)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? (Plates 4) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? (Plates 4)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? (Plate 4)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? (Plate 7)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? (Plate 8)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? (Plate 9)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? (Plate 10)  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

|                |               |
|----------------|---------------|
| Incident ID    | NCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID | pCH1903356077 |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: David Harwell Title: VP Eng. & Ops  
Signature: David Harwell Date: 3-7-19  
email: dharwell@adronceenergypartners.com Telephone: 832-672-4604

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: David Harwell Title: Vice President

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



|                |               |
|----------------|---------------|
| Incident ID    | NCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID | pCH1903356077 |

## Remediation Plan

**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: David Harwell Title: VP Eng. & Ops.  
Signature: David Harwell Date: 3-7-19  
email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

### OCD Only

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Released to Imaging: 1/18/2022 2:19:06 PM

State of New Mexico  
Oil Conservation Division

|                |               |
|----------------|---------------|
| Incident ID    | NCH1903355030 |
| District RP    | 1RP-5313      |
| Facility ID    |               |
| Application ID | pCH1903356077 |

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: David Harwell Title: VP Eng. + Ops.  
Signature: David Harwell Date: 3-7-19  
email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

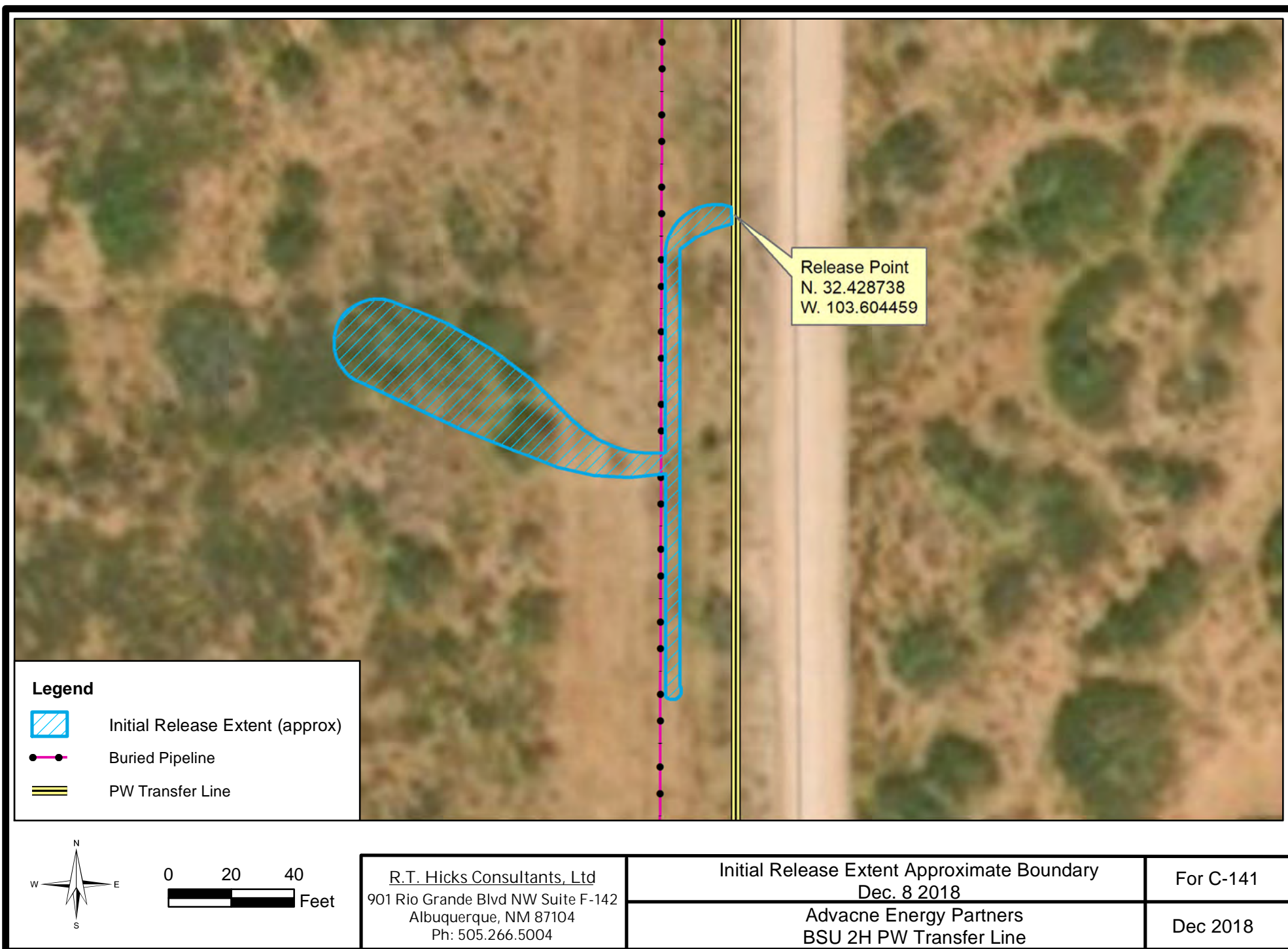
Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Received by OCD: 1/6/2022 8:41:31 AM



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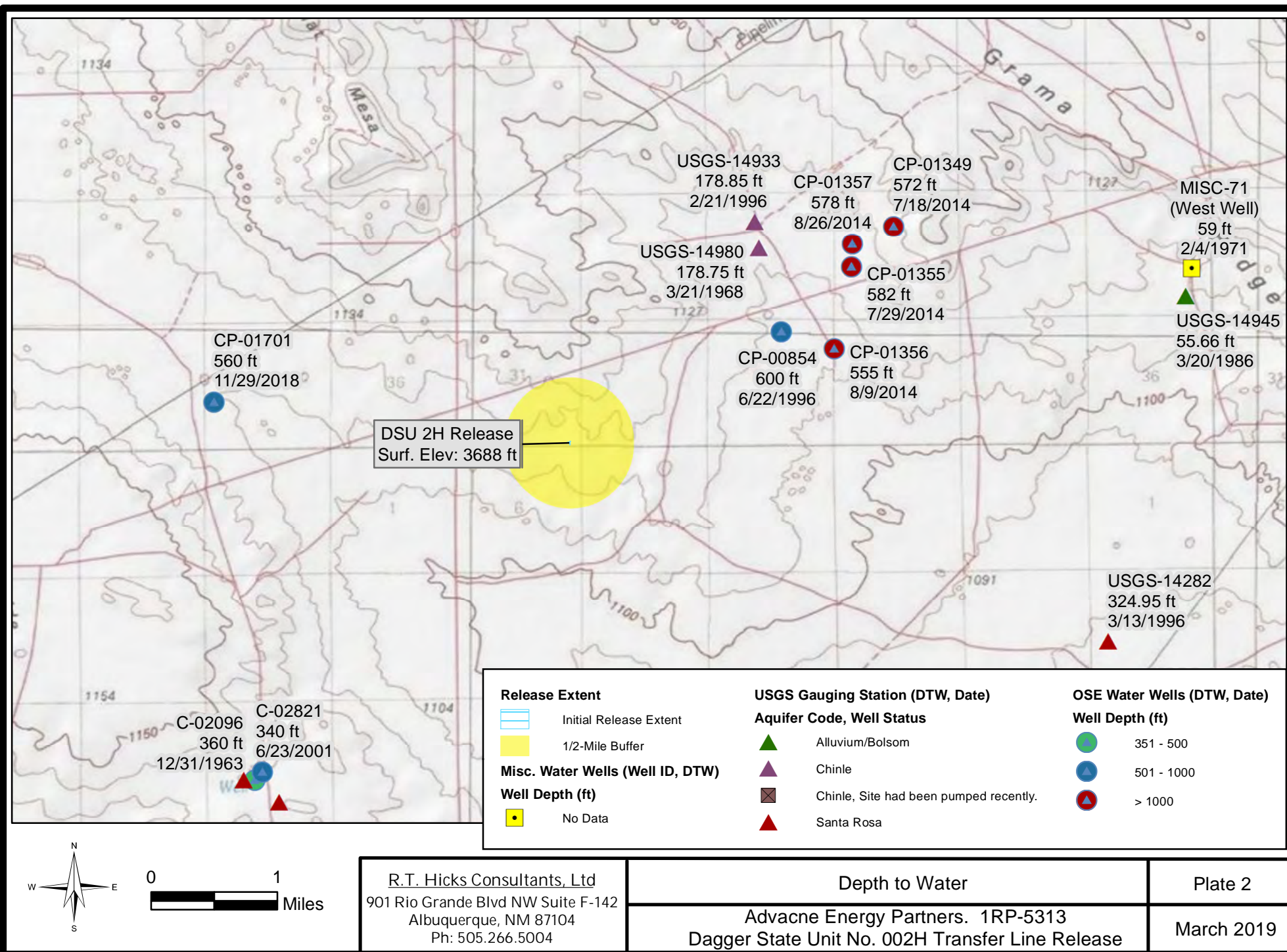


# Plates

**R.T. Hicks Consultants, Ltd.**

901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104

M:\Advance Energy\BSU 2H Release\ap\_nmGIS\Plates\Plate 2 Depth to Water.mxd



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Albuquerque, NM 87104  
Ph: 505.266.5004

Depth to Water

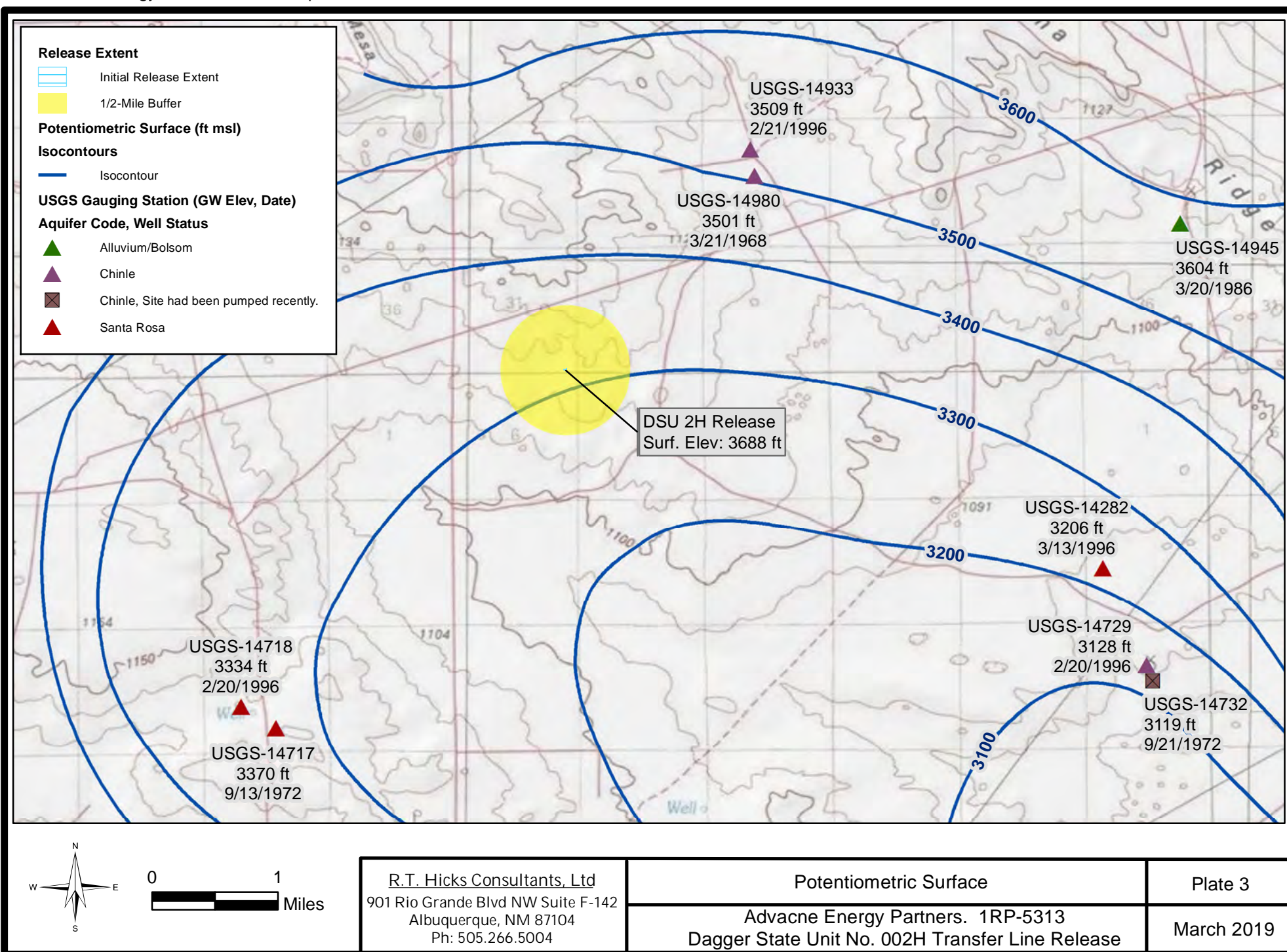
Plate 2

Advacne Energy Partners. 1RP-5313  
Dagger State Unit No. 002H Transfer Line Release

March 2019

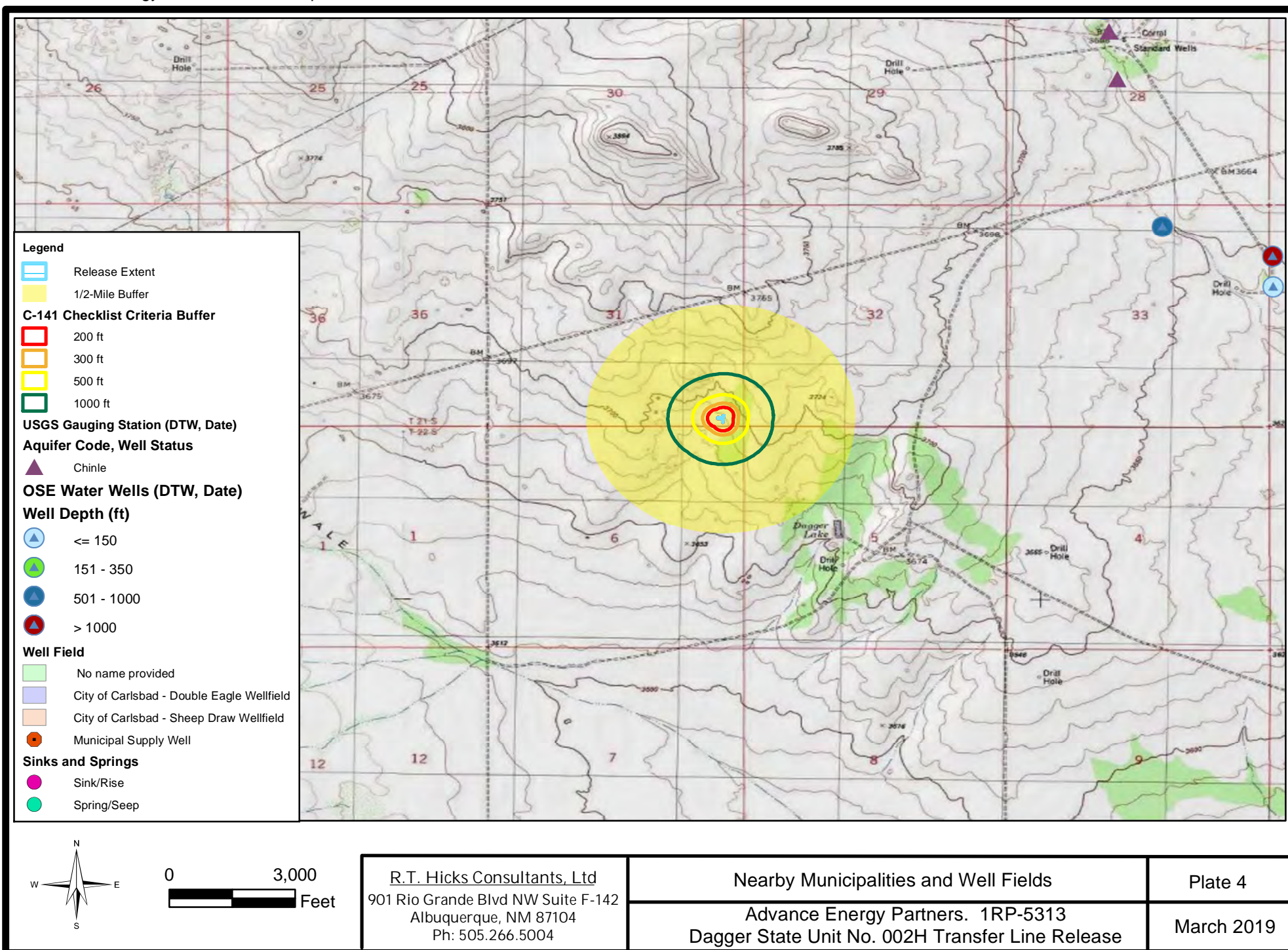


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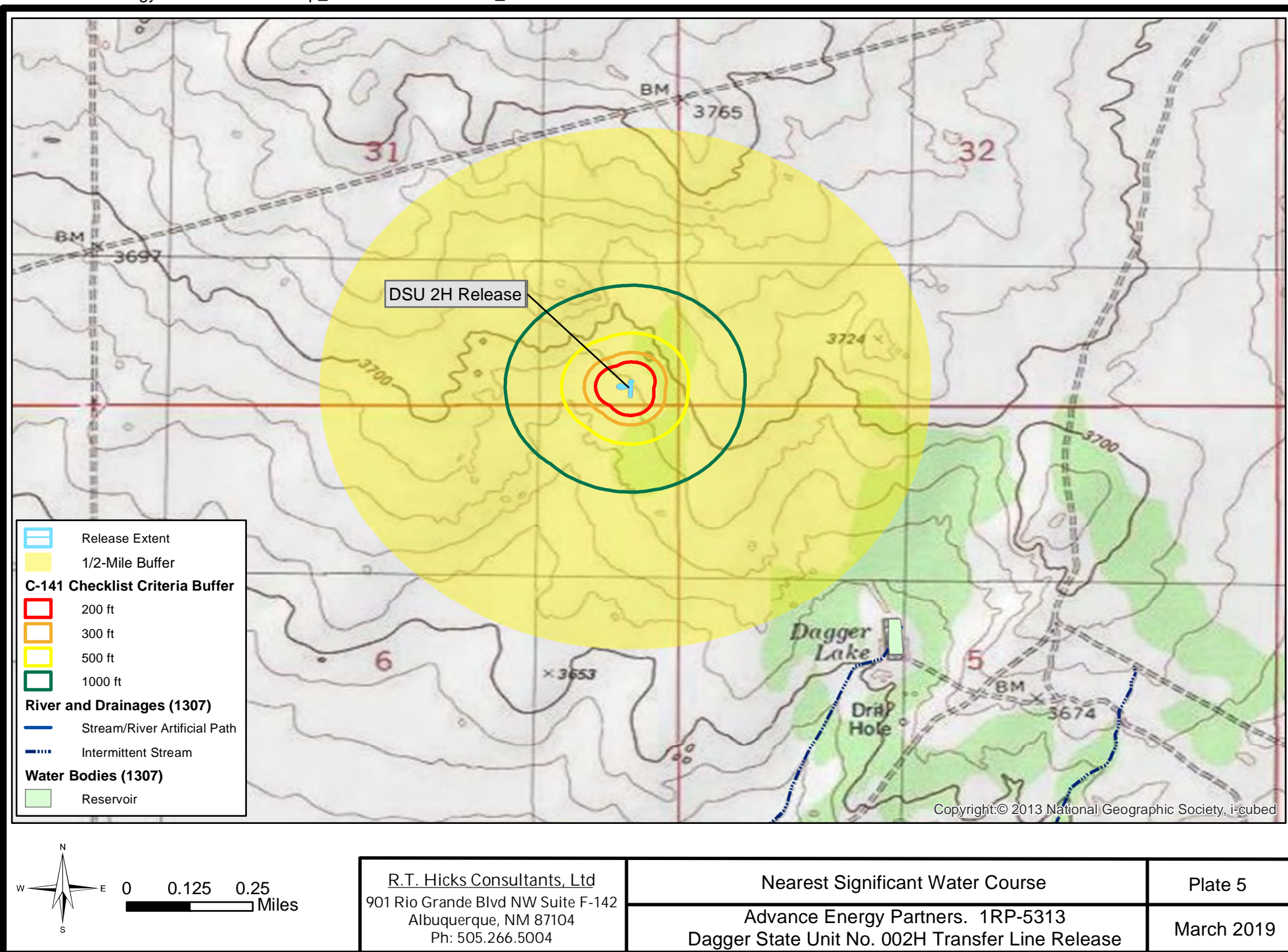


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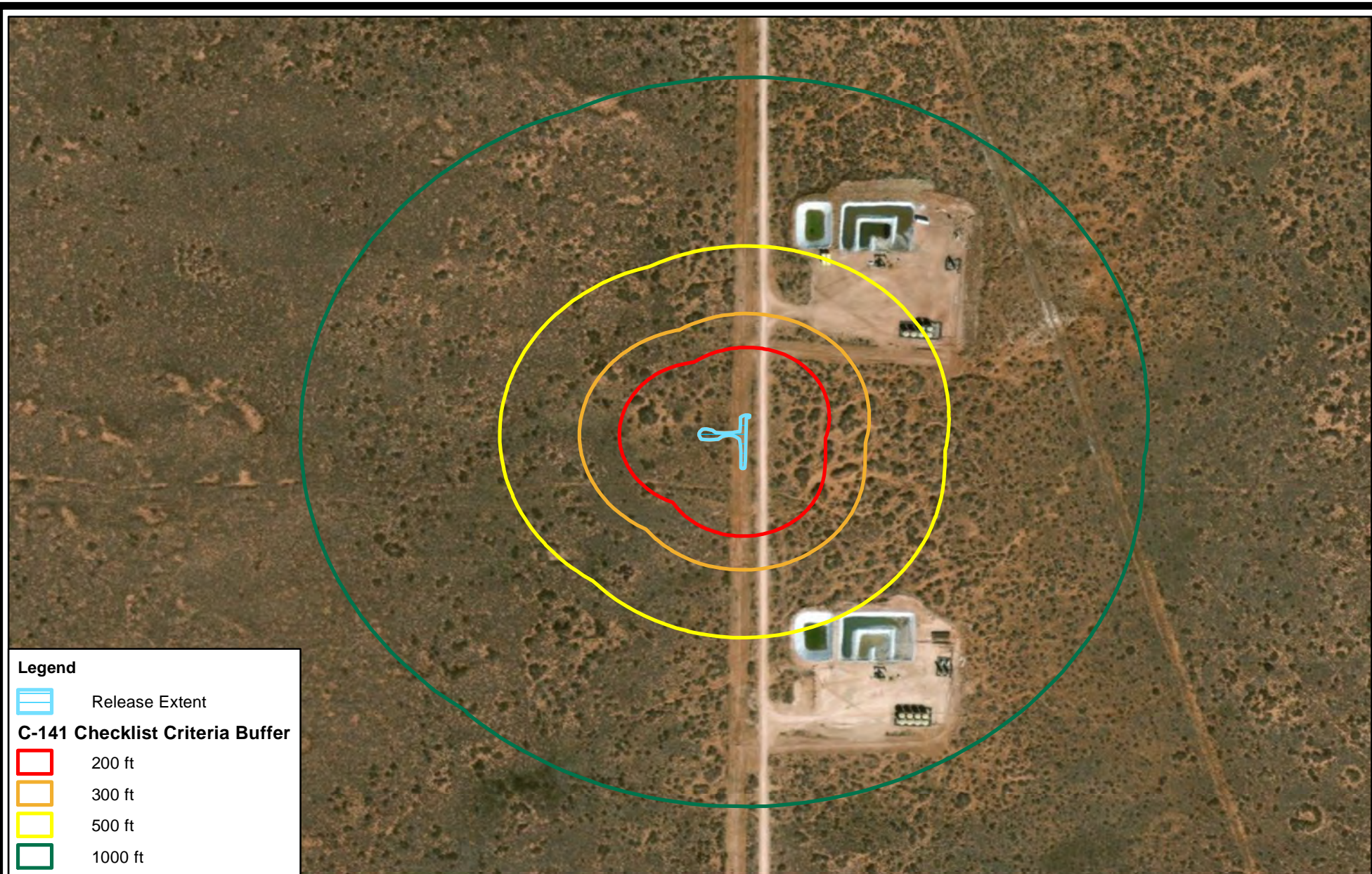





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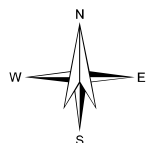




M:\Advance Energy\BSU 2H Release\ap\_nmGIS\Plates\Plate 6\_NearbyStructures.mxd

**Legend** Release Extent**C-141 Checklist Criteria Buffer**

-  200 ft
-  300 ft
-  500 ft
-  1000 ft



0 200 400  
Feet

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Albuquerque, NM 87104  
Ph: 505.266.5004

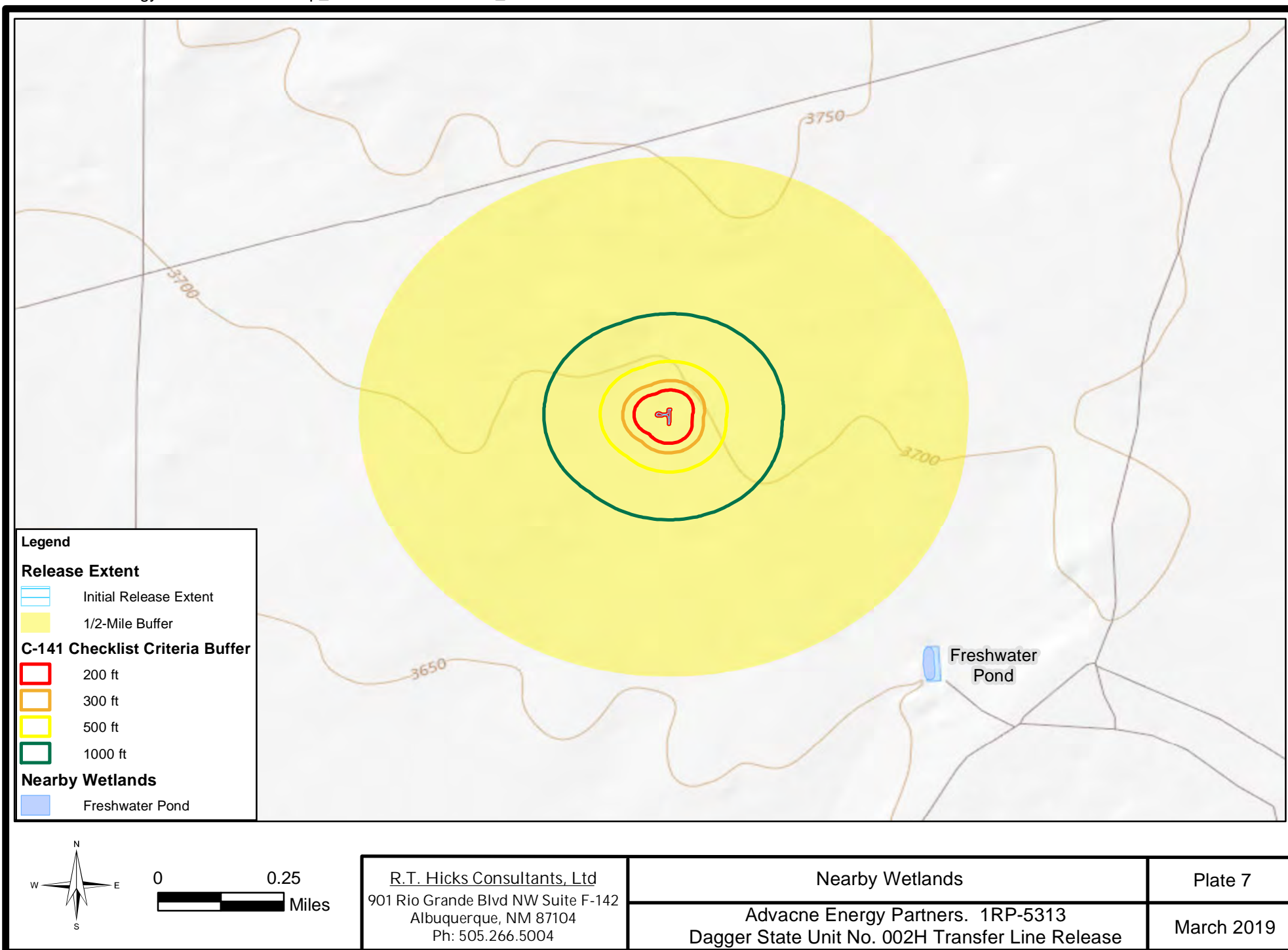
Nearby Structures

Plate 6

Advacne Energy Partners. 1RP-5313  
Dagger State Unit No. 002H Transfer Line Release

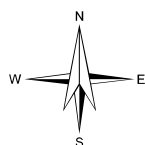
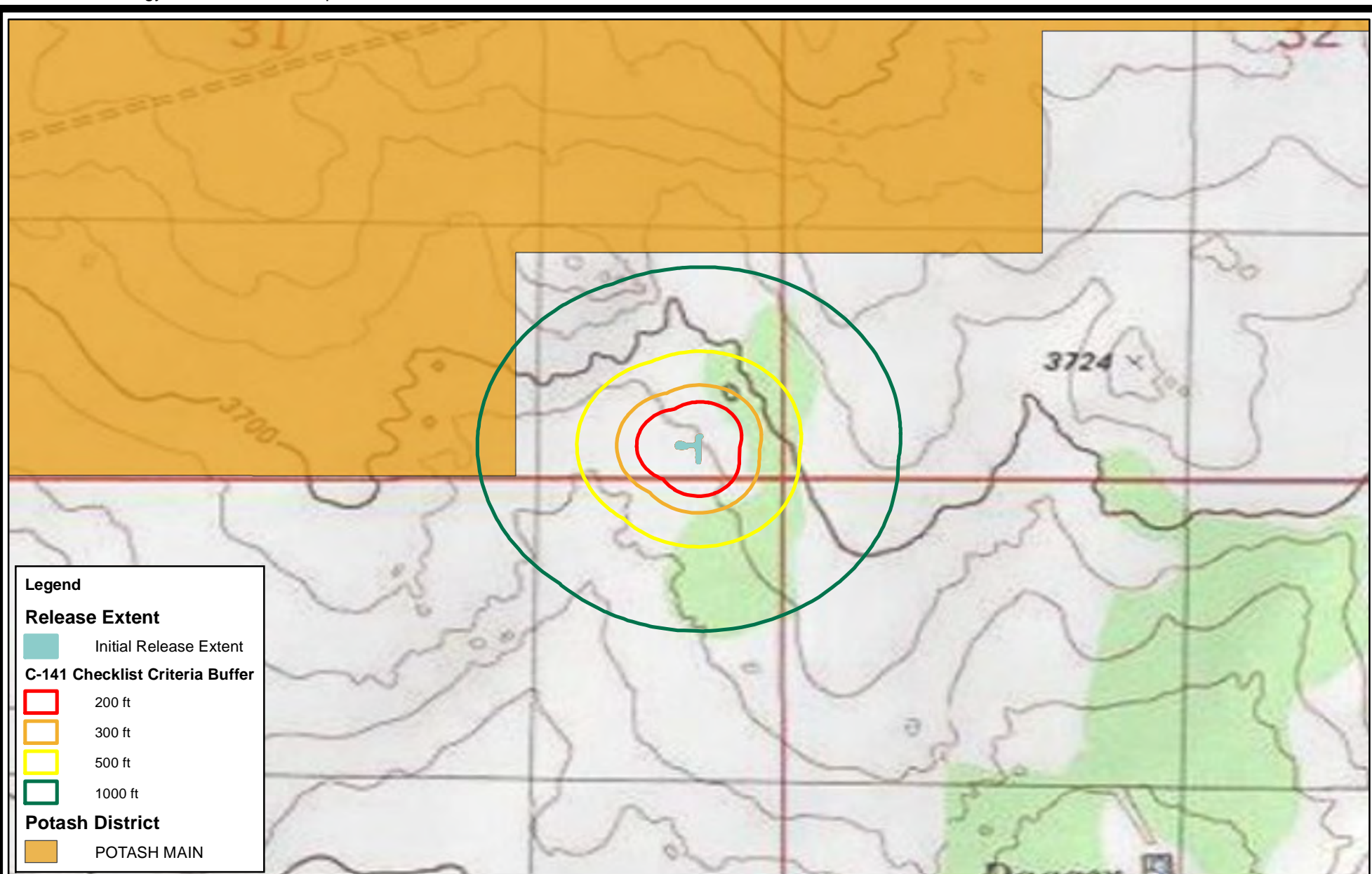
March 2019

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0 400 800  
Feet

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Nearby Mines and Minerals

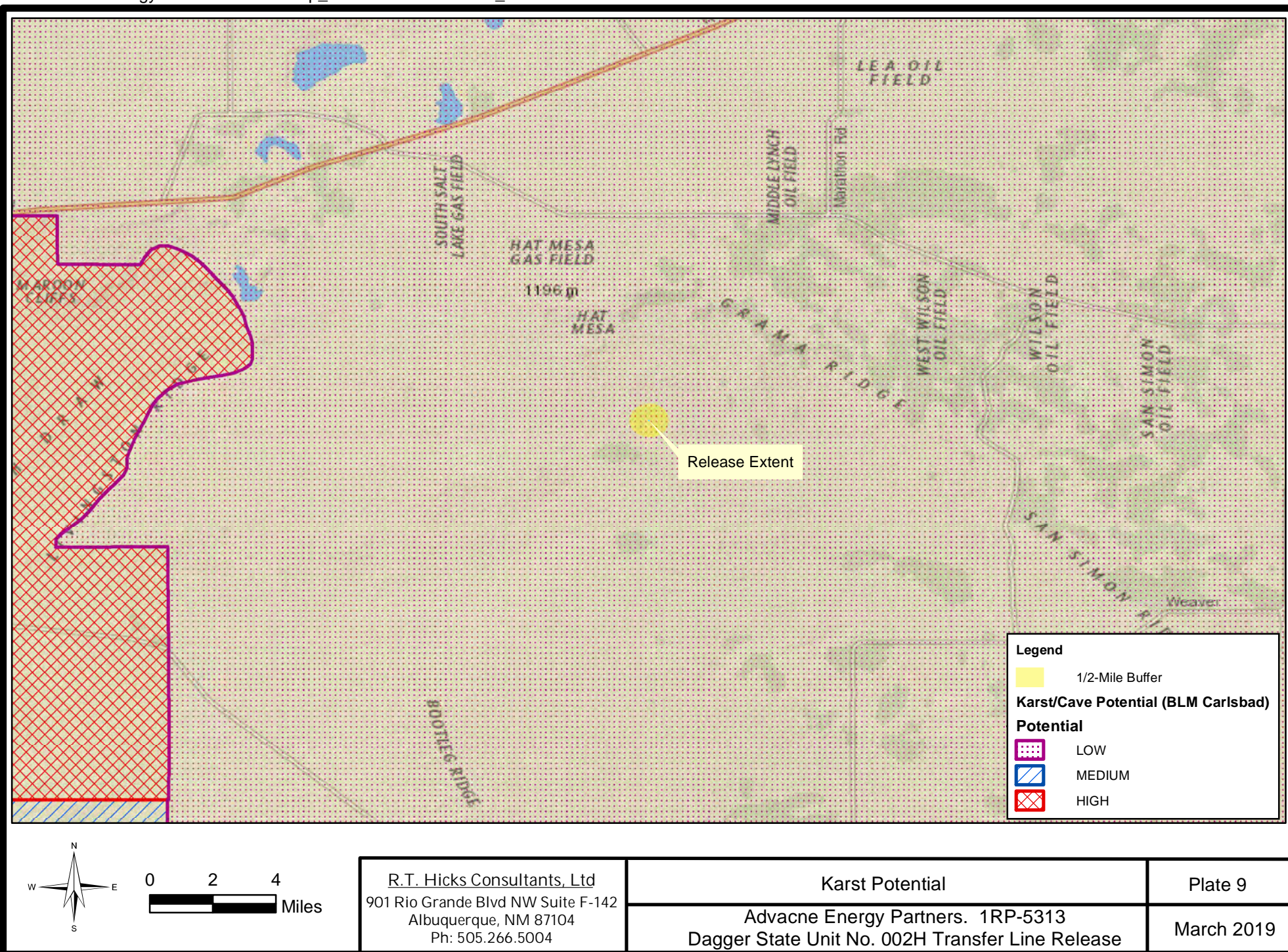
Advacne Energy Partners. 1RP-5313  
Dagger State Unit No. 002H Transfer Line Release

Plate 8

March 2019

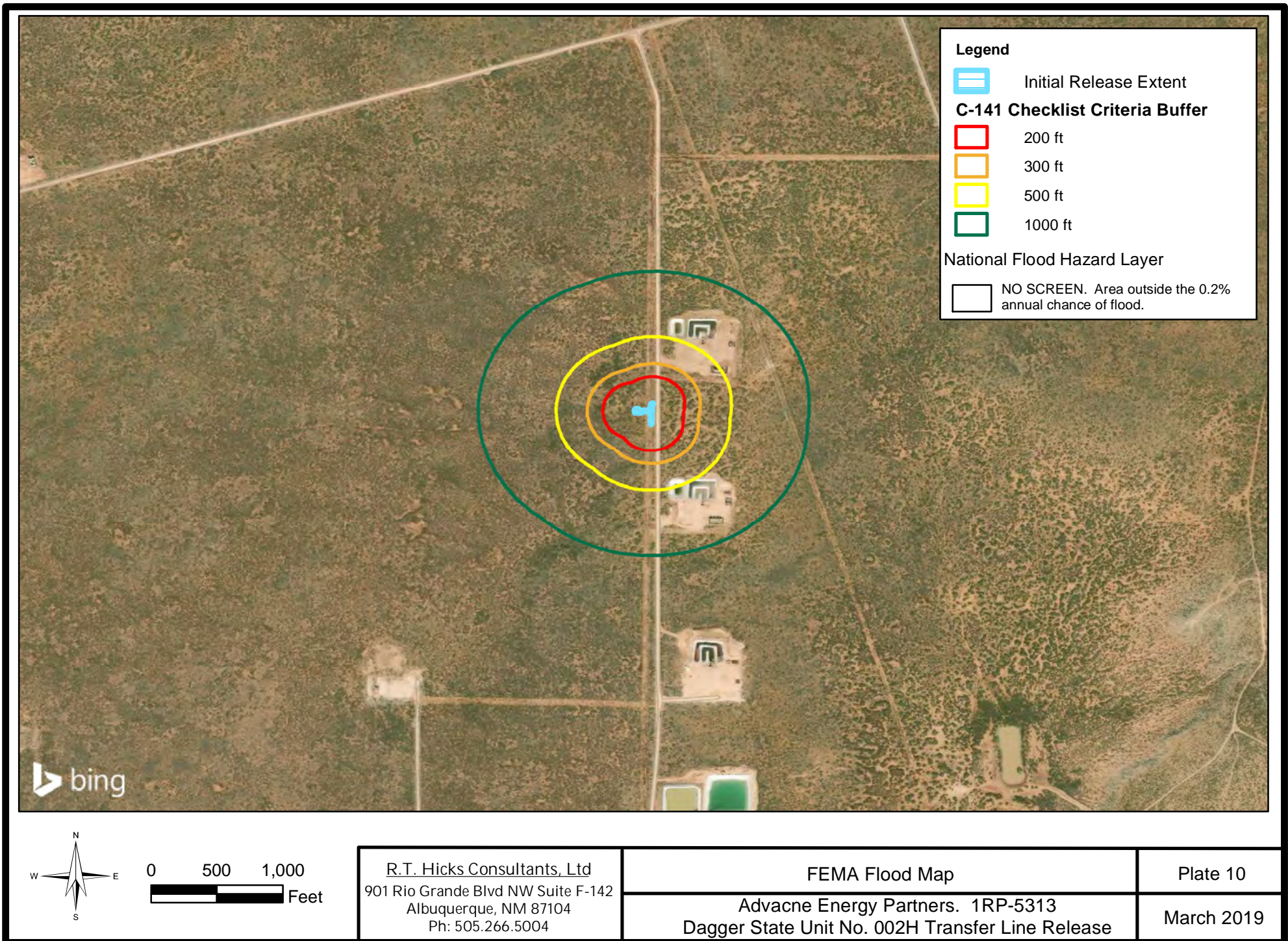


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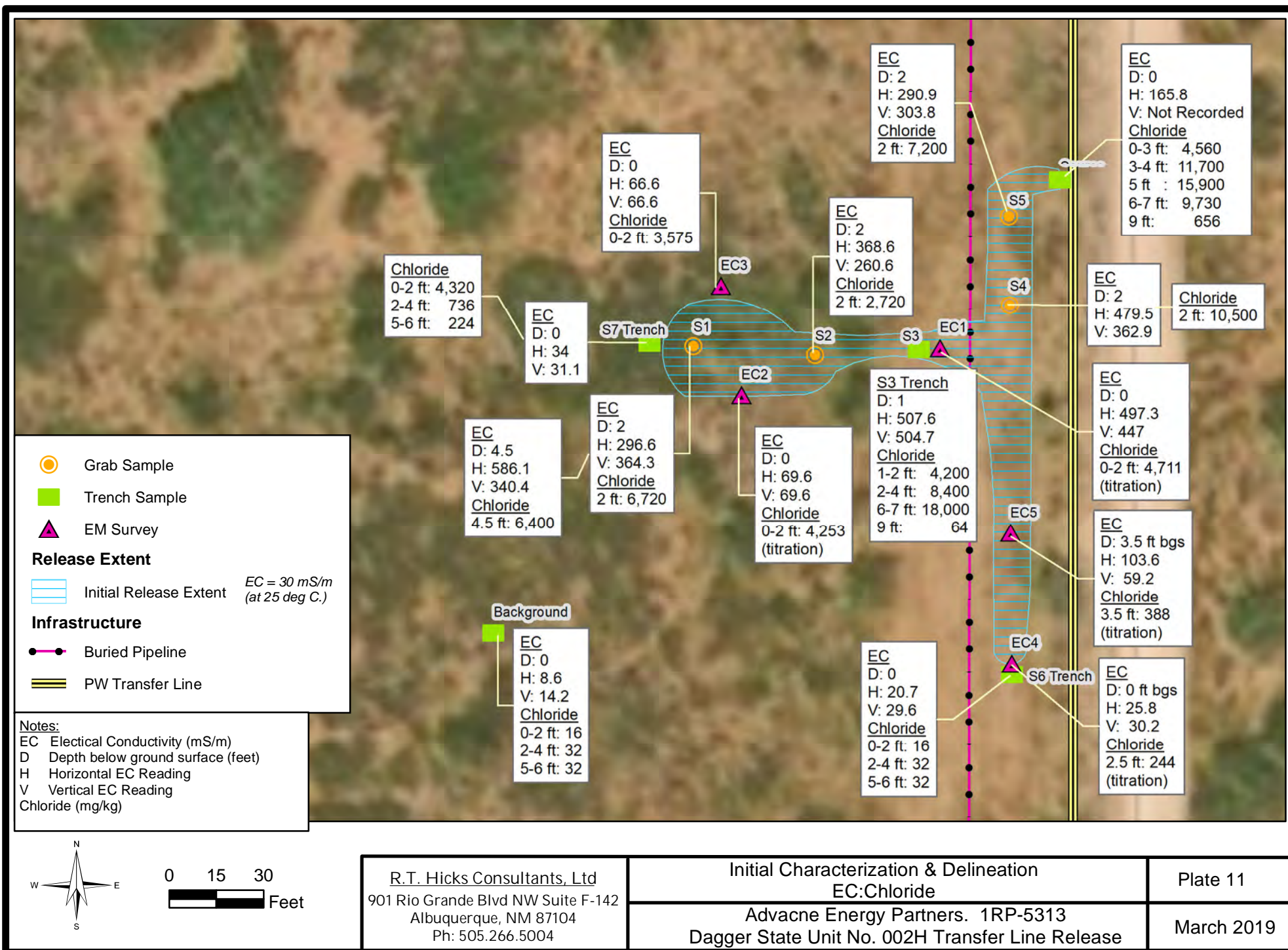


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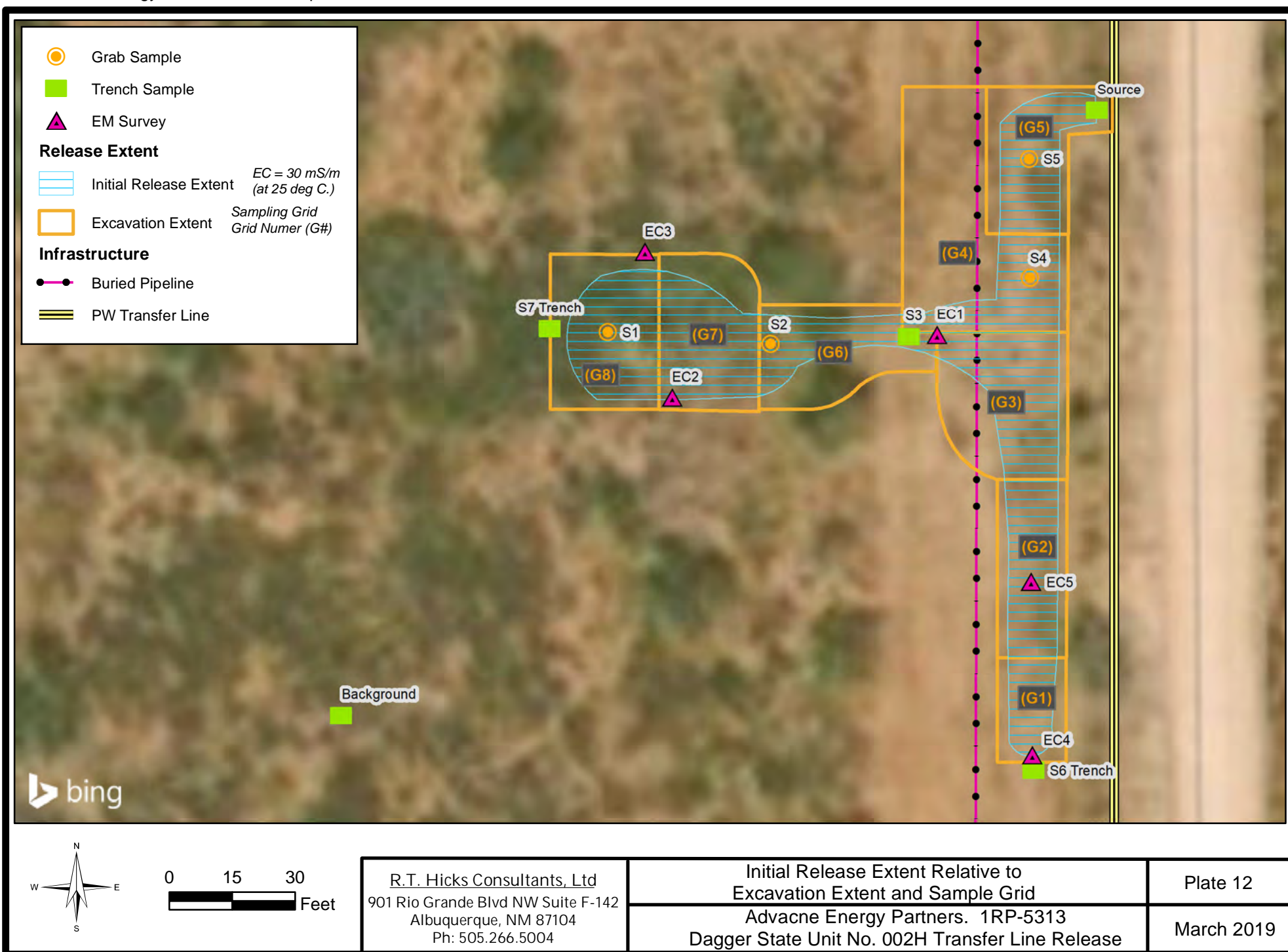




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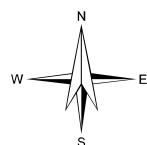


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M:\Advance Energy\BSU 2H Release\ap\_nmGIS\Plates\Plate 13 Confirmation Sampling.mxd



0 15 30  
Feet

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Albuquerque, NM 87104  
Ph: 505.266.5004

Chloride Confirmation Sampling Results  
Relative to Sampling Grid

Advacne Energy Partners. 1RP-5313  
Dagger State Unit No. 002H Transfer Line Release

Plate 13

March 2019

# Tables

**R.T. Hicks Consultants, Ltd.**

901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104

Table 2  
Initial Characterization Sampling

DSU #2H  
1RP-5313

| Sample Name                      | Date       | Depth (ft) | In-Use (Yes/No) | EM 38 mS/m | EM 38 mS/m | EM 38 TC mS/m | EM 38 TC mS/m | Cl titration | Cl mg/kg |
|----------------------------------|------------|------------|-----------------|------------|------------|---------------|---------------|--------------|----------|
| NMOCD Limits                     |            |            |                 | Horizontal | Vertical   | Horizontal    | Vertical      |              |          |
| 0 - 4 feet & "not in-use"        |            |            |                 | 100mS/m    | 100mS/m    | 100mS/m       | 100mS/m       |              | 600      |
| > 4 ft or "in-use"               |            |            |                 |            |            |               |               |              | 20,000   |
| Background                       | 12/12/2018 | 0          | No              | 5.8        | 9.6        | 8.6           | 14.2          |              |          |
| Background                       | 12/17/2018 | 0 - 2      | No              |            |            |               |               |              | 16       |
| Background                       | 12/17/2018 | 2 - 4      | No              |            |            |               |               |              | 32       |
| Background                       | 12/17/2019 | 5 - 6      | No              |            |            |               |               |              | 32       |
| Grid 1 (EC4; S6 Trench)          |            |            |                 |            |            |               |               |              |          |
| EC4                              | 12/01/2018 | 0          | No              | 17.9       | 21         | 25.8          | 30.2          |              |          |
| EC4                              | 12/01/2018 | 2.5        | No              |            |            |               |               | 244          |          |
| S6 Trench (Grid 1 S. Wall)       | 12/17/2018 | 0          | No              | 14         | 20         | 20.7          | 29.6          |              |          |
| S6 Trench (Grid 1 S. Wall)       | 12/17/2018 | 0 - 2      | No              |            |            |               |               |              | 16       |
| S6 Trench (Grid 1 S. Wall)       | 12/17/2018 | 2 - 4      | No              |            |            |               |               |              | 32       |
| S6 Trench                        | 12/17/2018 | 5 - 6      | No              |            |            |               |               |              | 32       |
| Grid 2 (EC5)                     |            |            |                 |            |            |               |               |              |          |
| EC-5                             | 12/19/2018 | 3.5        | Yes             | 70         | 40         | 103.6         | 59.2          | 388          |          |
| Grid 3                           |            |            |                 |            |            |               |               |              |          |
| Grid 4 (S4)                      |            |            |                 |            |            |               |               |              |          |
| S4 Base                          | 12/10/2018 | 2          | Yes             | 333        | 252        | 479.5         | 362.9         |              | 10,500   |
| S4 Wall                          | 12/10/2018 | 0 - 1      | Yes             |            |            |               |               |              | 5,330    |
| S4 Wall                          | 12/10/2018 | 0 - 2      | Yes             |            |            |               |               |              | 8,530    |
| G5 (Source Area, S5)             |            |            |                 |            |            |               |               |              |          |
| S5 Base                          | 12/10/2018 | 2          | Yes             | 202        | 211        | 290.9         | 303.8         |              | 7,200    |
| S5 Wall                          | 12/10/2018 | 0 - 1      | Yes             |            |            |               |               |              | 4,800    |
| S5 Wall                          | 12/10/2018 | 1 - 2      | Yes             |            |            |               |               |              | 7,860    |
| Source (at metal coupling)       | 12/11/2018 |            | Yes             | 112        |            | 165.8         |               |              |          |
| Source Wall                      | 12/11/2018 | 0 - 3      | Yes             |            |            |               |               |              | 4,560    |
| Source Wall                      | 12/11/2018 | 3 - 4      | Yes             |            |            |               |               |              | 11,700   |
| Source Base                      | 12/11/2018 | 5          | Yes             |            |            |               |               |              | 15,900   |
| Source Wall                      | 12/19/2018 | 6 - 7      | Yes             |            |            |               |               |              | 9,730    |
| Source Wall                      | 12/19/2018 | 9          | Yes             |            |            |               |               |              | 656      |
| Source Wall (sluffing from wall) | 12/19/2018 | 12         | Yes             |            |            |               |               |              | 7,060    |



Table 2  
Initial Characterization Sampling

DSU #2H  
1RP-5313

| Sample Name               | Date       | Depth (ft) | In-Use (Yes/No) | EM 38 mS/m | EM 38 mS/m | EM 38 TC mS/m | EM 38 TC mS/m | Cl titration | Cl mg/kg |
|---------------------------|------------|------------|-----------------|------------|------------|---------------|---------------|--------------|----------|
| NMOCD Limits              |            |            |                 | Horizontal | Vertical   | Horizontal    | Vertical      |              |          |
| 0 - 4 feet & "not in-use" |            |            |                 | 100mS/m    | 100mS/m    | 100mS/m       | 100mS/m       |              | 600      |
| > 4 ft or "in-use"        |            |            |                 |            |            |               |               |              | 20,000   |
| Grid 6 (S2, S3, EC1)      |            |            |                 |            |            |               |               |              |          |
| S2 Base                   | 12/10/2018 | 2          | No              | 256        | 181        | 368.6         | 260.6         | 1,355        | 2,720    |
| S2 N. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 5,760    |
| S2 S. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 5,840    |
| EC1                       | 12/11/2018 | 0          | No              | 336        | 302        | 497.3         | 447.0         |              |          |
| EC1                       | 12/11/2018 | 0 - 2      | No              |            |            |               |               | 4,711        |          |
| S3 Base                   | 12/10/2018 | 2          | No              | 277        | 250        | 398.9         | 360.0         | 5,575        | 8,000    |
| S3 N. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 96       |
| S3 S. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 48       |
| S3 Trench                 | 12/17/2018 | 1          | No              | 343        | 341        | 507.6         | 504.7         |              |          |
| S3 Trench                 | 12/17/2018 | 1 - 2      | No              |            |            |               |               |              | 4,200    |
| S3 Trench                 | 12/17/2018 | 2 - 4      | No              |            |            |               |               |              | 8,400    |
| S3 Trench                 | 12/17/2018 | 6 - 7      | No              |            |            |               |               |              | 18,000   |
| S3 Trench                 | 12/17/2018 | 9          | No              |            |            |               |               |              | 64       |
| Grid 7 (EC2)              |            |            |                 |            |            |               |               |              |          |
| EC-2                      | 12/11/2018 | 0          | No              | 47         | 47         | 69.6          | 69.6          |              |          |
| EC-2                      | 12/11/2018 | 0 - 2      | No              |            |            |               |               | 4,253        |          |
| Grid 8 (S1, EC3)          |            |            |                 |            |            |               |               |              |          |
| S1 N. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 5,280    |
| S1 S. Wall                | 12/10/2018 | 0 - 2      | No              |            |            |               |               |              | 832      |
| S1 Base                   | 12/10/2018 | 2          | No              | 206        | 253        | 296.6         | 364.3         | 4,992        | 6,720    |
| S1 Base                   | 12/17/2018 | 4.5        | No              | 396        | 230        | 586.1         | 340.4         | 4,588        | 6,400    |
| EC3                       | 12/11/2018 | 0          | No              | 45         | 45         | 66.6          | 66.6          |              |          |
| EC3                       | 12/11/2018 | 0 - 2      | No              |            |            |               |               | 3,575        |          |
| S7 Trench                 | 12/17/2018 | 0          | No              | 23         | 21         | 34.0          | 31.1          |              |          |
| S7 Trench                 | 12/17/2018 | 0 - 2      | No              |            |            |               |               |              | 4,320    |
| S7 Trench                 | 12/17/2018 | 2 - 4      | No              |            |            |               |               |              | 736      |
| S7 Trench                 | 12/17/2018 | 5 - 6      | No              |            |            |               |               |              | 224      |

Table 3  
Excavation Confirmation Sample Data

DSU #2H

1RP-5313

| Sample Name                | Date       | Depth (ft) | In-Use (Yes/No) | Cl mg/kg | GRO+DRO mg/kg | TPH Ext mg/kg | BTEX mg/kg | Benzene mg/kg |
|----------------------------|------------|------------|-----------------|----------|---------------|---------------|------------|---------------|
| NMOCD Limits               |            |            |                 |          |               |               |            |               |
| 0 - 4 feet & "not in-use"  |            |            |                 | 600      | --            | 2,500         | 10         | 50            |
| > 4 ft or "in-use"         |            |            |                 | 20,000   | 1,000         | 2,500         | 10         | 50            |
| Grid 1 (EC4; S6 Trench)    |            |            |                 |          |               |               |            |               |
| S6 Trench (Grid 1 S. Wall) | 12/17/2018 | 0 - 2      | No              | 16       |               |               |            |               |
| S6 Trench (Grid 1 S. Wall) | 12/17/2018 | 2 - 4      | No              | 32       |               |               |            |               |
| Grid 1 (G1) E. Wall        | 12/18/2018 | 0 - 2      | Yes             | 32       |               |               |            |               |
| Grid 1 (G1) W. Wall        | 12/18/2018 | 0 - 2      | Yes             | 16       |               |               |            |               |
| Grid 1 (G1) Base           | 12/18/2018 | 2          | Yes             | 48       |               |               |            |               |
| Grid 2 (EC5)               |            |            |                 |          |               |               |            |               |
| Grid 2 (G2) E. Wall        | 01/21/2019 | 0-4        | Yes             | 80       | <20           | <30           | <0.3       | <0.05         |
| Grid 2 (G2) W. Wall        | 01/30/2019 | 0-4        | Yes             | 32       | <20           | <30           | <0.3       | <0.05         |
| Grid 2 (G2) Base           | 01/21/2019 | 4.5        | Yes             | 3,040    | <20           | <30           | <0.3       | <0.05         |
| Grid 3                     |            |            |                 |          |               |               |            |               |
| Grid 3 (G3) SW Wall        | 01/30/2019 | 0-4        | Yes             | 48       | <20           | <30           | <0.3       | <0.05         |
| Grid 3 (G3) E. Wall        | 01/21/2019 | 0-4        | Yes             | 16       | <20           | <30           | <0.3       | <0.05         |
| Grid 3 (G3) Base           | 01/21/2019 | 4.5        | Yes             | 1,480    | <20           | <30           | <0.3       | <0.05         |
| Grid 4 (S4)                |            |            |                 |          |               |               |            |               |
| Grid 4 (G4) W. Wall        | 01/29/2019 | 0-4        | Yes             | 32       | <20           | <30           | <0.3       | <0.05         |
| Grid 4 (G4) E. Wall        | 01/21/2019 | 0-4        | Yes             | 144      | <20           | <30           | <0.3       | <0.05         |
| Grid 4 (G4) Base           | 01/21/2019 | 4.5        | Yes             | 11,200   | <20           | <30           | <0.3       | <0.05         |
| G5 (Source Area, S5)       |            |            |                 |          |               |               |            |               |
| Grid 5 (G5) N. Wall        | 01/21/2019 | 0-4        | Yes             | 176      | <20           | <30           | <0.3       | <0.05         |
| Grid 5 (G5) S. Wall        | 01/21/2019 | 0-4        | Yes             | 64       | <20           | <30           | <0.3       | <0.05         |
| Grid 5 (G5) SE Wall        | 01/30/2019 | 0-4        | Yes             | 16       | <20           | <30           | <0.3       | <0.05         |
| Grid 5 (G5) NE Wall        | 01/30/2019 | 0-4        | Yes             | 464      | <20           | <30           | <0.3       | <0.05         |
| Grid 5 (G5) Base           | 01/21/2019 | 4.5        | Yes             | 7,600    | <20           | <30           | <0.3       | <0.05         |

Table 3  
Excavation Confirmation Sample Data

DSU #2H

1RP-5313

| Sample Name               | Date       | Depth (ft) | In-Use (Yes/No) | Cl mg/kg | GRO+DRO mg/kg | TPH Ext mg/kg | BTEX mg/kg | Benzene mg/kg |
|---------------------------|------------|------------|-----------------|----------|---------------|---------------|------------|---------------|
| NMOCD Limits              |            |            |                 |          |               |               |            |               |
| 0 - 4 feet & "not in-use" |            |            |                 | 600      | --            | 2,500         | 10         | 50            |
| > 4 ft or "in-use"        |            |            |                 | 20,000   | 1,000         | 2,500         | 10         | 50            |
| Grid 6 (S2, S3, EC1)      |            |            |                 |          |               |               |            |               |
| Grid 6 (G6) N. Wall       | 01/29/2018 | 0-4        | No              | 32       | <20           | <30           | <0.3       | <0.05         |
| Grid 6 (G6) S. Wall       | 01/21/2019 | 0-4        | No              | 544      | <20           | <30           | <0.3       | <0.05         |
| Grid 6 (G6) Base          | 01/21/2019 | 4.5        | No              | 9,330    | <20           | <30           | <0.3       | <0.05         |
| Grid 7 (EC2)              |            |            |                 |          |               |               |            |               |
| Grid 7 (G7) S. Wall       | 01/29/2019 | 0-4        | No              | 32       | <20           | <30           | <0.3       | <0.05         |
| Grid 7 (G7) N. Wall       | 01/21/2019 | 0-4        | No              | 32       | <20           | <30           | <0.3       | <0.05         |
| Grid 7 (G7) Base          | 01/21/2019 | 4.5        | No              | 8,800    | <20           | <30           | <0.3       | <0.05         |
| Grid 8 (S1, EC3)          |            |            |                 |          |               |               |            |               |
| Grid 8 (G8) N. Wall       | 01/21/2019 | 0-4        | No              | 16       | <20           | <30           | <0.3       | <0.05         |
| Grid 8 (G8) S. Wall       | 01/29/2019 | 0-4        | No              | 16       | <20           | <30           | <0.3       | <0.05         |
| Grid 8 (G8) W. Wall       | 01/21/2019 | 0-4        | No              | 400      | <20           | <30           | <0.3       | <0.05         |
| Grid 8 (G8) Base          | 01/21/2019 | 4.5        | No              | 3,080    | <20           | <30           | <0.3       | <0.05         |

# **Appendix A**

## **OSE Well Logs**

**R.T. Hicks Consultants, Ltd.**  
901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104




# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

|                 |                   |                   |            |            |            |          |   |
|-----------------|-------------------|-------------------|------------|------------|------------|----------|---|
| <b>Well Tag</b> | <b>POD Number</b> | <b>Q64 Q16 Q4</b> | <b>Sec</b> | <b>Tws</b> | <b>Rng</b> | <b>X</b> | <b>Y</b>  |
| CP 00854        | POD1              | 1 1 2             | 33         | 21S        | 33E        | 633879   | 3590223  |

**Driller License:** 421 **Driller Company:** GLENN'S WATER WELL SERVICE

**Driller Name:** GLENN, CLARK A."CORKY" (LD)

**Drill Start Date:** 06/22/1996

**Drill Finish Date:** 06/22/1996

**Plug Date:**

**Log File Date:** 07/11/1996

**PCW Rcv Date:** 10/17/2013

**Source:** Shallow

**Pump Type:** SUBMER

**Pipe Discharge Size:** 2.875

**Estimated Yield:** 100 GPM

**Casing Size:** 6.63

**Depth Well:** 950 feet

**Depth Water:** 600 feet

### Water Bearing Stratifications:

### Top Bottom Description

755 805 Sandstone/Gravel/Conglomerate

860 890 Sandstone/Gravel/Conglomerate

### Casing Perforations:

### Top Bottom

760 950

**Meter Number:** 8514

**Meter Make:** BLANCETT

**Meter Serial Number:** 040711711

**Meter Multiplier:** 1.0000

**Number of Dials:** 7

**Meter Type:** Diversion

**Unit of Measure:** Barrels 42 gal.

**Return Flow Percent:**

**Usage Multiplier:**

**Reading Frequency:** Quarterly

### Meter Readings (in Acre-Feet)

| Read Date  | Year | Mtr Reading | Flag | Rdr | Comment         | Mtr Amount |
|------------|------|-------------|------|-----|-----------------|------------|
| 03/15/2004 | 2004 | 121         | A    | jw  |                 | 0          |
| 03/29/2004 | 2004 | 69871       | A    | jw  |                 | 0          |
| 05/17/2004 | 2004 | 8758        | A    | jw  |                 | 2.651      |
| 06/11/2004 | 2004 | 79641       | A    | jw  |                 | 2.998      |
| 01/27/2012 | 2012 | 18062553    | A    | RPT | Initial reading | 0          |
| 03/01/2012 | 2012 | 19039807    | A    | RPT |                 | 2.999      |
| 05/29/2013 | 2013 | 179696      | A    | RPT | initial reading | 0          |
| 10/07/2013 | 2013 | 460774      | A    | RPT | Qtr IV 2013     | 36.229     |
| 11/11/2013 | 2013 | 540326      | A    | RPT |                 | 10.254     |
| 01/01/2014 | 2013 | 614283      | A    | RPT |                 | 9.533      |
| 10/01/2014 | 2014 | 1122654     | A    | RPT |                 | 65.526     |
| 01/01/2015 | 2014 | 1212343     | A    | RPT |                 | 11.560     |
| 03/31/2015 | 2015 | 1307063     | A    | RPT |                 | 12.209     |
| 06/27/2015 | 2015 | 1369556     | A    | RPT |                 | 8.055      |



**Meter Readings (in Acre-Feet)**

| Read Date  | Year | Mtr Reading | Flag | Rdr Comment     | Mtr Amount |
|------------|------|-------------|------|-----------------|------------|
| 09/30/2015 | 2015 | 1371471     | A    | RPT             | 0.247      |
| 10/22/2015 | 2015 | 1400502     | A    | RPT             | 3.742      |
| 11/30/2015 | 2015 | 1400502     | A    | RPT             | 0          |
| 04/28/2016 | 2016 | 1464116     | A    | RPT "JD33 Well" | 8.199      |
| 06/01/2016 | 2016 | 1464116     | A    | RPT             | 0          |
| 07/27/2016 | 2016 | 1496980     | A    | RPT JD33 Well   | 4.236      |
| 09/01/2016 | 2016 | 1510835     | A    | RPT JD 33 Well  | 1.786      |
| 09/30/2016 | 2016 | 1517146     | A    | RPT             | 0.813      |
| 10/31/2016 | 2016 | 1531178     | A    | RPT JD 33 well  | 1.809      |
| 11/29/2016 | 2016 | 1553285     | A    | RPT JD33 Well   | 2.849      |
| 03/01/2017 | 2017 | 1583100     | A    | RPT             | 3.843      |

---

| <b>**YTD Meter Amounts:</b> | <b>Year</b> | <b>Amount</b> |
|-----------------------------|-------------|---------------|
|                             | 2004        | 5.649         |
|                             | 2012        | 2.999         |
|                             | 2013        | 56.016        |
|                             | 2014        | 77.086        |
|                             | 2015        | 24.253        |
|                             | 2016        | 19.692        |
|                             | 2017        | 3.843         |


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# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X      | Y   |
|----------|------------|-----|-----|----|-----|-----|-----|--------|---|
| CP 01349 | POD1       | 2   | 3   | 1  | 27  | 21S | 33E | 635304 | 3591576  |

|   |  |                              |
|---|--|------------------------------|
| <b>Driller License:</b> 421                 | <b>Driller Company:</b> GLENN'S WATER WELL SERVICE |                              |
| <b>Driller Name:</b> GLENN, CLARK A."CORKY" |  |                              |
| <b>Drill Start Date:</b> 07/12/2014         | <b>Drill Finish Date:</b> 07/18/2014               | <b>Plug Date:</b>            |
| <b>Log File Date:</b> 08/04/2014            | <b>PCW Rcv Date:</b>                               | <b>Source:</b> Artesian      |
| <b>Pump Type:</b>                           | <b>Pipe Discharge Size:</b>                        | <b>Estimated Yield:</b>      |
| <b>Casing Size:</b> 7.00                    | <b>Depth Well:</b> 1188 feet                       | <b>Depth Water:</b> 572 feet |

| Water Bearing Stratifications: | Top | Bottom | Description                   |
|--------------------------------|-----|--------|-------------------------------|
|                                | 990 | 1188   | Sandstone/Gravel/Conglomerate |

| Casing Perforations: | Top | Bottom |
|----------------------|-----|--------|
|                      | 721 | 1188   |

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.

3/5/19 2:09 PM

Page 1 of 1

POD SUMMARY - CP 01349 POD1



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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STATE ENGINEER OFFICE  
SOSWELL, NEW MEXICO

2014 SEP 10 PM 2:15

|  |   |                        |   |   |  |   |   |                    |
|--|---|------------------------|---|---|--|---|---|--------------------|
| 1. GENERAL AND WELL LOCATION   | OSE POD NUMBER (WELL NUMBER)<br>CP-1355 (East Standard South) *** Revised 09/09/14 ***  |                        |   |   | OSE FILE NUMBER(S)   |   |   |                    |
|  | WELL OWNER NAME(S)<br>Merchants/Glenn's Water Well Service, Inc.  |                        |   |   | PHONE (OPTIONAL)<br>575-398-2424                                       |   |   |                    |
|  | WELL OWNER MAILING ADDRESS<br>P. O. Box 692   |                        |   |   | CITY<br>Tatum  |   | STATE<br>NM                                       | ZIP<br>88267       |
|  | WELL LOCATION (FROM GPS)  | DEGREES<br>LATITUDE 32 | MINUTES<br>26                           | SECONDS<br>54.8 N   | * ACCURACY REQUIRED: ONE TENTH OF A SECOND<br>* DATUM REQUIRED: WGS 84 |   |   |                    |
| LONGITUDE 103 33 58.3 W<br>DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE<br>NE1/4NW1/4SW1/4 Section 27, Township 21 South, Range 33 East on Merchants Livestock Land |   |                        |   |   |  |   |   |                    |
| 2. DRILLING & CASING INFORMATION   | LICENSE NUMBER<br>WD 421  |                        | NAME OF LICENSED DRILLER<br>Corky Glenn |   |  | NAME OF WELL DRILLING COMPANY<br>Glenn's Water Well Service, Inc. |   |                    |
|  | DRILLING STARTED<br>07/22/14  |                        | DRILLING ENDED<br>07/29/14              |   | DEPTH OF COMPLETED WELL (FT)<br>1,192'                                 |   | BORE HOLE DEPTH (FT)<br>1,192'                    |                    |
|  |   |                        |   |   | DEPTH WATER FIRST ENCOUNTERED (FT)<br>925'                             |   |   |                    |
|  | COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)                        |                        |   |   |  |   | STATIC WATER LEVEL IN COMPLETED WELL (FT)<br>582' |                    |
|  | DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:   |                        |   |   |  |   |   |                    |
|  | DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY: |                        |   |   |  |   |   |                    |
|  | DEPTH (feet bgl)  |                        | BORE HOLE DIAM (inches)                 | CASING MATERIAL AND/OR GRADE<br>(include each casing string, and note sections of screen) | CASING CONNECTION TYPE   | CASING INSIDE DIAM. (inches)                                      | CASING WALL THICKNESS (inches)                    | SLOT SIZE (inches) |
|  | FROM  | TO                     |   |   |  |   |   |                    |
|  | 0'  | 40'                    | 20"                                     | 16"   | None   | 15 1/2"   | .250  |                    |
|  | 0'  | 757'                   | 14 3/4"                                 | 9 5/8"  | Thread & Collar  | 8.921"  | 36 lbs.   | none               |
| 690'   | 1,192'  | 8 3/4"                 | 7" (502.14' Total)                      | Thread & Collar   | 6.366"   | 23 lbs.   | 1/8"  |                    |
|  |   |                        | 317.96 perforated                       |   |  |   |   |                    |
|  |   |                        | on bottom of liner                      |   |  |   |   |                    |
|  |   |                        |   |   |  |   |   |                    |
|  |   |                        |   |   |  |   |   |                    |
| 3. ANNULAR MATERIAL  | DEPTH (feet bgl)  |                        | BORE HOLE DIAM. (inches)                | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL                         | AMOUNT (cubic feet)  | METHOD OF PLACEMENT   |   |                    |
|  | FROM  | TO                     |   |   |  |   |   |                    |
|  | 0'  | 40'                    | 20"                                     | Cemented  | 2 yds.   | Top Pour  |   |                    |
|  | 0   | 757'                   | 14 3/4"                                 | Float and shoe cemented to surface  | 962  | Circulated  |   |                    |
|  |   |                        |   |   |  |   |   |                    |
|  |   |                        |   |   |  |   |   |                    |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

|             |         |                |   |            |             |
|-------------|---------|----------------|---|------------|-------------|
| FILE NUMBER | CP-1355 | POD NUMBER     | 1 | TRN NUMBER | 549450      |
| LOCATION    | Expl    | 215.33E.27.312 |   |            | PAGE 1 OF 2 |

## 1. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

### 6. SIGNATURE

|                      |                 |  |             |
|----------------------|-----------------|--|-------------|
| FOR OSE INTERNAL USE |                 | WR-20 WELL RECORD & LOG (Version 06/08/2012) |             |
| FILE NUMBER          | CP-1355         | POD NUMBER                                   | 1           |
| LOCATION             | 215.33 E 27.312 |  | TRN NUMBER  |
|                      |                 |  | 549450      |
|                      |                 |  | PAGE 2 OF 2 |





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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|   |   |                           |   |   |                                   |   |                                |                    |
|---|---|---------------------------|---|---|-----------------------------------|---|--------------------------------|--------------------|
| 1. GENERAL AND WELL LOCATION  | OSE POD NUMBER (WELL NUMBER)<br>CP - 1355 East Standard (South)   |                           |   |   | OSE FILE NUMBER(S)                |   |                                |                    |
|   | WELL OWNER NAME(S)<br>Merchants Livestock/Glenn's Water Well Service, Inc.  |                           |   |   | PHONE (OPTIONAL)<br>(575)398-2424 |   |                                |                    |
|   | WELL OWNER MAILING ADDRESS<br>P.O. Box 692  |                           |   |   | CITY<br>Tatum                     |   | STATE<br>NM                    | ZIP<br>88267       |
|   | WELL LOCATION (FROM GPS)  | DEGREES<br>LATITUDE<br>32 | MINUTES<br>26                           | SECONDS<br>54.8   | N                                 | * ACCURACY REQUIRED: ONE TENTH OF A SECOND                        |                                |                    |
|   | LONGITUDE<br>103  | 33                        | 58.3                                    | W   | * DATUM REQUIRED: WGS 84          |   |                                |                    |
| DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE<br>NE/NW/SW Sec. 27, T21S, R33E on Merchants Livestock Land |   |                           |   |   |                                   |   |                                |                    |
| 2. DRILLING & CASING INFORMATION  | LICENSE NUMBER<br>WD 421  |                           | NAME OF LICENSED DRILLER<br>Corky Glenn |   |                                   | NAME OF WELL DRILLING COMPANY<br>Glenn's Water Well Service, Inc. |                                |                    |
|   | DRILLING STARTED<br>7/29/14   | DRILLING ENDED<br>8/2/14  | DEPTH OF COMPLETED WELL (FT)<br>1192'   |   | BORE HOLE DEPTH (FT)<br>1192'     | DEPTH WATER FIRST ENCOUNTERED (FT)<br>925'                        |                                |                    |
|   | COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)                        |                           |   |   |                                   | STATIC WATER LEVEL IN COMPLETED WELL (FT)<br>582'                 |                                |                    |
|   | DRILLING FLUID: <input type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:  |                           |   |   |                                   |   |                                |                    |
|   | DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY: |                           |   |   |                                   |   |                                |                    |
|   | DEPTH (feet bgl)  |                           | BORE HOLE DIAM (inches)                 | CASING MATERIAL AND/OR GRADE<br>(include each casing string, and note sections of screen) | CASING CONNECTION TYPE            | CASING INSIDE DIAM. (inches)                                      | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|   | FROM  | TO                        |   |   |                                   |   |                                |                    |
|   | 0'  | 40'                       | 20"                                     | 16"   | None                              | 15 1/2"   | .250                           |                    |
|   | 0'  | 757'                      | 14 3/4"                                 | 9 5/8"  | Thread and Collar                 | .352  | 36 lbs.                        | none               |
|   | 757'  | 1192'                     | 8 3/4"                                  | 7"  | Thread and Collar                 | 6.5"  | 23 lbs.                        | 1/8"               |
|   |   |                           |   |   |                                   |   |                                |                    |
|   |   |                           |   |   |                                   |   |                                |                    |
|   |   |                           |   |   |                                   |   |                                |                    |
| 3. ANNULAR MATERIAL   | DEPTH (feet bgl)  |                           | BORE HOLE DIAM. (inches)                | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL                         | AMOUNT (cubic feet)               | METHOD OF PLACEMENT   |                                |                    |
|   | FROM  | TO                        |   |   |                                   |   |                                |                    |
|   | 0'  | 40'                       | 20"                                     | Cemented  | 2 yds                             | Top Pour  |                                |                    |
|   | 0'  | 757'                      | 14 3/4"                                 | Float and Shoe Cemented to Surface  | 1034                              | Circulated  |                                |                    |
|   |   |                           |   |   |                                   |   |                                |                    |
|   |   |                           |   |   |                                   |   |                                |                    |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)


|             |         |                |   |            |             |
|-------------|---------|----------------|---|------------|-------------|
| FILE NUMBER | CP-1355 | POD NUMBER     | 1 | TRN NUMBER | 549450      |
| LOCATION    | Exp     | 21S.33E.27.312 |   |            | PAGE 1 OF 2 |

| DEPTH (feet bgl)   | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED -<br>INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES<br>(attach supplemental sheets to fully describe all units) | WATER BEARING?<br>(YES / NO)            | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)              |      |
|--|------------------|--|---|--|------|
|  |                  |  |   |  | FROM |
| 0'   | 4'               | 4'   | Soil                                    | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 4'   | 28'              | 24'  | Caleche                                 | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 28'  | 120'             | 92'  | Sand and Clay                           | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 120'   | 260'             | 140'   | Red Clay                                | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 260'   | 757'             | 497'   | Red and Brown Shale and Clay(some blue) | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 757'   | 815'             | 58'  | Red and Brown Shale                     | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 815'   | 840'             | 25'  | Blue Clay and Shale                     | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 840'   | 925'             | 85'  | Red and Brown Shale(some sandrock)      | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
| 925'   | 975'             | 50'  | Watersand and Gravel                    | <input checked="" type="radio"/> Y <input type="radio"/> N |      |
| 975'   | 1185'            | 210'   | Watersand(brown sandrock)               | <input checked="" type="radio"/> Y <input type="radio"/> N |      |
| 1185'  | 1192'            | 7'   | Red Shale                               | <input type="radio"/> Y <input checked="" type="radio"/> N |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
|  |                  |  |   | <input type="radio"/> Y <input type="radio"/> N            |      |
| METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP       |                  |  | TOTAL ESTIMATED WELL YIELD (gpm): 50    |  |      |
| <input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY: |                  |  |   |  |      |

|   |   |   |
|---|---|---|
| 5. TEST; RIG SUPERVISION  | WELL TEST   | TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD. |
|   | MISCELLANEOUS INFORMATION:  |   |
|   | 0' to 757' drilled with mud. 757' to 1192' drilled with air and foam. |   |
| PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: |   |   |

|              |   |  |
|--------------|---|--|
| 6. SIGNATURE | THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING: |  |
|              | <div style="display: flex; justify-content: space-between;"> <div> <br/>           SIGNATURE OF DRILLER / PRINT SIGNEE NAME         </div> <div>           8/7/14<br/>           DATE         </div> </div>              |  |

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

|             |         |                |   |            |             |
|-------------|---------|----------------|---|------------|-------------|
| FILE NUMBER | CP-1355 | POD NUMBER     | 1 | TRN NUMBER | 549450      |
| LOCATION    | Exp1    | 215.33E.27.312 |   |            | PAGE 2 OF 2 |



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X      | Y       |
|----------|------------|-----|-----|----|-----|-----|-----|--------|---------|
| CP 01356 | POD1       | 4   | 2   | 2  | 33  | 21S | 33E | 634560 | 3590014 |

|   |  |                              |
|---|--|------------------------------|
| <b>Driller License:</b> 421                 | <b>Driller Company:</b> GLENN'S WATER WELL SERVICE |                              |
| <b>Driller Name:</b> GLENN, CLARK A."CORKY" |  |                              |
| <b>Drill Start Date:</b> 08/01/2014         | <b>Drill Finish Date:</b> 08/09/2014               | <b>Plug Date:</b>            |
| <b>Log File Date:</b> 08/25/2014            | <b>PCW Rcv Date:</b>                               | <b>Source:</b> Artesian      |
| <b>Pump Type:</b>                           | <b>Pipe Discharge Size:</b>                        | <b>Estimated Yield:</b>      |
| <b>Casing Size:</b> 6.37                    | <b>Depth Well:</b> 1098 feet                       | <b>Depth Water:</b> 555 feet |

| Water Bearing Stratifications: | Top  | Bottom | Description                   |
|--------------------------------|------|--------|-------------------------------|
|                                | 765  | 795    | Sandstone/Gravel/Conglomerate |
|                                | 795  | 825    | Shale/Mudstone/Siltstone      |
|                                | 825  | 920    | Sandstone/Gravel/Conglomerate |
|                                | 920  | 935    | Shale/Mudstone/Siltstone      |
|                                | 935  | 968    | Sandstone/Gravel/Conglomerate |
|                                | 968  | 976    | Shale/Mudstone/Siltstone      |
|                                | 976  | 1005   | Sandstone/Gravel/Conglomerate |
|                                | 1005 | 1092   | Sandstone/Gravel/Conglomerate |

| Casing Perforations: | Top | Bottom |
|----------------------|-----|--------|
|                      | 735 | 1098   |

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3/5/19 1:52 PM

Page 1 of 1

POD SUMMARY - CP 01356 POD1






# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

|                 |                   |                   |            |            |            |          |   |
|-----------------|-------------------|-------------------|------------|------------|------------|----------|---|
| <b>Well Tag</b> | <b>POD Number</b> | <b>Q64 Q16 Q4</b> | <b>Sec</b> | <b>Tws</b> | <b>Rng</b> | <b>X</b> | <b>Y</b>  |
|                 | CP 01357 POD1     | 4                 | 3          | 1          | 27 21S 33E | 634782   | 3591347  |

**Driller License:** 421      **Driller Company:** GLENN'S WATER WELL SERVICE

**Driller Name:** GLENN, CLARK A."CORKY"

**Drill Start Date:** 08/16/2014

**Drill Finish Date:** 08/26/2014

**Plug Date:**

**Log File Date:** 09/10/2014

**PCW Rcv Date:**

**Source:** Artesian

**Pump Type:**

**Pipe Discharge Size:**

**Estimated Yield:**

**Casing Size:** 6.37

**Depth Well:** 1286 feet

**Depth Water:** 578 feet

### Water Bearing Stratifications:

### Top Bottom Description

|      |      |                               |
|------|------|-------------------------------|
| 945  | 960  | Sandstone/Gravel/Conglomerate |
| 960  | 1077 | Shale/Mudstone/Siltstone      |
| 1077 | 1215 | Sandstone/Gravel/Conglomerate |
| 1215 | 1286 | Shale/Mudstone/Siltstone      |

### Casing Perforations:

### Top Bottom

|     |      |
|-----|------|
| 846 | 1286 |
|-----|------|

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.

3/5/19 2:11 PM

Page 1 of 1

POD SUMMARY - CP 01357 POD1

# **Appendix B**

## **EM Survey Calibration**

**R.T. Hicks Consultants, Ltd.**

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## R. T. HICKS CONSULTANTS, LTD.

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✱ Durango, CO ✱ Carlsbad, NM ✱ Midland, TX

# ELECTROMAGNETIC SURVEY CALIBRATION TO CHLORIDE

Revised: March 7, 2019 (DRAFT)

Electromagnetic surveys (EM Survey) are commonly used to measure electrical conductivity (EC, “soil salinity”) in soils. Employing a Geonics EM38 (Exhibit 1), field personnel can effectively delineate the horizontal extent of a produced water release by measuring EC and monitoring for EC changes between background and higher EC readings. Increasing EC measurements suggest that the edge of the release extent is approaching.



**Exhibit 1: Measuring EC with the EM38 in the vertical position.**

The EM38 detects EC from the surface to a depth of approximately 4-feet. EC measurements can be obtained in the vertical or horizontal positions. In the vertical position, EC readings are weighted toward the lower depths of 3 to 4 feet. In the horizontal position, EC readings are weighted toward the upper 0 to 2 feet. If a higher EC reading is obtained in the horizontal position than the vertical position, produced water has likely impacted the upper surface more than at lower depths. If a higher EC reading is obtained in the vertical position than the horizontal position, produced water has likely impacted lower soils than the upper surface soils.

The below charts show the correlation between EC and Chloride (Cl) measurements. The EC measurements collected in the field were temperature corrected (TC) to 25° Celsius. Table 1 shows



7 March 2019

Page 2

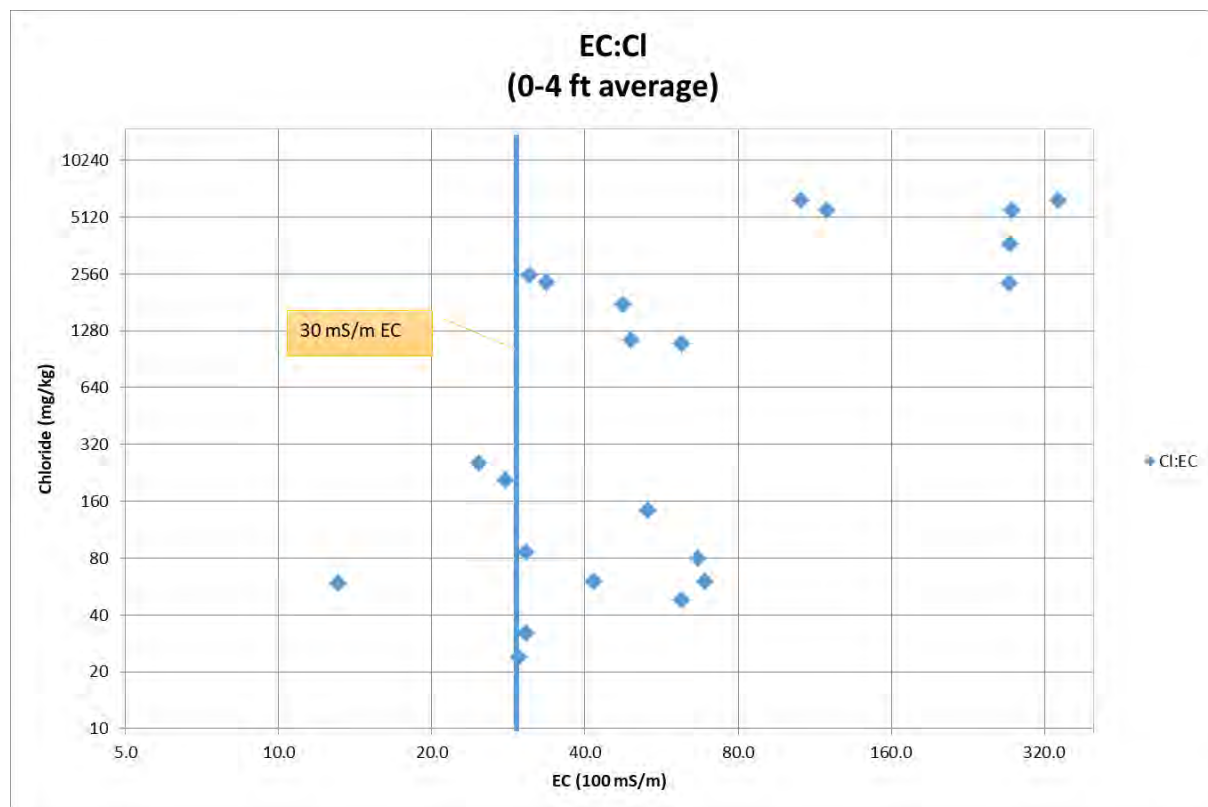
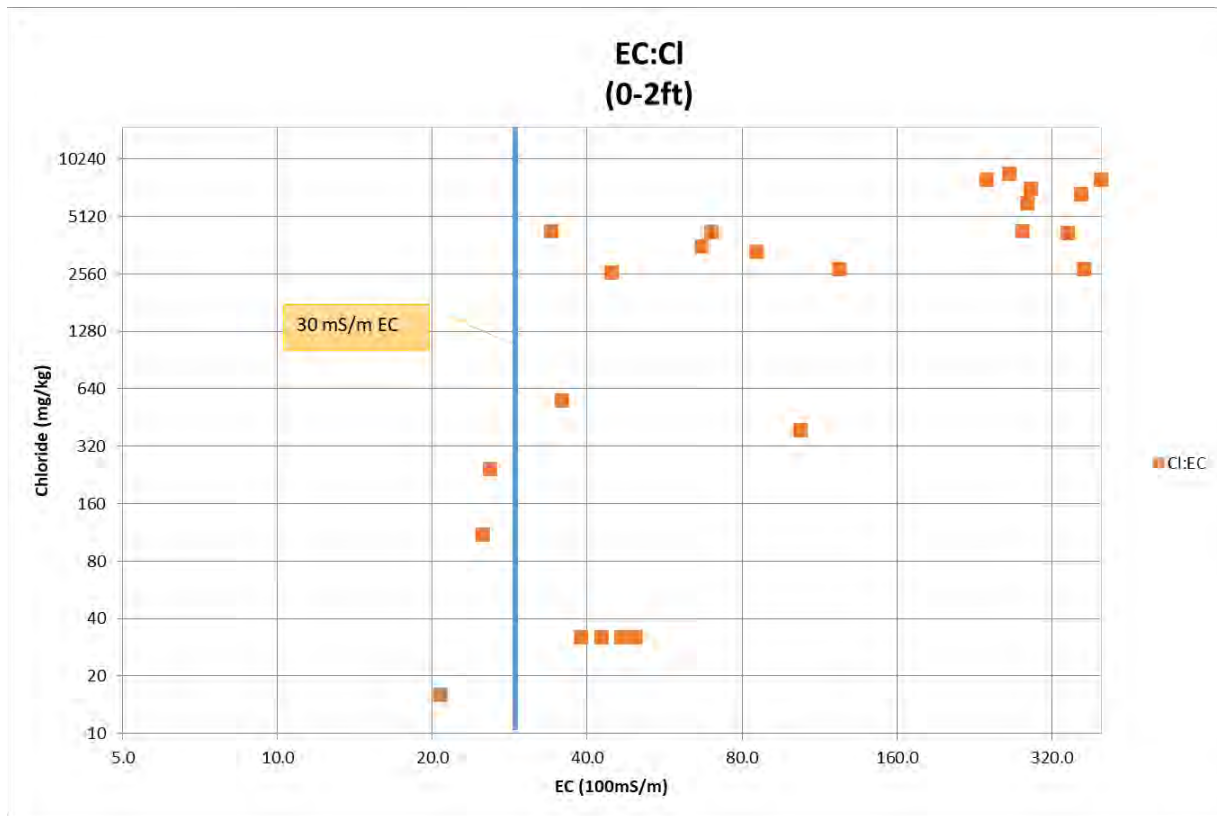
the data, collected by R.T. Hicks Consultants, which was used for the EC:Cl correlation. Table 2 shows the temperature correction factor.

Analysis of data shows that an  $EC_{tc}$  value greater than 30 mS/m is the delineation curve where chloride in soil will be greater than 600 mg/kg. Furthermore, field personnel can survey a release and identify “hot spots” with the highest EC readings. These hot spots are likely areas where impacted to near surface soils (0 to 4 feet) from released produced water will be the greatest.

R.T. Hicks Consultants, LTD

7 March 2019

Page 3



R.T. Hicks Consultants, LTD

Table 1  
EM 38 Survey  
EC:Cl

| Sample Name | Date       | Depth<br>(ft) | In-Use<br>(Yes/No) | EM38<br>(Horizontal) | EM38<br>(vertical) | EM38 TC<br>(Horizontal) | EM38 TC<br>(vertical) | Cl<br>(titration) | Cl<br>mg/kg |
|-------------|------------|---------------|--------------------|----------------------|--------------------|-------------------------|-----------------------|-------------------|-------------|
|             |            |               |                    | 100mS/m              | 100mS/m            | 100mS/m                 | 100mS/m               |                   |             |
| Background  | 12/12/2018 | 0             | No                 | 4.2                  | 6.8                | 6.2                     | 10.1                  |                   |             |
| Background  | 12/17/2018 | 0 - 2         | No                 |                      |                    |                         |                       |                   | 16          |
| Background  | 12/17/2018 | 2 - 4         | No                 |                      |                    |                         |                       |                   | 32          |
| Background  | 12/17/2018 | 5 - 6         | No                 |                      |                    |                         |                       |                   | 32          |
| S1 Base     | 12/10/2018 | 2             | No                 | 206                  | 253.0              | 296.6                   | 364.3                 | 4,992             | 6,720       |
| S1 Base     | 12/17/2018 | 4.5           | No                 | 396                  | 230.0              | 586.1                   | 340.4                 | 4,588             | 6,400       |
| S2 Base     | 12/10/2018 | 2             | No                 | 256                  | 181.0              | 368.6                   | 260.6                 | 1,355             | 2,720       |
| S3 Base     | 12/10/2018 | 2             | No                 | 277                  | 250.0              | 398.9                   | 360.0                 | 5,575             | 8,000       |
| S3 Trench   | 12/17/2018 | 1             | No                 | 343                  | 341.0              | 343                     | 341.0                 |                   |             |
| S3 Trench   | 12/17/2018 | 1 - 2         | No                 |                      |                    |                         |                       |                   | 4,200       |
| S3 Trench   | 12/17/2018 | 2 - 4         | No                 |                      |                    |                         |                       |                   | 8,400       |
| S4 Base     | 12/10/2018 | 2             | Yes                | 333                  | 252.0              | 479.5                   | 362.9                 |                   | 10,500      |
| S5 Base     | 12/10/2018 | 2             | Yes                | 202                  | 211.0              | 290.9                   | 303.8                 |                   | 7,200       |
| S6 Trench   | 12/17/2018 | 0             | No                 | 14                   | 20.0               | 20.7                    | 29.6                  |                   |             |
| S6 Trench   | 12/17/2018 | 0 - 2         | No                 |                      |                    |                         |                       |                   | 16          |
| S6 Trench   | 12/17/2018 | 2 - 4         | No                 |                      |                    |                         |                       |                   | 32          |
| S6 Trench   | 12/17/2018 | 5 - 6         | No                 |                      |                    |                         |                       |                   | 32          |
| S7 Trench   | 12/17/2018 | 0             | No                 | 23                   | 21.0               | 34.0                    | 31.1                  |                   |             |
| S7 Trench   | 12/17/2018 | 0 - 2         | No                 |                      |                    |                         |                       |                   | 4,320       |
| S7 Trench   | 12/17/2018 | 2 - 4         | No                 |                      |                    |                         |                       |                   | 736         |
| S7 Trench   | 12/17/2018 | 5 - 6         | No                 |                      |                    |                         |                       |                   | 224         |
| EC-1        | 12/11/2018 | 0             | No                 | 336                  | 302.0              | 497.3                   | 447.0                 |                   |             |
| EC-1        | 12/11/2018 | 0 - 2         | No                 |                      |                    |                         |                       | 4,711             |             |
| EC-2        | 12/11/2018 | 0             | No                 | 47                   | 47.0               | 69.6                    | 69.6                  | 4,253             |             |
| EC-2        | 12/11/2018 | 0 - 2         | No                 |                      |                    |                         |                       | 4,253             |             |
| EC-3        | 12/11/2018 | 0             | No                 | 45                   |                    | 66.6                    |                       |                   |             |
| EC-3        | 12/11/2018 | 0 - 2         | No                 |                      |                    |                         |                       | 3,575             |             |
| EC-4        | 12/01/2018 | 2.5           | No                 | 17.9                 | 21.0               | 25.8                    | 30.2                  |                   |             |
| EC-4        | 12/01/2018 | 2.5           | No                 |                      |                    |                         |                       | 244               |             |
| EC-5        | 12/19/2018 | 3.5           | Yes                | 70                   | 40.0               | 103.6                   | 59.2                  |                   |             |
| EC-5        | 12/19/2018 | 3.5           | Yes                |                      |                    |                         |                       | 388               |             |



Table 1  
EM 38 Survey  
EC:CI

| Sample Name                 | Date       | Depth<br>(ft) | In-Use<br>(Yes/No) | EM38<br>(Horizontal)<br>100mS/m | EM38<br>(vertical)<br>100mS/m | EM38 TC<br>(Horizontal)<br>100mS/m | EM38 TC<br>(vertical)<br>100mS/m | CI<br>(titration) | CI<br>mg/kg |
|-----------------------------|------------|---------------|--------------------|---------------------------------|-------------------------------|------------------------------------|----------------------------------|-------------------|-------------|
| Tee (release origin)        | 12/15/2018 | 0             | Yes                | 189.6                           | 153.4                         | 280.6                              | 227.0                            |                   |             |
| Tee (release origin)        | 04/26/2018 | 0-0.5         | Yes                |                                 |                               |                                    |                                  |                   | 4,800       |
| Tee (release origin)        | 04/26/2018 | 0.5-1.0       | Yes                |                                 |                               |                                    |                                  |                   | 830         |
| Tee (release origin)        | 04/26/2018 | 1-2           | Yes                |                                 |                               |                                    |                                  |                   | 1,100       |
| Tee (release origin)        | 04/26/2018 | 2-3           | Yes                |                                 |                               |                                    |                                  |                   | 1,100       |
| Tee (release origin)        | 04/26/2018 | 3-4           | Yes                |                                 |                               |                                    |                                  |                   | 1,500       |
| Tee (release origin)        | 04/26/2018 | 4-5           | Yes                |                                 |                               |                                    |                                  |                   | 1,600       |
| 83 ft East (of origin)      | 12/15/2018 | 0             |                    | 193.8                           | 185.2                         | 286.8                              | 274.1                            |                   |             |
| 83 ft East (of origin)      | 01/16/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 6,000       |
| 83 ft East (of origin)      | 01/16/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 1,420       |
| 83 ft East (of origin)      | 01/16/2019 | 5             | Yes                |                                 |                               |                                    |                                  |                   | 1,760       |
| 35 ft Northeast (of origin) | 12/15/2018 | 0             | No                 | 189.8                           | 186.3                         | 280.9                              | 275.7                            |                   |             |
| 35 ft Northeast (of origin) | 01/16/2019 | 0-2           | No                 |                                 |                               |                                    |                                  |                   | 4,320       |
| 35 ft Northeast (of origin) | 01/16/2019 | 2-4           | No                 |                                 |                               |                                    |                                  |                   | 3,920       |
| 35 ft Northeast (of origin) | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 5,600       |
| 35 ft Northeast (of origin) | 01/16/2019 | 5             | No                 |                                 |                               |                                    |                                  |                   | 5,040       |
| 230 ft East (of origin)     | 12/15/2018 | 0             |                    | 178.8                           | 71.8                          | 264.6                              | 106.3                            |                   |             |
| 230 ft East (of origin)     | 01/16/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 8,660       |
| 230 ft East (of origin)     | 01/16/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 960         |
| 230 ft East (of origin)     | 01/16/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 6,320       |
| 230 ft East (of origin)     | 01/16/2019 | 5             | Yes                |                                 |                               |                                    |                                  |                   | 368         |
| 390 ft East (of origin)     | 12/15/2018 | 0             |                    | 161.5                           | 80.8                          | 239.0                              | 119.6                            |                   |             |
| 390 ft East (of origin)     | 01/16/2019 | 0-2           |                    |                                 |                               |                                    |                                  |                   | 8,000       |
| 390 ft East (of origin)     | 01/16/2019 | 2-4           |                    |                                 |                               |                                    |                                  |                   | 624         |
| 390 ft East (of origin)     | 01/16/2019 | 0-4           |                    |                                 |                               |                                    |                                  |                   | 5,600       |
| 390 ft East (of origin)     | 01/16/2019 | 4.3           |                    |                                 |                               |                                    |                                  |                   | 3,360       |
| Background                  | 12/15/2018 | 0             | No                 | 16.9                            | 20.7                          | 25.0                               | 30.6                             |                   |             |
| Background                  | 01/30/2019 | 0-2           | No                 |                                 |                               |                                    |                                  |                   | 110         |
| Background                  | 01/30/2019 | 2-4           | No                 |                                 |                               |                                    |                                  |                   | 61          |
| Background                  | 01/30/2019 | 5             | No                 |                                 |                               |                                    |                                  |                   | 120         |
| EC-01                       | 12/15/2018 | 0             | No                 | 30.1                            | 33.3                          | 44.5                               | 49.3                             |                   |             |
| EC-01                       | 01/16/2019 | 0-2           | No                 |                                 |                               |                                    |                                  |                   | 2,600       |
| EC-01                       | 01/16/2019 | 2-4           | No                 |                                 |                               |                                    |                                  |                   | 352         |
| EC-01                       | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 1,140       |
| EC-01                       | 01/16/2019 | 4.3           | No                 |                                 |                               |                                    |                                  |                   | 64          |
| EC-02                       | 12/15/2018 | 0             | No                 | 18.3                            | 16.7                          | 27.1                               | 24.7                             |                   |             |
| EC-02                       | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 256         |
| EC-02                       | 01/16/2019 | 4.3           | No                 |                                 |                               |                                    |                                  |                   | 7,200       |
| EC-03                       | 12/15/2018 | 0             | No                 | 21.8                            | 20.7                          | 32.3                               | 30.6                             |                   |             |
| EC-03                       | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 32          |
| EC-03                       | 01/16/2019 | 5.0           | No                 |                                 |                               |                                    |                                  |                   | 48          |
| EC-04                       | 12/15/2018 | 0             | No                 | 83.4                            | 22.7                          | 123.4                              | 33.6                             |                   |             |
| EC-04                       | 01/16/2019 | 0-2           | No                 |                                 |                               |                                    |                                  |                   | 2,720       |
| EC-04                       | 01/16/2019 | 2-4           | No                 |                                 |                               |                                    |                                  |                   | 688         |
| EC-04                       | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 2,320       |
| EC-04                       | 01/16/2019 | 5.0           | No                 |                                 |                               |                                    |                                  |                   | 192         |
| EC-05                       | 12/15/2018 | 0             | No                 | 57.4                            | 32.1                          | 85.0                               | 47.5                             |                   |             |
| EC-05                       | 01/16/2019 | 0-2           | No                 |                                 |                               |                                    |                                  |                   | 3,360       |
| EC-05                       | 01/16/2019 | 2-4           | No                 |                                 |                               |                                    |                                  |                   | 1,010       |
| EC-05                       | 01/16/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | 1,760       |
| EC-05                       | 01/16/2019 | 5.0           | No                 |                                 |                               |                                    |                                  |                   | 704         |

Table 1  
EM 38 Survey  
EC:Cl

| Sample Name | Date      | Depth<br>(ft) | In-Use<br>(Yes/No) | EM38<br>(Horizontal)<br>100mS/m | EM38<br>(vertical)<br>100mS/m | EM38 TC<br>(Horizontal)<br>100mS/m | EM38 TC<br>(vertical)<br>100mS/m | Cl<br>(titration) | Cl<br>mg/kg |
|-------------|-----------|---------------|--------------------|---------------------------------|-------------------------------|------------------------------------|----------------------------------|-------------------|-------------|
| HA1         | 1/9/2019  | 0             | Yes                | 27.5                            | 18.0                          | 42.6                               | 27.9                             |                   |             |
| HA1         | 1/23/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 32          |
| HA1         | 1/23/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 304         |
| HA1         | 1/23/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 208         |
| HA2         | 1/9/2019  | 0             | Yes                | 25.0                            | 34.3                          | 38.8                               | 53.2                             |                   |             |
| HA2         | 1/23/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 32          |
| HA2         | 1/23/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 160         |
| HA2         | 1/23/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 144         |
| HA3         | 1/9/2019  | 0             | Yes                | 23.0                            | 40.0                          | 35.7                               | 62.0                             |                   |             |
| HA3         | 1/23/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 560         |
| HA3         | 1/23/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 1840        |
| HA3         | 1/23/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 1100        |
| HA1         | 1/9/2019  | 0             | Yes                | 30.0                            | 40.0                          | 46.5                               | 62.0                             |                   |             |
| HA1         | 1/23/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 32          |
| HA1         | 1/23/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 64          |
| HA1         | 1/23/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 48          |
| HA1         | 1/23/2019 | 4-4.2         | Yes                |                                 |                               |                                    |                                  |                   | 64          |
| HA2         | 1/23/2019 | 0             | Yes                | 32.0                            | 43.0                          | 49.6                               | 66.7                             |                   |             |
| HA2         | 1/23/2019 | 0-2           | Yes                |                                 |                               |                                    |                                  |                   | 32          |
| HA2         | 1/23/2019 | 2-4           | Yes                |                                 |                               |                                    |                                  |                   | 112         |
| HA2         | 1/23/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 80          |
| HA2         | 1/23/2019 | 0-4.4         | Yes                |                                 |                               |                                    |                                  |                   | 96          |
| Trench 1    | 2/24/2019 | 0             | Yes                | 187.0                           | 145.0                         | 273.0                              | 211.7                            |                   |             |
| Trench 1    | 2/24/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | 2300        |
| Trench 1    | 2/24/2019 | 4.5           | Yes                |                                 |                               |                                    |                                  |                   | <60         |
| Trench 2    | 2/24/2019 | 0             | Yes                | 6.0                             | 9.0                           | 8.8                                | 13.1                             |                   |             |
| Trench 2    | 2/24/2019 | 0-4           | Yes                |                                 |                               |                                    |                                  |                   | <59         |
| Trench 2    | 2/24/2019 | 4.5           | Yes                |                                 |                               |                                    |                                  |                   | <60         |
| HA-01       | 2/24/2019 | 1             | No                 | 32.7                            | 47.2                          | 47.7                               | 68.9                             |                   |             |
| HA-01       | 2/24/2019 | 1-4           | No                 |                                 |                               |                                    |                                  |                   | <60         |
| HA-01       | 2/24/2019 | 4.5           | No                 |                                 |                               |                                    |                                  |                   | <60         |
| HA-02       | 2/24/2019 | 0             | No                 | 18.0                            | 28.5                          | 26.3                               | 41.6                             |                   |             |
| HA-02       | 2/24/2019 | 0-4           | No                 |                                 |                               |                                    |                                  |                   | <60         |
| HA-02       | 2/24/2019 | 4.5           | No                 |                                 |                               |                                    |                                  |                   | <60         |

Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 01/01 | 1.55              |
| 01/02 | 1.55              |
| 01/03 | 1.55              |
| 01/04 | 1.55              |
| 01/05 | 1.55              |
| 01/06 | 1.55              |
| 01/07 | 1.55              |
| 01/08 | 1.55              |
| 01/09 | 1.55              |
| 01/10 | 1.55              |
| 01/11 | 1.56              |
| 01/12 | 1.56              |
| 01/13 | 1.56              |
| 01/14 | 1.56              |
| 01/15 | 1.56              |
| 01/16 | 1.56              |
| 01/17 | 1.56              |
| 01/18 | 1.56              |
| 01/19 | 1.56              |
| 01/20 | 1.56              |
| 01/21 | 1.55              |
| 01/22 | 1.55              |
| 01/23 | 1.55              |
| 01/24 | 1.55              |
| 01/25 | 1.55              |
| 01/26 | 1.55              |
| 01/27 | 1.55              |
| 01/28 | 1.55              |
| 01/29 | 1.55              |
| 01/30 | 1.55              |
| 01/31 | 1.55              |
| 02/01 | 1.53              |
| 02/02 | 1.53              |
| 02/03 | 1.53              |
| 02/04 | 1.53              |
| 02/05 | 1.53              |
| 02/06 | 1.53              |
| 02/07 | 1.53              |
| 02/08 | 1.53              |
| 02/09 | 1.53              |
| 02/10 | 1.53              |
| 02/11 | 1.5               |
| 02/12 | 1.5               |
| 02/13 | 1.5               |
| 02/14 | 1.5               |
| 02/15 | 1.5               |
| 02/16 | 1.5               |
| 02/17 | 1.5               |
| 02/18 | 1.5               |
| 02/19 | 1.5               |
| 02/20 | 1.5               |
| 02/21 | 1.46              |
| 02/22 | 1.46              |
| 02/23 | 1.46              |
| 02/24 | 1.46              |
| 02/25 | 1.46              |
| 02/26 | 1.46              |
| 02/27 | 1.46              |
| 02/28 | 1.46              |
| 02/29 | 1.46              |

Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 03/01 | 1.42              |
| 03/02 | 1.42              |
| 03/03 | 1.42              |
| 03/04 | 1.42              |
| 03/05 | 1.42              |
| 03/06 | 1.42              |
| 03/07 | 1.42              |
| 03/08 | 1.42              |
| 03/09 | 1.42              |
| 03/10 | 1.42              |
| 03/11 | 1.36              |
| 03/12 | 1.36              |
| 03/13 | 1.36              |
| 03/14 | 1.36              |
| 03/15 | 1.36              |
| 03/16 | 1.36              |
| 03/17 | 1.36              |
| 03/18 | 1.36              |
| 03/19 | 1.36              |
| 03/20 | 1.36              |
| 03/21 | 1.3               |
| 03/22 | 1.3               |
| 03/23 | 1.3               |
| 03/24 | 1.3               |
| 03/25 | 1.3               |
| 03/26 | 1.3               |
| 03/27 | 1.3               |
| 03/28 | 1.3               |
| 03/29 | 1.3               |
| 03/30 | 1.3               |
| 03/31 | 1.3               |
| 04/01 | 1.24              |
| 04/02 | 1.24              |
| 04/03 | 1.24              |
| 04/04 | 1.24              |
| 04/05 | 1.24              |
| 04/06 | 1.24              |
| 04/07 | 1.24              |
| 04/08 | 1.24              |
| 04/09 | 1.24              |
| 04/10 | 1.24              |
| 04/11 | 1.18              |
| 04/12 | 1.18              |
| 04/13 | 1.18              |
| 04/14 | 1.18              |
| 04/15 | 1.18              |
| 04/16 | 1.18              |
| 04/17 | 1.18              |
| 04/18 | 1.18              |
| 04/19 | 1.18              |
| 04/20 | 1.18              |
| 04/21 | 1.13              |
| 04/22 | 1.13              |
| 04/23 | 1.13              |
| 04/24 | 1.13              |
| 04/25 | 1.13              |
| 04/26 | 1.13              |
| 04/27 | 1.13              |
| 04/28 | 1.13              |
| 04/29 | 1.13              |
| 04/30 | 1.13              |



Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 05/01 | 1.08              |
| 05/02 | 1.08              |
| 05/03 | 1.08              |
| 05/04 | 1.08              |
| 05/05 | 1.08              |
| 05/06 | 1.08              |
| 05/07 | 1.08              |
| 05/08 | 1.08              |
| 05/09 | 1.08              |
| 05/10 | 1.08              |
| 05/11 | 1.04              |
| 05/12 | 1.04              |
| 05/13 | 1.04              |
| 05/14 | 1.04              |
| 05/15 | 1.04              |
| 05/16 | 1.04              |
| 05/17 | 1.04              |
| 05/18 | 1.04              |
| 05/19 | 1.04              |
| 05/20 | 1.04              |
| 05/21 | 1                 |
| 05/22 | 1                 |
| 05/23 | 1                 |
| 05/24 | 1                 |
| 05/25 | 1                 |
| 05/26 | 1                 |
| 05/27 | 1                 |
| 05/28 | 1                 |
| 05/29 | 1                 |
| 05/30 | 1                 |
| 05/31 | 1                 |
| 06/01 | 0.97              |
| 06/02 | 0.97              |
| 06/03 | 0.97              |
| 06/04 | 0.97              |
| 06/05 | 0.97              |
| 06/06 | 0.97              |
| 06/07 | 0.97              |
| 06/08 | 0.97              |
| 06/09 | 0.97              |
| 06/10 | 0.97              |
| 06/11 | 0.94              |
| 06/12 | 0.94              |
| 06/13 | 0.94              |
| 06/14 | 0.94              |
| 06/15 | 0.94              |
| 06/16 | 0.94              |
| 06/17 | 0.94              |
| 06/18 | 0.94              |
| 06/19 | 0.94              |
| 06/20 | 0.94              |
| 06/21 | 0.92              |
| 06/22 | 0.92              |
| 06/23 | 0.92              |
| 06/24 | 0.92              |
| 06/25 | 0.92              |
| 06/26 | 0.92              |
| 06/27 | 0.92              |
| 06/28 | 0.92              |
| 06/29 | 0.92              |
| 06/30 | 0.92              |

Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 07/01 | 0.91              |
| 07/02 | 0.91              |
| 07/03 | 0.91              |
| 07/04 | 0.91              |
| 07/05 | 0.91              |
| 07/06 | 0.91              |
| 07/07 | 0.91              |
| 07/08 | 0.91              |
| 07/09 | 0.91              |
| 07/10 | 0.91              |
| 07/11 | 0.91              |
| 07/12 | 0.91              |
| 07/13 | 0.91              |
| 07/14 | 0.91              |
| 07/15 | 0.91              |
| 07/16 | 0.91              |
| 07/17 | 0.91              |
| 07/18 | 0.91              |
| 07/19 | 0.91              |
| 07/20 | 0.91              |
| 07/21 | 0.91              |
| 07/22 | 0.91              |
| 07/23 | 0.91              |
| 07/24 | 0.91              |
| 07/25 | 0.91              |
| 07/26 | 0.91              |
| 07/27 | 0.91              |
| 07/28 | 0.91              |
| 07/29 | 0.91              |
| 07/30 | 0.91              |
| 07/31 | 0.91              |
| 08/01 | 0.92              |
| 08/02 | 0.92              |
| 08/03 | 0.92              |
| 08/04 | 0.92              |
| 08/05 | 0.92              |
| 08/06 | 0.92              |
| 08/07 | 0.92              |
| 08/08 | 0.92              |
| 08/09 | 0.92              |
| 08/10 | 0.92              |
| 08/11 | 0.93              |
| 08/12 | 0.93              |
| 08/13 | 0.93              |
| 08/14 | 0.93              |
| 08/15 | 0.93              |
| 08/16 | 0.93              |
| 08/17 | 0.93              |
| 08/18 | 0.93              |
| 08/19 | 0.93              |
| 08/20 | 0.93              |
| 08/21 | 0.91              |
| 08/22 | 0.91              |
| 08/23 | 0.91              |
| 08/24 | 0.91              |
| 08/25 | 0.91              |
| 08/26 | 0.91              |
| 08/27 | 0.91              |
| 08/28 | 0.91              |
| 08/29 | 0.91              |
| 08/30 | 0.91              |
| 08/31 | 0.91              |

Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 09/01 | 0.98              |
| 09/02 | 0.98              |
| 09/03 | 0.98              |
| 09/04 | 0.98              |
| 09/05 | 0.98              |
| 09/06 | 0.98              |
| 09/07 | 0.98              |
| 09/08 | 0.98              |
| 09/09 | 0.98              |
| 09/10 | 0.98              |
| 09/11 | 1.01              |
| 09/12 | 1.01              |
| 09/13 | 1.01              |
| 09/14 | 1.01              |
| 09/15 | 1.01              |
| 09/16 | 1.01              |
| 09/17 | 1.01              |
| 09/18 | 1.01              |
| 09/19 | 1.01              |
| 09/20 | 1.01              |
| 09/21 | 1.05              |
| 09/22 | 1.05              |
| 09/23 | 1.05              |
| 09/24 | 1.05              |
| 09/25 | 1.05              |
| 09/26 | 1.05              |
| 09/27 | 1.05              |
| 09/28 | 1.05              |
| 09/29 | 1.05              |
| 09/30 | 1.05              |
| 10/01 | 1.09              |
| 10/02 | 1.09              |
| 10/03 | 1.09              |
| 10/04 | 1.09              |
| 10/05 | 1.09              |
| 10/06 | 1.09              |
| 10/07 | 1.09              |
| 10/08 | 1.09              |
| 10/09 | 1.09              |
| 10/10 | 1.09              |
| 10/11 | 1.14              |
| 10/12 | 1.14              |
| 10/13 | 1.14              |
| 10/14 | 1.14              |
| 10/15 | 1.14              |
| 10/16 | 1.14              |
| 10/17 | 1.14              |
| 10/18 | 1.14              |
| 10/19 | 1.14              |
| 10/20 | 1.14              |
| 10/21 | 1.2               |
| 10/22 | 1.2               |
| 10/23 | 1.2               |
| 10/24 | 1.2               |
| 10/25 | 1.2               |
| 10/26 | 1.2               |
| 10/27 | 1.2               |
| 10/28 | 1.2               |
| 10/29 | 1.2               |
| 10/30 | 1.2               |
| 10/31 | 1.2               |

Table 2  
EC Temperature Correction Factor

| Date  | Correction Factor |
|-------|-------------------|
| 11/01 | 1.26              |
| 11/02 | 1.26              |
| 11/03 | 1.26              |
| 11/04 | 1.26              |
| 11/05 | 1.26              |
| 11/06 | 1.26              |
| 11/07 | 1.26              |
| 11/08 | 1.26              |
| 11/09 | 1.26              |
| 11/10 | 1.26              |
| 11/11 | 1.32              |
| 11/12 | 1.32              |
| 11/13 | 1.32              |
| 11/14 | 1.32              |
| 11/15 | 1.32              |
| 11/16 | 1.32              |
| 11/17 | 1.32              |
| 11/18 | 1.32              |
| 11/19 | 1.32              |
| 11/20 | 1.32              |
| 11/21 | 1.38              |
| 11/22 | 1.38              |
| 11/23 | 1.38              |
| 11/24 | 1.38              |
| 11/25 | 1.38              |
| 11/26 | 1.38              |
| 11/27 | 1.38              |
| 11/28 | 1.38              |
| 11/29 | 1.38              |
| 11/30 | 1.38              |
| 12/01 | 1.44              |
| 12/02 | 1.44              |
| 12/03 | 1.44              |
| 12/04 | 1.44              |
| 12/05 | 1.44              |
| 12/06 | 1.44              |
| 12/07 | 1.44              |
| 12/08 | 1.44              |
| 12/09 | 1.44              |
| 12/10 | 1.44              |
| 12/11 | 1.48              |
| 12/12 | 1.48              |
| 12/13 | 1.48              |
| 12/14 | 1.48              |
| 12/15 | 1.48              |
| 12/16 | 1.48              |
| 12/17 | 1.48              |
| 12/18 | 1.48              |
| 12/19 | 1.48              |
| 12/20 | 1.48              |
| 12/21 | 1.52              |
| 12/22 | 1.52              |
| 12/23 | 1.52              |
| 12/24 | 1.52              |
| 12/25 | 1.52              |
| 12/26 | 1.52              |
| 12/27 | 1.52              |
| 12/28 | 1.52              |
| 12/29 | 1.52              |
| 12/30 | 1.52              |
| 12/31 | 1.52              |



# **Appendix C**

## **Laboratory Certificates of Analyses**

**R.T. Hicks Consultants, Ltd.**  
901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 11, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: DAGGER 2H PW

Enclosed are the results of analyses for samples received by the laboratory on 12/10/18 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

|                   |                |                     |                |
|-------------------|----------------|---------------------|----------------|
| Received:         | 12/10/2018     | Sampling Date:      | 12/10/2018     |
| Reported:         | 12/11/2018     | Sampling Type:      | Soil           |
| Project Name:     | DAGGER 2H PW   | Sampling Condition: | ** (See Notes) |
| Project Number:   | NONE GIVEN     | Sample Received By: | Tamara Oldaker |
| Project Location: | LEA COUNTY, NM |                     |                |

**Sample ID: S 1 BASE @ 2' (H803613-01)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 6720   | 16.0            | 12/11/2018 | ND              | 432 | 108        | 400           | 3.77 |           |

**Sample ID: S 1 S. WALL @ 0-2' (H803613-02)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 832    | 16.0            | 12/11/2018 | ND              | 432 | 108        | 400           | 3.77 |           |

**Sample ID: S 1 N. WALL @ 0-2' (H803613-03)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 5280   | 16.0            | 12/11/2018 | ND              | 432 | 108        | 400           | 3.77 |           |

**Sample ID: S 2 BASE @ 2' (H803613-04)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 2720   | 16.0            | 12/11/2018 | ND              | 432 | 108        | 400           | 3.77 |           |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/10/2018  
 Reported: 12/11/2018  
 Project Name: DAGGER 2H PW  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY, NM

Sampling Date: 12/10/2018  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: S 2 N. WALL @ 0-2' (H803613-05)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 5760   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 | QM-07     |  |

**Sample ID: S 2 S. WALL @ 0- 2' (H803613-06)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 5840   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 3 BASE @ 2' (H803613-07)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 8000   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 3 S. WALL @ 0-2' (H803613-08)**

| 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            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 3 N. WALL @ 0-2' (H803613-09)**

| 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            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/10/2018  
 Reported: 12/11/2018  
 Project Name: DAGGER 2H PW  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY, NM

Sampling Date: 12/10/2018  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: S 4 BASE @ 2' (H803613-10)**

| Chloride, SM4500Cl-B |        | mg / kg         |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 10500  | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 4 1-2' (H803613-11)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 8530   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 4 0-1' (H803613-12)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 5330   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 5 BASE @ 2' (H803613-13)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 7200   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 5 1-2' (H803613-14)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 7860   | 16.0            | 12/11/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/10/2018  
 Reported: 12/11/2018  
 Project Name: DAGGER 2H PW  
 Project Number: NONE GIVEN  
 Project Location: LEA COUNTY, NM

Sampling Date: 12/10/2018  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: S 5 0-1' (H803613-15)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: AC**

| Analyte         | Result      | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
|-----------------|-------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| <b>Chloride</b> | <b>4800</b> | 16.0            | 12/11/2018 | ND           | 448 | 112        | 400           | 0.00 |           |

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Celey D. Keene, Lab Director/Quality Manager

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---

### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| Company Name: <u>RT Hicks Consultants</u>   |                         |                 |              | <b>BILL TO</b>             |            |      |     | <b>ANALYSIS REQUEST</b>   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
|---|-------------------------|-----------------|--------------|----------------------------|------------|------|-----|---|--------|------------|------------|----------------|--------------|------|--|------------------|--|-----------------|--------------|--------|--|--|--|--|--|----------|--|----------|--|----------|-------------|-------------|------------|------|-----|--------|--------|------------|------------|--------|------|------|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|----------------------|----------|--|--|--|---|--|--|--|--|--|----------------|--------------|----------|-------------------------|----------|--|--|--|--|--|--|--|--|--|--|--------------|----------|----------------------|----------|--|--|--|--|--|--|--|--|--|--|--------------|----------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|----------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|----------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|----------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|----------|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|----------|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|
| Project Manager: <u>Andrew Parker</u>   |                         |                 |              | P.O. #:                    |            |      |     | <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Company: <u>RT Hicks</u></p> <p>Attn: <u>Andrew Parker</u></p> <p>Address:</p> <p>City:</p> <p>State:      Zip:</p> <p>Phone #:</p> <p>Fax #:</p> </div> <div style="width: 65%;"> <p>CL (4800)</p> <p>TPH EXT</p> <p>BTEX, Benzene</p> </div> </div> |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Address: <u>on file</u>   |                         |                 |              | Company: <u>RT Hicks</u>   |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| City:      State:      Zip:   |                         |                 |              | Attn: <u>Andrew Parker</u> |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Phone #:      Fax #:  |                         |                 |              | Address:                   |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Project #:      Project Owner:  |                         |                 |              | City:                      |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Project Name:   |                         |                 |              | State:      Zip:           |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Project Location: <u>Dagger 2H PW</u>   |                         |                 |              | Phone #:                   |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Sampler Name: <u>Andrew</u>   |                         |                 |              | Fax #:                     |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <table border="1"> <thead> <tr> <th colspan="2">FOR LAB USE ONLY</th> <th rowspan="2">GRAB OR (C)OMP.</th> <th rowspan="2"># CONTAINERS</th> <th colspan="6">MATRIX</th> <th colspan="2">PRESERV.</th> <th colspan="2">SAMPLING</th> </tr> <tr> <th>Lab I.D.</th> <th>Sample I.D.</th> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER:</th> <th>ACID/BASE:</th> <th>ICE / COOL</th> <th>OTHER:</th> <th>DATE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td><u>H803613</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>1</u></td> <td><u>S1 Base @ 2ft</u></td> <td><u>C</u></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>12/6/18</u></td> <td><u>13:00</u></td> </tr> <tr> <td><u>2</u></td> <td><u>S1 S.WALL 0-2 ft</u></td> <td><u>C</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:05</u></td> </tr> <tr> <td><u>3</u></td> <td><u>S1 N.WALL 0-2</u></td> <td><u>C</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:10</u></td> </tr> <tr> <td><u>4</u></td> <td><u>S2 Base @ 2ft</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:15</u></td> </tr> <tr> <td><u>5</u></td> <td><u>S2 N.WALL 0-2</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:20</u></td> </tr> <tr> <td><u>6</u></td> <td><u>S2 S.WALL 0-2</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:30</u></td> </tr> <tr> <td><u>7</u></td> <td><u>S3 Base @ 2ft</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:40</u></td> </tr> <tr> <td><u>8</u></td> <td><u>S3 S.WALL 0-2 ft</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:45</u></td> </tr> <tr> <td><u>9</u></td> <td><u>S3 N.WALL 0-2 ft</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>13:50</u></td> </tr> </tbody> </table> |                         |                 |              |                            |            |      |     |   |        |            |            |                |              |      |  | FOR LAB USE ONLY |  | GRAB OR (C)OMP. | # CONTAINERS | MATRIX |  |  |  |  |  | PRESERV. |  | SAMPLING |  | Lab I.D. | Sample I.D. | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER: | ACID/BASE: | ICE / COOL | OTHER: | DATE | TIME | <u>H803613</u> |  |  |  |  |  |  |  |  |  |  |  |  |  | <u>1</u> | <u>S1 Base @ 2ft</u> | <u>C</u> |  |  |  | X |  |  |  |  |  | <u>12/6/18</u> | <u>13:00</u> | <u>2</u> | <u>S1 S.WALL 0-2 ft</u> | <u>C</u> |  |  |  |  |  |  |  |  |  |  | <u>13:05</u> | <u>3</u> | <u>S1 N.WALL 0-2</u> | <u>C</u> |  |  |  |  |  |  |  |  |  |  | <u>13:10</u> | <u>4</u> | <u>S2 Base @ 2ft</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:15</u> | <u>5</u> | <u>S2 N.WALL 0-2</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:20</u> | <u>6</u> | <u>S2 S.WALL 0-2</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:30</u> | <u>7</u> | <u>S3 Base @ 2ft</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:40</u> | <u>8</u> | <u>S3 S.WALL 0-2 ft</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:45</u> | <u>9</u> | <u>S3 N.WALL 0-2 ft</u> |  |  |  |  |  |  |  |  |  |  |  | <u>13:50</u> |
| FOR LAB USE ONLY  |                         | GRAB OR (C)OMP. | # CONTAINERS | MATRIX                     |            |      |     |   |        | PRESERV.   |            | SAMPLING       |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| Lab I.D.  | Sample I.D.             |                 |              | GROUNDWATER                | WASTEWATER | SOIL | OIL | SLUDGE  | OTHER: | ACID/BASE: | ICE / COOL | OTHER:         | DATE         | TIME |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>H803613</u>  |                         |                 |              |                            |            |      |     |   |        |            |            |                |              |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>1</u>  | <u>S1 Base @ 2ft</u>    | <u>C</u>        |              |                            |            | X    |     |   |        |            |            | <u>12/6/18</u> | <u>13:00</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>2</u>  | <u>S1 S.WALL 0-2 ft</u> | <u>C</u>        |              |                            |            |      |     |   |        |            |            |                | <u>13:05</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>3</u>  | <u>S1 N.WALL 0-2</u>    | <u>C</u>        |              |                            |            |      |     |   |        |            |            |                | <u>13:10</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>4</u>  | <u>S2 Base @ 2ft</u>    |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:15</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>5</u>  | <u>S2 N.WALL 0-2</u>    |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:20</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>6</u>  | <u>S2 S.WALL 0-2</u>    |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:30</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>7</u>  | <u>S3 Base @ 2ft</u>    |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:40</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>8</u>  | <u>S3 S.WALL 0-2 ft</u> |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:45</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |
| <u>9</u>  | <u>S3 N.WALL 0-2 ft</u> |                 |              |                            |            |      |     |   |        |            |            |                | <u>13:50</u> |      |  |                  |  |                 |              |        |  |  |  |  |  |          |  |          |  |          |             |             |            |      |     |        |        |            |            |        |      |      |                |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                      |          |  |  |  |   |  |  |  |  |  |                |              |          |                         |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |          |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                      |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |          |                         |  |  |  |  |  |  |  |  |  |  |  |              |

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|   |  |                       |   |  |   |                |
|---|--|-----------------------|---|--|---|----------------|
| Relinquished By: <u>Andrew Parker</u>         |  | Date: <u>12/10/18</u> | Received By: <u>[Signature]</u>   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No                                | Add'l Phone #: |
| Time: <u>16:30</u>                            |  |                       | Time: <u>16:30</u>  |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No                                  | Add'l Fax #:   |
| Relinquished By: <u>[Signature]</u>           |  | Date: <u>12/10/18</u> | Received By: <u>[Signature]</u>   |  | REMARKS:  |                |
| Time: <u>13:20</u>                            |  |                       | Time: <u>13:20</u>  |  | <p><u>CHLORIDE RFN</u></p> <p><u>Rush!</u></p> <p><u>Text when CL are emailed to 970-570-9535</u></p> |                |
| Delivered By: (Circle One)                    |  |                       | Sample Condition  |  | CHECKED BY: (Initials)  |                |
| Sampler - UPS - Bus - Other: <u>13.20 #97</u> |  |                       | Cool Intact<br><input type="checkbox"/> Yes <input type="checkbox"/> No |  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><u>13.20</u>                              |                |

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# CARDINAL

## Laboratories

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

|   |  |                     |  |                                |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
|---|--|---------------------|--|--------------------------------|--|--|--|---|--|------------------------------------|--|---------------------------|--|--|--|--|--|--|--|------|--|
| Company Name: <u>RT Hicks Consultants</u> |  |                     |  | <b>BILL TO</b>                 |  |  |  | <b>ANALYSIS REQUEST</b>   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Project Manager: <u>Andrew Parker</u>     |  |                     |  | P.O. #:                        |  |  |  | <div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div>CI</div> <div>TPH EXT</div> <div>BTEX, BENZENE</div> </div> |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Address:                                  |  |                     |  | Company: <u>RT Hicks</u>       |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| City:                                     |  | State:              |  | Zip:                           |  | Attn: <u>Andrew Parker</u>                                   |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Phone #:                                  |  | Fax #:              |  | Address:                       |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Project #:                                |  | Project Owner:      |  | City:                          |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Project Name:                             |  |                     |  | State:                         |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  | Zip: |  |
| Project Location: <u>Daggyr 2H PW</u>     |  |                     |  | Phone #:                       |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Sampler Name:                             |  |                     |  | Fax #:                         |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| FOR LAB USE ONLY                          |  |                     |  |                                |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |
| Lab I.D.                                  |  | Sample I.D.         |  | (GRAB OR (C)OMP. # CONTAINERS) |  | MATRIX   |  |   |  | PRESERV.                           |  | SAMPLING                  |  |  |  |  |  |  |  |      |  |
|   |  |                     |  |                                |  | GROUNDWATER<br>WASTEWATER<br>SOIL<br>OIL<br>SLUDGE<br>OTHER: |  |   |  | ACID/BASE:<br>ICE / COOL<br>OTHER: |  | DATE TIME                 |  |  |  |  |  |  |  |      |  |
| <u>H803613</u>                            |  |                     |  | <u>6</u>                       |  |  |  |   |  |                                    |  | <u>12-10</u> <u>14:00</u> |  |  |  |  |  |  |  |      |  |
| <u>10</u>                                 |  | <u>S4 Box @ 2ft</u> |  | <u>↓</u>                       |  |  |  |   |  |                                    |  | <u>14:05</u>              |  |  |  |  |  |  |  |      |  |
| <u>11</u>                                 |  | <u>S4 1-2 ft</u>    |  | <u>↓</u>                       |  |  |  |   |  |                                    |  | <u>14:10</u>              |  |  |  |  |  |  |  |      |  |
| <u>12</u>                                 |  | <u>S4 0-1 ft</u>    |  | <u>↓</u>                       |  |  |  |   |  |                                    |  | <u>14:15</u>              |  |  |  |  |  |  |  |      |  |
| <u>13</u>                                 |  | <u>S5 Box @ 2ft</u> |  | <u>↓</u>                       |  |  |  |   |  |                                    |  | <u>14:20</u>              |  |  |  |  |  |  |  |      |  |
| <u>14</u>                                 |  | <u>S5 1-2 ft</u>    |  | <u>↓</u>                       |  |  |  |   |  |                                    |  | <u>14:25</u>              |  |  |  |  |  |  |  |      |  |
| <u>15</u>                                 |  | <u>S5 0-1 ft</u>    |  | <u>↓</u>                       |  |  |  |   |  |                                    |  |                           |  |  |  |  |  |  |  |      |  |

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|                                     |  |                    |  |  |  |  |  |   |  |
|-------------------------------------|--|--------------------|--|--|--|--|--|---|--|
| Relinquished By: <u>[Signature]</u> |  | Date: <u>12-10</u> |  | Received By: <u>[Signature]</u>  |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Add'l Phone #:  |  |
| Relinquished By:                    |  | Time: <u>16:30</u> |  | Received By:   |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Add'l Fax #:  |  |
| Delivered By: (Circle One)          |  | Time:              |  | Sample Condition   |  | CHECKED BY: (Initials)   |  | REMARKS:  |  |
| Sampler - UPS - Bus - Other:        |  | <u>13.2c #97</u>   |  | Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  | <u>TO.</u>   |  | <u>Rush!</u><br><u>CHLORIDE RFN</u><br><u>HOLD BTEX, TPH, BENZENE</u> |  |

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---

December 12, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: DAGGER 2H PW

Enclosed are the results of analyses for samples received by the laboratory on 12/11/18 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

|                   |                |                     |                |
|-------------------|----------------|---------------------|----------------|
| Received:         | 12/11/2018     | Sampling Date:      | 12/11/2018     |
| Reported:         | 12/12/2018     | Sampling Type:      | Soil           |
| Project Name:     | DAGGER 2H PW   | Sampling Condition: | ** (See Notes) |
| Project Number:   | ADVANCE ENERGY | Sample Received By: | Jodi Henson    |
| Project Location: | LEA COUNTY, NM |                     |                |

**Sample ID: SOURCE BASE @ 5' (H803623-01)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 15900  | 16.0            | 12/12/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

**Sample ID: SOURCE 0-3' (H803623-02)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 4560   | 16.0            | 12/12/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

**Sample ID: SOURCE 3-4' (H803623-03)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 11700  | 16.0            | 12/12/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

Cardinal Laboratories

\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager





(575) 393-2326 FAX (575) 393-2476

Released to Imaging: 1/18/2022 2:19:06 PM



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

December 18, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/18/18 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

|                   |                |                     |                |
|-------------------|----------------|---------------------|----------------|
| Received:         | 12/18/2018     | Sampling Date:      | 12/17/2018     |
| Reported:         | 12/18/2018     | Sampling Type:      | Soil           |
| Project Name:     | ADVANCE ENERGY | Sampling Condition: | Cool & Intact  |
| Project Number:   | BSU 2H         | Sample Received By: | Tamara Oldaker |
| Project Location: | NOT GIVEN      |                     |                |

**Sample ID: S 3 TRENCH 1-2' (H803671-01)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 4240   | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 3 TRENCH 2-4' (H803671-02)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 8400   | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 3 TRENCH 6-7' (H803671-03)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 18000  | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 3 TRENCH 9' (H803671-04)**

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 64.0   | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/18/2018  
 Reported: 12/18/2018  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU 2H  
 Project Location: NOT GIVEN

Sampling Date: 12/17/2018  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S 6 TRENCH 0-2' (H803671-05)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 6 TRENCH 2-4' (H803671-06)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 6 TRENCH 5-6' (H803671-07)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: S 7 TRENCH 0-2' (H803671-08)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 4320   | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 7 TRENCH 2-4' (H803671-09)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 736    | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/18/2018  
 Reported: 12/18/2018  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU 2H  
 Project Location: NOT GIVEN

Sampling Date: 12/17/2018  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S 7 TRENCH 5-6' (H803671-10)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 224    | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |  |

**Sample ID: BACKGROUND 0-2' (H803671-11)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: BACKGROUND 2-4' (H803671-12)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: BACKGROUND 5-6' (H803671-13)**

| 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            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

**Sample ID: S 1 TRENCH 4.5' (H803671-14)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 6400   | 16.0            | 12/18/2018 | ND              | 448 | 112        | 400           | 0.00 |           |

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Celey D. Keene, Lab Director/Quality Manager



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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

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Celey D. Keene, Lab Director/Quality Manager



**CARDINAL**  
Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

[illegible]

**PLEASE NOTE:** Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.

|                              |  |       |  |  |  |                |
|------------------------------|--|-------|--|--|--|----------------|
| Relinquished By:             |  | Date: | Received By:   | Phone Result:  | <input type="checkbox"/> Yes <input type="checkbox"/> No | Add'l Phone #: |
| <i>Amador</i>                |  | Time: | <i>Jamara Oldaker</i>  | Fax Result:  | <input type="checkbox"/> Yes <input type="checkbox"/> No | Add'l Fax #:   |
| Relinquished By:             |  | Date: | Received By:   | REMARKS:   |  |                |
|                              |  | Time: |  | <i>RFNNN</i> - <i>Rush!</i> <i>Page 1/2</i><br><i>Text when results emailed.</i> |  |                |
| Delivered By: (Circle One)   |  |       | Sample Condition   | CHECKED BY:  |  |                |
| Sampler - UPS - Bus - Other: |  |       | Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | (Initials)<br><i>TO.</i>   |  |                |

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 292-2226





# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]

**PLEASE NOTE: Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.

|                              |  |          |  |  |  |  |  |                |  |
|------------------------------|--|----------|--|--|--|--|--|----------------|--|
| Relinquished By:             |  | Date:    |  | Received By:   |  | Phone Result:  |  | Add'l Phone #: |  |
| <i>Amber</i>                 |  | 12-18-18 |  | <i>Samara Oldaker</i>  |  | <input type="checkbox"/> Yes <input type="checkbox"/> No |  |                |  |
|                              |  | Time:    |  |  |  | Fax Result:  |  | Add'l Fax #:   |  |
|                              |  | 8:05     |  |  |  | <input type="checkbox"/> Yes <input type="checkbox"/> No |  |                |  |
| Relinquished By:             |  | Date:    |  | Received By:   |  | REMARKS:   |  |                |  |
|                              |  | Time:    |  |  |  |  |  |                |  |
| Delivered By: (Circle One)   |  |          |  | Sample Condition   |  | <i>RFNN</i> <i>Rush! 2/2</i>                             |  |                |  |
| Sampler - UPS - Bus - Other: |  | 5.9i #97 |  | Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> No |  |  |  |                |  |

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 392-2326.





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---

December 19, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/18/18 17:15.

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|                  |                              |
|------------------|------------------------------|
| 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

|                   |                |                     |                |
|-------------------|----------------|---------------------|----------------|
| Received:         | 12/18/2018     | Sampling Date:      | 12/18/2018     |
| Reported:         | 12/19/2018     | Sampling Type:      | Soil           |
| Project Name:     | ADVANCE ENERGY | Sampling Condition: | ** (See Notes) |
| Project Number:   | BSU 2H         | Sample Received By: | Jodi Henson    |
| Project Location: | NOT GIVEN      |                     |                |

**Sample ID: G1 BASE @ 2' (H803694-01)**

| 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            | 12/19/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

**Sample ID: G1 E WALL 0- 2' (H803694-02)**

| 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            | 12/19/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

**Sample ID: G1 W WALL 0- 2' (H803694-03)**

| 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            | 12/19/2018 | ND              | 416 | 104        | 400           | 0.00 |           |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

|   |  |                          |  |                                  |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--------------------------|--|----------------------------------|--|----------------------------|--|-------------------------|--|------------|--|----------|--|-----|--|--------|--|--------|--|------------|--|------------|--|--------|--|-----------------|--|--------------|--|----------|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: <u>RT Hicks Consultants</u> |  |                          |  | <b>BILL TO</b>                   |  |                            |  | <b>ANALYSIS REQUEST</b> |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Project Manager: <u>Andrew Parker</u>     |  |                          |  | P.O. #:                          |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Address:                                  |  |                          |  | Company: <u>RT Hicks Consult</u> |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| City:                                     |  | State:                   |  | Zip:                             |  | Attn: <u>Andrew Parker</u> |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Phone #:                                  |  | Fax #:                   |  | Address:                         |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Project #:                                |  | Project Owner:           |  | City:                            |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Project Name: <u>Advance Energy</u>       |  |                          |  | State:      Zip:                 |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Project Location: <u>BSU 2H</u>           |  |                          |  | Phone #: <u>970-570-9535</u>     |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Sampler Name: <u>Andrew Parker</u>        |  |                          |  | Fax #:                           |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                          |  |                          |  |                                  |  | MATRIX                     |  | PRESERV.                |  | SAMPLING   |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| Lab I.D.                                  |  | Sample I.D.              |  | (GRAB OR COMPOUND)               |  | # CONTAINERS               |  | GROUNDWATER             |  | WASTEWATER |  | SOIL     |  | OIL |  | SLUDGE |  | OTHER: |  | ACID/BASE: |  | ICE / COOL |  | OTHER: |  | DATE            |  | TIME         |  |          |  |  |  |  |  |  |  |  |  |  |  |
| <u>H803694</u>                            |  |                          |  |                                  |  |                            |  |                         |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                 |  |              |  |          |  |  |  |  |  |  |  |  |  |  |  |
| <u>1</u>                                  |  | <u>Bsee G1 Base 2ft</u>  |  | <u>C</u>                         |  | <u>1</u>                   |  |                         |  |            |  | <u>X</u> |  |     |  |        |  |        |  |            |  |            |  |        |  | <u>10-18-18</u> |  | <u>15:20</u> |  | <u>X</u> |  |  |  |  |  |  |  |  |  |  |  |
| <u>2</u>                                  |  | <u>G1 E. WALL 0-2 ft</u> |  | <u>C</u>                         |  | <u>1</u>                   |  |                         |  |            |  | <u>↓</u> |  |     |  |        |  |        |  |            |  |            |  |        |  | <u>12-18-18</u> |  | <u>15:25</u> |  | <u>↓</u> |  |  |  |  |  |  |  |  |  |  |  |
| <u>3</u>                                  |  | <u>G1 W. WALL 0-2 ft</u> |  | <u>C</u>                         |  | <u>1</u>                   |  |                         |  |            |  | <u>↓</u> |  |     |  |        |  |        |  |            |  |            |  |        |  | <u>12-18-18</u> |  | <u>15:30</u> |  | <u>↓</u> |  |  |  |  |  |  |  |  |  |  |  |

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|   |  |                       |  |   |  |  |  |                |  |
|---|--|-----------------------|--|---|--|--|--|----------------|--|
| Relinquished By: <u>Andrew Parker</u>           |  | Date: <u>12-18-18</u> |  | Received By: <u>Jodi Benson</u>   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Add'l Phone #: |  |
|   |  | Time: <u>17:15</u>    |  |   |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Add'l Fax #:   |  |
| Relinquished By:                                |  | Date:                 |  | Received By:  |  | REMARKS:   |  |                |  |
|   |  | Time:                 |  |   |  | Sample just taken and brought to Lab                                   |  |                |  |
| Delivered By: (Circle One)                      |  |                       |  | Sample Condition  |  | CHECKED BY: (Initials)   |  |                |  |
| Sampler - UPS - Bus - Other: <u>14.30 / #97</u> |  |                       |  | Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | <u>16°C</u>  |  |                |  |
|   |  |                       |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             |  | sample taken & brought directly to Lab.                                |  |                |  |
|   |  |                       |  |   |  | Notify email sent via text to 970-570-9535<br>Thanks<br>RFN<br>JHA     |  |                |  |

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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December 20, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/19/18 16:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 12/19/2018  
 Reported: 12/20/2018  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU 2H  
 Project Location: NOT GIVEN

Sampling Date: 12/19/2018  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SOURCE 6-7' (H803725-01)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 9730   | 16.0            | 12/20/2018 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: SOURCE 9' (H803725-02)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 656    | 16.0            | 12/20/2018 | ND              | 400 | 100        | 400           | 3.92 |           |

**Sample ID: SOURCE 12' (H803725-03)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 7060   | 16.0            | 12/20/2018 | ND              | 400 | 100        | 400           | 3.92 |           |

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

|   |  |                      |  |                          |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
|---|--|----------------------|--|--------------------------|--|----------------------------|--|--|--|--|--|------------------------------------|--|---------------------------------|--|----------|--|--|--|------|--|--|--|--|--|--|--|
| Company Name: <u>RT Hicks consultants</u> |  |                      |  | <b>BILL TO</b>           |  |                            |  | <b>ANALYSIS REQUEST</b>                                      |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Project Manager: <u>Andrew Parker</u>     |  |                      |  | P.O. #:                  |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Address: <u>on file</u>                   |  |                      |  | Company: <u>RT Hicks</u> |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| City:                                     |  | State:               |  | Zip:                     |  | Attn: <u>Andrew Parker</u> |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Phone #:                                  |  | Fax #:               |  | Address:                 |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Project #:                                |  | Project Owner:       |  | City:                    |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Project Name: <u>Advance Energy</u>       |  |                      |  | State:                   |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  | Zip: |  |  |  |  |  |  |  |
| Project Location: <u>BSU 2H</u>           |  |                      |  | Phone #:                 |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Sampler Name: <u>Andrew Parker</u>        |  |                      |  | Fax #:                   |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                          |  |                      |  |                          |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| Lab I.D.                                  |  | Sample I.D.          |  | (GRAB OR (C)OMP.)        |  | # CONTAINERS               |  | MATRIX   |  |  |  | PRESERV.                           |  | SAMPLING                        |  | Chloride |  |  |  |      |  |  |  |  |  |  |  |
|   |  |                      |  |                          |  |                            |  | GROUNDWATER<br>WASTEWATER<br>SOIL<br>OIL<br>SLUDGE<br>OTHER: |  |  |  | ACID/BASE:<br>ICE / COOL<br>OTHER: |  | DATE<br>TIME                    |  |          |  |  |  |      |  |  |  |  |  |  |  |
| <u>H803725</u>                            |  |                      |  |                          |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
| <u>1</u>                                  |  | <u>Source 6-7 ft</u> |  | <u>G</u>                 |  | <u>1</u>                   |  |  |  |  |  |                                    |  | <u>12-19-18</u><br><u>14:10</u> |  |          |  |  |  |      |  |  |  |  |  |  |  |
| <u>2</u>                                  |  | <u>Source 9 ft</u>   |  | <u>G</u>                 |  | <u>1</u>                   |  |  |  |  |  |                                    |  | <u>14:15</u>                    |  |          |  |  |  |      |  |  |  |  |  |  |  |
| <u>3</u>                                  |  | <u>Source 12 ft</u>  |  | <u>G</u>                 |  | <u>1</u>                   |  |  |  |  |  |                                    |  | <u>14:30</u>                    |  |          |  |  |  |      |  |  |  |  |  |  |  |
|   |  |                      |  |                          |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |
|   |  |                      |  |                          |  |                            |  |  |  |  |  |                                    |  |                                 |  |          |  |  |  |      |  |  |  |  |  |  |  |

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|  |  |                       |  |   |  |  |  |  |  |
|--|--|-----------------------|--|---|--|--|--|--|--|
| Relinquished By: <u>[Signature]</u>          |  | Date: <u>12-19-18</u> |  | Received By: <u>[Signature]</u>   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Add'l Phone #:   |  |
| Relinquished By:                             |  | Time: <u>16:10</u>    |  | Received By:  |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Add'l Fax #:   |  |
| Delivered By: (Circle One)                   |  | Time:                 |  | Sample Condition  |  | CHECKED BY: (Initials)   |  | REMARKS:   |  |
| Sampler - UPS - Bus - Other: <u>5.92 #97</u> |  |                       |  | Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/><br>Yes <input type="checkbox"/> No <input type="checkbox"/> |  | <u>[Signature]</u>   |  | <u>RFN</u><br>Text when Results emailed<br>970-570-9535<br>Sampled and brought directly to lab |  |

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326





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---

January 29, 2019

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/22/19 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G2 EW 0-4 (H900221-01)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

| 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            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 87.1 % 41-142

Surrogate: 1-Chlorooctadecane 94.6 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G2 WW (H900221-02)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 3520   | 16.0            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G2 B (H900221-03)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 3040   | 16.0            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 89.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.7 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G3 SW (H900221-04)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 2080   | 16.0            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

**Sample ID: G3 WW 0-4 (H900221-05)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 2240   | 16.0            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G3 EW 0-4 (H900221-06)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

| Chloride, SM4500CI-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            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G3 B (H900221-07)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 1480   | 16.0            | 01/23/2019 | ND              | 416 | 104        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 86.5 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G4 WW 0-4 (H900221-08)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 10900  | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 | QM-07     |  |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G4 EW 0-4 (H900221-09)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |  |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |  |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |  |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.3-129

| 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            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 83.5 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G4 B (H900221-10)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 11200  | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 91.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.8 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G5 NW 0-4 (H900221-11)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTEx     | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 176    | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 91.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G5 WW 0-4 (H900221-12)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 3280   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G5 SW 0-4 (H900221-13)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |  |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |  |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |  |
| Total BTEX     | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 73.3-129

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 64.0   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.5 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G5 EW 0-4 (H900221-14)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 1960   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G5 B (H900221-15)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 7600   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 88.9 % 41-142

Surrogate: 1-Chlorooctadecane 84.3 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G6 NW 0-4 (H900221-16)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 720    | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G6 SW 0-4 (H900221-17)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 544    | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/28/2019 | ND              | 221 | 110        | 200           | 0.996 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/28/2019 | ND              | 217 | 108        | 200           | 0.132 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/28/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 93.8 % 41-142

Surrogate: 1-Chlorooctadecane 90.4 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G6 B (H900221-18)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 9330   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/29/2019 | ND              | 222 | 111        | 200           | 3.58 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 244 | 122        | 200           | 16.4 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 87.8 % 41-142

Surrogate: 1-Chlorooctadecane 84.1 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G7 SW 0-4 (H900221-19)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 2480   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G7 NW 0-4 (H900221-20)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

| Chloride, SM4500CI-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            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/29/2019 | ND              | 222 | 111        | 200           | 3.58 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 244 | 122        | 200           | 16.4 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 87.0 % 37.6-147

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G7 B (H900221-21)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |  |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |  |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |  |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 8800   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/29/2019 | ND              | 182 | 91.2       | 200           | 0.296 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 200 | 100        | 200           | 0.940 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 93.2 % 41-142

Surrogate: 1-Chlorooctadecane 83.3 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G8 NW 0-4 (H900221-22)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 73.3-129

| Chloride, SM4500CI-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            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/29/2019 | ND              | 182 | 91.2       | 200           | 0.296 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 200 | 100        | 200           | 0.940 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 89.5 % 41-142

Surrogate: 1-Chlorooctadecane 84.1 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G8 SW 0-4 (H900221-23)**

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 2120   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G8 WW 0-4 (H900221-24)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTEX     | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 73.3-129

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 400    | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |

| 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            | 01/29/2019 | ND              | 182 | 91.2       | 200           | 0.296 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 200 | 100        | 200           | 0.940 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 78.8 % 37.6-147

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**Analytical Results For:**

R T HICKS CONSULTANTS  
 ANDREW PARKER  
 901 RIO GRANDE BLVD SUITE F-142  
 ALBUQUERQUE NM, 87104  
 Fax To: NONE

Received: 01/22/2019  
 Reported: 01/29/2019  
 Project Name: ADVANCE ENERGY  
 Project Number: BSU #2  
 Project Location: NOT GIVEN

Sampling Date: 01/21/2019  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: G8 B (H900221-25)**

| 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           | 01/28/2019 | ND              | 1.85 | 92.7       | 2.00          | 0.379 |           |
| Toluene*       | <0.050 | 0.050           | 01/28/2019 | ND              | 1.97 | 98.3       | 2.00          | 0.292 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 01/28/2019 | ND              | 2.06 | 103        | 2.00          | 1.82  |           |
| Total Xylenes* | <0.150 | 0.150           | 01/28/2019 | ND              | 5.94 | 99.0       | 6.00          | 3.01  |           |
| Total BTX      | <0.300 | 0.300           | 01/28/2019 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 73.3-129

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 3080   | 16.0            | 01/23/2019 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| 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            | 01/29/2019 | ND              | 182 | 91.2       | 200           | 0.296 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 01/29/2019 | ND              | 200 | 100        | 200           | 0.940 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 01/29/2019 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 79.3 % 37.6-147

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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



# CARDINAL

## Laboratories

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

|   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|---|--|----------------|--|-----------------------|--|---------------------|--|---|--|--|--|--|--|--|--|--|--|--|--|--------|--|----------|--|
| Company Name: R.T. Hicks Consultants              |  |                |  | <b>BILL TO</b>        |  |                     |  | <b>ANALYSIS REQUEST</b>   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Project Manager: Andrew Parker                    |  |                |  | P.O. #:               |  |                     |  | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chlorides (Rush)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX added 1/25/19</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHEX not Rush</div> </div> |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Address: on-file                                  |  |                |  | Company: R.T. Hicks   |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| City:   |  | State:         |  | Zip:                  |  | Attn: Andrew Parker |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Phone #:  |  | Fax #:         |  | Address:              |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Project #:  |  | Project Owner: |  | City:                 |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Project Name: Advance Energy                      |  |                |  | State:                |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  | Zip:   |  |          |  |
| Project Location: BSU #2 or Tomahawk SWD Trench 5 |  |                |  | Phone #: 970-570-9535 |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Sampler Name: Erica Hart                          |  |                |  | Fax #:                |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| FOR LAB USE ONLY                                  |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| Lab I.D.  |  | Sample I.D.    |  | GRAB OR (C)OMP.       |  | # CONTAINERS        |  |   |  |  |  |  |  |  |  |  |  |  |  | MATRIX |  | PRESERV. |  |
|   |  |                |  |                       |  |                     |  | GROUNDWATER   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | WASTEWATER  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | SOIL  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | OIL   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | SLUDGE  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | OTHER :   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | ACID/BASE:  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | ICE / COOL  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | OTHER :   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | DATE  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
|   |  |                |  |                       |  |                     |  | TIME  |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| H900221   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 1 G2EW0-4   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 2 G2WW  |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 3 G2B   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 4 G3SW  |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 5 G3WW0-4   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 6 G3EW0-4   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 7 G3B   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 8 G4WW0-4   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 9 G4EW0-4   |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |
| 10 G4B  |  |                |  |                       |  |                     |  |   |  |  |  |  |  |  |  |  |  |  |  |        |  |          |  |

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|  |  |               |  |  |  |  |  |                |  |
|--|--|---------------|--|--|--|--|--|----------------|--|
| Relinquished By: Erica Hart            |  | Date: 1/22/19 |  | Received By: Tamara R. R. R.   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No |  | Add'l Phone #: |  |
|  |  | Time: 15:40   |  |  |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Add'l Fax #:   |  |
| Relinquished By:                       |  | Date:         |  | Received By:   |  | REMARKS:<br><br>Email results to andrew@rthicksconsult.com             |  |                |  |
|  |  | Time:         |  |  |  |  |  |                |  |
| Delivered By: (Circle One)             |  |               |  | Sample Condition   |  | CHECKED BY:  |  |                |  |
| Sampler - UPS - Bus - Other: 15.1c #97 |  |               |  | Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  | (Initials)<br>TO   |  |                |  |

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

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|  |  |  |  |  |  |   |  |
|--|--|--|--|--|--|---|--|
| Relinquished By:<br><i>Erica Hunt</i>                      |  | Date: <i>11/20/19</i><br>Time: <i>15:40</i>  |  | Received By:<br><i>Laura Oldaker</i>   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:                 |  |
| Relinquished By:   |  | Date:<br>Time:   |  | Received By:                           |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:                     |  |
| Delivered By: (Circle One)<br>Sampler - UPS - Bus - Other: |  | Sample Condition<br>Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  | CHECKED BY:<br>(Initials)<br><i>TO</i> |  | REMARKS:<br>Email results to <a href="mailto:andrew@rthicksconsult.com">andrew@rthicksconsult.com</a> |  |

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

|   |                 |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
|---|-----------------|------------------|--------------|------------------------------|------------|----------|-----|---|---------|------------|------------|---------|-----------------|------|--|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: <u>RT Hicks Consultants</u> |                 |                  |              | <b>BILL TO</b>               |            |          |     | <b>ANALYSIS REQUEST</b>   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Manager: <u>Andrew Parker</u>     |                 |                  |              | P.O. #:                      |            |          |     | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chlorides (Rush)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX y added 1/25/19</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH Ext Not Rush</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">may require add. tests.</div> </div> |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Address:                                  |                 |                  |              | Company: <u>RT Hicks</u>     |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| City: State: Zip:                         |                 |                  |              | Attn: <u>Andrew Parker</u>   |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Phone #: Fax #:                           |                 |                  |              | Address:                     |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Project #: Project Owner:                 |                 |                  |              | City:                        |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Name: <u>Advance Energy</u>       |                 |                  |              | State: Zip:                  |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Location: <u>BSU #2</u>           |                 |                  |              | Phone #: <u>970-570-9535</u> |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Sampler Name: <u>Erica Hart</u>           |                 |                  |              | Fax #:                       |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                          |                 |                  |              | MATRIX                       |            | PRESERV. |     | SAMPLING  |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| Lab I.D.                                  | Sample I.D.     | (GRAB OR (C)OMP. | # CONTAINERS | GROUNDWATER                  | WASTEWATER | SOIL     | OIL | SLUDGE  | OTHER : | ACID/BASE: | ICE / COOL | OTHER : | DATE            | TIME |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>H900221</u>                            |                 |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>21</u>                                 | <u>G7B</u>      |                  |              |                              |            |          |     |   |         |            |            |         | <u>11/22/19</u> |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>22</u>                                 | <u>G8NW 0-4</u> |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>23</u>                                 | <u>G8SW 0-4</u> |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>24</u>                                 | <u>G8W 0-4</u>  |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>25</u>                                 | <u>G8B</u>      |                  |              |                              |            |          |     |   |         |            |            |         |                 |      |  |  |  |  |  |  |  |  |  |  |  |  |

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|   |                       |   |  |                |
|---|-----------------------|---|--|----------------|
| Relinquished By: <u>Erica Hart</u>            | Date: <u>11/22/19</u> | Received By: <u>Tamara Olda-Syr</u>                                     | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No | Add'l Phone #: |
|   | Time: <u>15:40</u>    |   | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   | Add'l Fax #:   |
| Relinquished By:                              | Date:                 | Received By:  | REMARKS:   |                |
|   | Time:                 |   |  |                |
| Delivered By: (Circle One)                    |                       | Sample Condition  | CHECKED BY: (Initials)   |                |
| Sampler - UPS - Bus - Other: <u>15.1c #97</u> |                       | Cool Intact<br><input type="checkbox"/> Yes <input type="checkbox"/> No | <u>TO.</u>   |                |

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February 01, 2019

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/30/19 8:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

|                  |   |
|------------------|---|
| Method SM 9223-B | Total Coliform and E. coli (Colilert MMO-MUG)   |
| Method EPA 524.2 | Regulated VOCs and Total Trihalomethanes (TTHM) |
| Method EPA 552.2 | Total Haloacetic Acids (HAA-5)                  |

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

| Sample ID       | Laboratory ID | Matrix | Date Sampled    | Date Received   |
|-----------------|---------------|--------|-----------------|-----------------|
| G 6 N WALL 0-4' | H900312-01    | Soil   | 29-Jan-19 14:00 | 30-Jan-19 08:10 |
| G 7 S WALL 0-4' | H900312-02    | Soil   | 29-Jan-19 14:15 | 30-Jan-19 08:10 |
| G 8 S WALL 0-4' | H900312-03    | Soil   | 29-Jan-19 14:30 | 30-Jan-19 08:10 |
| G 4 W WALL 0-4' | H900312-04    | Soil   | 29-Jan-19 15:15 | 30-Jan-19 08:10 |

BTEX and TPH analysis were added to the work order on 01/30/19 as per Andrew. This is the revised report that replaces the one sent on 01/30/19.

Cardinal Laboratories

\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**G 6 N WALL 0-4'**  
**H900312-01 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|                 |             |  |      |       |   |         |    |           |           |  |
|-----------------|-------------|--|------|-------|---|---------|----|-----------|-----------|--|
| <b>Chloride</b> | <b>32.0</b> |  | 16.0 | mg/kg | 4 | 9013001 | AC | 30-Jan-19 | 4500-Cl-B |  |
|-----------------|-------------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |       |       |    |         |    |           |       |  |
|----------------|--------|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Toluene*       | <0.050 | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Ethylbenzene*  | <0.050 | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total Xylenes* | <0.150 | 0.150 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total BTEX     | <0.300 | 0.300 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |

|                                       |       |          |         |    |           |       |  |
|---------------------------------------|-------|----------|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) | 101 % | 73.3-129 | 9013103 | ms | 31-Jan-19 | 8021B |  |
|---------------------------------------|-------|----------|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |      |       |   |         |    |           |       |  |
|------------------|-------|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |

|                           |        |        |         |    |           |       |  |
|---------------------------|--------|--------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane | 90.9 % | 41-142 | 9013102 | MS | 31-Jan-19 | 8015B |  |
|---------------------------|--------|--------|---------|----|-----------|-------|--|

|                               |        |          |         |    |           |       |  |
|-------------------------------|--------|----------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane | 85.4 % | 37.6-147 | 9013102 | MS | 31-Jan-19 | 8015B |  |
|-------------------------------|--------|----------|---------|----|-----------|-------|--|

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**G 7 S WALL 0-4'****H900312-02 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 32.0 |  | 16.0 | mg/kg | 4 | 9013001 | AC | 30-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |

|                                       |  |  |       |          |  |         |    |           |       |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) |  |  | 103 % | 73.3-129 |  | 9013103 | ms | 31-Jan-19 | 8021B |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |

|                           |  |  |        |        |  |         |    |           |       |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane |  |  | 86.8 % | 41-142 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|

|                               |  |  |        |          |  |         |    |           |       |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane |  |  | 77.6 % | 37.6-147 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**G 8 S WALL 0-4'****H900312-03 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 16.0 |  | 16.0 | mg/kg | 4 | 9013001 | AC | 30-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |

|                                       |  |  |       |          |  |         |    |           |       |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) |  |  | 102 % | 73.3-129 |  | 9013103 | ms | 31-Jan-19 | 8021B |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |

|                           |  |  |        |        |  |         |    |           |       |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane |  |  | 93.5 % | 41-142 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|

|                               |  |  |        |          |  |         |    |           |       |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane |  |  | 84.6 % | 37.6-147 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**G 4 W WALL 0-4'**  
**H900312-04 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 32.0 |  | 16.0 | mg/kg | 4 | 9013001 | AC | 30-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9013103 | ms | 31-Jan-19 | 8021B |  |

|                                       |  |  |       |          |  |         |    |           |       |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) |  |  | 101 % | 73.3-129 |  | 9013103 | ms | 31-Jan-19 | 8021B |  |
|---------------------------------------|--|--|-------|----------|--|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9013102 | MS | 31-Jan-19 | 8015B |  |

|                           |  |  |        |        |  |         |    |           |       |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane |  |  | 90.5 % | 41-142 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|---------------------------|--|--|--------|--------|--|---------|----|-----------|-------|--|

|                               |  |  |        |          |  |         |    |           |       |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane |  |  | 80.7 % | 37.6-147 |  | 9013102 | MS | 31-Jan-19 | 8015B |  |
|-------------------------------|--|--|--------|----------|--|---------|----|-----------|-------|--|

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

| Analyte  | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result               | %REC<br>Limits | RPD    | RPD<br>Limit | Notes |
|--|--------|--------------------|-------|----------------|--------------------------------|----------------|--------|--------------|-------|
| <b>Batch 9013001 - General Prep - Wet Chem</b> |        |                    |       |                |                                |                |        |              |       |
| <b>Blank (9013001-BLK1)</b>                    |        |                    |       |                |                                |                |        |              |       |
|  |        |                    |       |                | Prepared & Analyzed: 30-Jan-19 |                |        |              |       |
| Chloride                                       | ND     | 16.0               | mg/kg |                |                                |                |        |              |       |
| <b>LCS (9013001-BS1)</b>                       |        |                    |       |                |                                |                |        |              |       |
|  |        |                    |       |                | Prepared & Analyzed: 30-Jan-19 |                |        |              |       |
| Chloride                                       | 400    | 16.0               | mg/kg | 400            |                                | 100            | 80-120 |              |       |
| <b>LCS Dup (9013001-BSD1)</b>                  |        |                    |       |                |                                |                |        |              |       |
|  |        |                    |       |                | Prepared & Analyzed: 30-Jan-19 |                |        |              |       |
| Chloride                                       | 416    | 16.0               | mg/kg | 400            |                                | 104            | 80-120 | 3.92         | 20    |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|----------------|-----|--------------|-------|

**Batch 9013103 - Volatiles****Blank (9013103-BLK1)**

Prepared &amp; Analyzed: 31-Jan-19

|                                       |       |       |       |       |  |     |  |          |  |
|---------------------------------------|-------|-------|-------|-------|--|-----|--|----------|--|
| Benzene                               | ND    | 0.050 | mg/kg |       |  |     |  |          |  |
| Toluene                               | ND    | 0.050 | mg/kg |       |  |     |  |          |  |
| Ethylbenzene                          | ND    | 0.050 | mg/kg |       |  |     |  |          |  |
| Total Xylenes                         | ND    | 0.150 | mg/kg |       |  |     |  |          |  |
| Total BTEX                            | ND    | 0.300 | mg/kg |       |  |     |  |          |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.101 |       | mg/kg | 0.100 |  | 101 |  | 73.3-129 |  |

**LCS (9013103-BS1)**

Prepared &amp; Analyzed: 31-Jan-19

|                                       |        |       |       |       |  |      |  |          |  |
|---------------------------------------|--------|-------|-------|-------|--|------|--|----------|--|
| Benzene                               | 2.36   | 0.050 | mg/kg | 2.00  |  | 118  |  | 72.2-131 |  |
| Toluene                               | 2.24   | 0.050 | mg/kg | 2.00  |  | 112  |  | 71.7-126 |  |
| Ethylbenzene                          | 2.20   | 0.050 | mg/kg | 2.00  |  | 110  |  | 68.9-126 |  |
| Total Xylenes                         | 6.73   | 0.150 | mg/kg | 6.00  |  | 112  |  | 71.4-125 |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0991 |       | mg/kg | 0.100 |  | 99.1 |  | 73.3-129 |  |

**LCS Dup (9013103-BSD1)**

Prepared &amp; Analyzed: 31-Jan-19

|                                       |        |       |       |       |  |      |  |          |       |      |
|---------------------------------------|--------|-------|-------|-------|--|------|--|----------|-------|------|
| Benzene                               | 2.37   | 0.050 | mg/kg | 2.00  |  | 119  |  | 72.2-131 | 0.804 | 6.91 |
| Toluene                               | 2.26   | 0.050 | mg/kg | 2.00  |  | 113  |  | 71.7-126 | 0.837 | 7.12 |
| Ethylbenzene                          | 2.22   | 0.050 | mg/kg | 2.00  |  | 111  |  | 68.9-126 | 1.03  | 7.88 |
| Total Xylenes                         | 6.80   | 0.150 | mg/kg | 6.00  |  | 113  |  | 71.4-125 | 1.10  | 7.46 |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0999 |       | mg/kg | 0.100 |  | 99.9 |  | 73.3-129 |       |      |

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU #2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
01-Feb-19 14:07

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch 9013102 - General Prep - Organics****Blank (9013102-BLK1)**

Prepared &amp; Analyzed: 31-Jan-19

|                               |      |      |       |      |  |      |          |  |  |  |
|-------------------------------|------|------|-------|------|--|------|----------|--|--|--|
| GRO C6-C10                    | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| DRO >C10-C28                  | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| EXT DRO >C28-C36              | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| Surrogate: 1-Chlorooctane     | 45.3 |      | mg/kg | 50.0 |  | 90.6 | 41-142   |  |  |  |
| Surrogate: 1-Chlorooctadecane | 39.1 |      | mg/kg | 50.0 |  | 78.1 | 37.6-147 |  |  |  |

**LCS (9013102-BS1)**

Prepared &amp; Analyzed: 31-Jan-19

|                               |      |      |       |      |  |      |          |  |  |  |
|-------------------------------|------|------|-------|------|--|------|----------|--|--|--|
| GRO C6-C10                    | 171  | 10.0 | mg/kg | 200  |  | 85.3 | 76.5-133 |  |  |  |
| DRO >C10-C28                  | 177  | 10.0 | mg/kg | 200  |  | 88.5 | 72.9-138 |  |  |  |
| Total TPH C6-C28              | 348  | 10.0 | mg/kg | 400  |  | 86.9 | 78-132   |  |  |  |
| Surrogate: 1-Chlorooctane     | 45.9 |      | mg/kg | 50.0 |  | 91.8 | 41-142   |  |  |  |
| Surrogate: 1-Chlorooctadecane | 38.3 |      | mg/kg | 50.0 |  | 76.6 | 37.6-147 |  |  |  |

**LCS Dup (9013102-BS1)**

Prepared &amp; Analyzed: 31-Jan-19

|                               |      |      |       |      |  |      |          |      |      |  |
|-------------------------------|------|------|-------|------|--|------|----------|------|------|--|
| GRO C6-C10                    | 173  | 10.0 | mg/kg | 200  |  | 86.6 | 76.5-133 | 1.48 | 20.6 |  |
| DRO >C10-C28                  | 180  | 10.0 | mg/kg | 200  |  | 89.8 | 72.9-138 | 1.49 | 20.6 |  |
| Total TPH C6-C28              | 353  | 10.0 | mg/kg | 400  |  | 88.2 | 78-132   | 1.48 | 18   |  |
| Surrogate: 1-Chlorooctane     | 44.9 |      | mg/kg | 50.0 |  | 89.8 | 41-142   |      |      |  |
| Surrogate: 1-Chlorooctadecane | 39.7 |      | mg/kg | 50.0 |  | 79.5 | 37.6-147 |      |      |  |

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Celey D. Keene, Lab Director/Quality Manager



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### 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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

|   |  |                   |              |                            |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|-------------------|--------------|----------------------------|------------|----------|-----|---|-------|-----------|------------|-------|----------------|--------------|----------|--|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: <u>RT Hicks Consultants</u> |  |                   |              | <b>BILL TO</b>             |            |          |     | <b>ANALYSIS REQUEST</b>   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Manager: <u>Andrew Parker</u>     |  |                   |              | P.O. #:                    |            |          |     | <div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX 7 added 1/30/19</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PH EXT</div> </div> |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Address: <u>on file</u>                   |  |                   |              | Company: <u>RT Hicks</u>   |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| City: _____ State: _____ Zip: _____       |  |                   |              | Attn: <u>Andrew Parker</u> |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Phone #: _____ Fax #: _____               |  |                   |              | Address: _____             |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Project #: _____ Project Owner: _____     |  |                   |              | City: _____                |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Name: <u>Advance Energy</u>       |  |                   |              | State: _____ Zip: _____    |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Location: <u>BSU #2H</u>          |  |                   |              | Phone #: _____             |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Sampler Name: <u>Andrew Parker</u>        |  |                   |              | Fax #: _____               |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                          |  |                   |              | MATRIX                     |            | PRESERV. |     | SAMPLING  |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
| Lab I.D.                                  | Sample I.D.                              | (G)RAB OR (C)OMP. | # CONTAINERS | GROUNDWATER                | WASTEWATER | SOIL     | OIL | SLUDGE  | OTHER | ACID/BASE | ICE / COOL | OTHER | DATE           | TIME         |          |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>H900312</u>                            |  |                   |              |                            |            |          |     |   |       |           |            |       |                |              |          |  |  |  |  |  |  |  |  |  |  |  |  |
|   | <u>1 G6 N. WALL 0-4 ft</u>               | <u>C</u>          |              |                            |            | <u>X</u> |     |   |       |           |            |       | <u>1:29 PM</u> | <u>14:00</u> | <u>X</u> |  |  |  |  |  |  |  |  |  |  |  |  |
|   | <u>2 G7 S. WALL 0-4 ft</u>               | <u>↓</u>          |              |                            |            | <u>↓</u> |     |   |       |           |            |       | <u>↓</u>       | <u>14:15</u> | <u>↓</u> |  |  |  |  |  |  |  |  |  |  |  |  |
|   | <u>3 <del>G8</del> G8 S. WALL 0-4 ft</u> | <u>↓</u>          |              |                            |            | <u>↓</u> |     |   |       |           |            |       | <u>↓</u>       | <u>14:30</u> | <u>↓</u> |  |  |  |  |  |  |  |  |  |  |  |  |
|   | <u>4 G4 W WALL 0-4 ft</u>                |                   |              |                            |            |          |     |   |       |           |            |       | <u>↓</u>       | <u>15:15</u> | <u>X</u> |  |  |  |  |  |  |  |  |  |  |  |  |

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|  |  |  |  |                |
|--|--|--|--|----------------|
| Relinquished By: <u>[Signature]</u>          | Date: <u>1-30-19</u>   | Received By: <u>[Signature]</u>        | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No | Add'l Phone #: |
|  | Time: <u>0810</u>  |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   | Add'l Fax #:   |
| Relinquished By:                             | Date:  | Received By:                           | REMARKS:   |                |
|  | Time:  |  | <u>RFN</u><br><u>Thanks</u><br><u>Rush!</u>                            |                |
| Delivered By: (Circle One)                   |  |  |  |                |
| Sampler - UPS - Bus - Other: <u>2.4c #97</u> | Sample Condition<br>Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | CHECKED BY:<br>(Initials)<br><u>TO</u> |  |                |

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

February 06, 2019

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/31/19 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

|                  |   |
|------------------|---|
| Method SM 9223-B | Total Coliform and E. coli (Colilert MMO-MUG)   |
| Method EPA 524.2 | Regulated VOCs and Total Trihalomethanes (TTHM) |
| Method EPA 552.2 | Total Haloacetic Acids (HAA-5)                  |

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

| Sample ID           | Laboratory ID | Matrix | Date Sampled    | Date Received   |
|---------------------|---------------|--------|-----------------|-----------------|
| G5 S-E WALL 0-4'    | H900350-01    | Soil   | 30-Jan-19 14:00 | 31-Jan-19 08:00 |
| G5 N-E WALL 0-4'    | H900350-02    | Soil   | 30-Jan-19 14:15 | 31-Jan-19 08:00 |
| G2 W WALL 0-4'      | H900350-03    | Soil   | 30-Jan-19 15:00 | 31-Jan-19 08:00 |
| G2 + 2' W WALL 0-4' | H900350-04    | Soil   | 30-Jan-19 15:30 | 31-Jan-19 08:00 |
| G3 SW WALL 0-4'     | H900350-05    | Soil   | 30-Jan-19 13:30 | 31-Jan-19 08:00 |

BTEX and TPH were added to samples -01, -02, -04 and -05 on 01/31/19 as per Andrew. This is the revised report that replaces the one sent on 01/31/19.

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\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**G5 S-E WALL 0-4'**  
**H900350-01 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 16.0 |  | 16.0 | mg/kg | 4 | 9013114 | AC | 31-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020303 | ms | 03-Feb-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020303 | ms | 03-Feb-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9020303 | ms | 03-Feb-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9020303 | ms | 03-Feb-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9020303 | ms | 03-Feb-19 | 8021B |  |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129 9020303 ms 03-Feb-19 8021B

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 01-Feb-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 01-Feb-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 01-Feb-19 | 8015B |  |

Surrogate: 1-Chlorooctane 80.5 % 41-142 9020109 MS 01-Feb-19 8015B

Surrogate: 1-Chlorooctadecane 82.5 % 37.6-147 9020109 MS 01-Feb-19 8015B

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**G5 N-E WALL 0-4'****H900350-02 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |     |  |      |       |   |         |    |           |           |  |
|----------|-----|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 464 |  | 16.0 | mg/kg | 4 | 9013114 | AC | 31-Jan-19 | 4500-Cl-B |  |
|----------|-----|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |

|                                       |        |  |          |  |  |         |    |           |       |  |
|---------------------------------------|--------|--|----------|--|--|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) | 92.6 % |  | 73.3-129 |  |  | 9020407 | MS | 05-Feb-19 | 8021B |  |
|---------------------------------------|--------|--|----------|--|--|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |

|                           |        |  |        |  |  |         |    |           |       |  |
|---------------------------|--------|--|--------|--|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane | 95.0 % |  | 41-142 |  |  | 9020109 | MS | 02-Feb-19 | 8015B |  |
|---------------------------|--------|--|--------|--|--|---------|----|-----------|-------|--|

|                               |        |  |          |  |  |         |    |           |       |  |
|-------------------------------|--------|--|----------|--|--|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane | 94.2 % |  | 37.6-147 |  |  | 9020109 | MS | 02-Feb-19 | 8015B |  |
|-------------------------------|--------|--|----------|--|--|---------|----|-----------|-------|--|

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**G2 W WALL 0-4'****H900350-03 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|                 |            |  |      |       |   |         |    |           |           |  |
|-----------------|------------|--|------|-------|---|---------|----|-----------|-----------|--|
| <b>Chloride</b> | <b>688</b> |  | 16.0 | mg/kg | 4 | 9013114 | AC | 31-Jan-19 | 4500-Cl-B |  |
|-----------------|------------|--|------|-------|---|---------|----|-----------|-----------|--|

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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**G2 + 2' W WALL 0-4'****H900350-04 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 32.0 |  | 16.0 | mg/kg | 4 | 9013114 | AC | 31-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |

|                                       |  |  |        |  |          |         |    |           |       |  |
|---------------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) |  |  | 96.2 % |  | 73.3-129 | 9020407 | MS | 05-Feb-19 | 8021B |  |
|---------------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |

|                           |  |  |        |  |        |         |    |           |       |  |
|---------------------------|--|--|--------|--|--------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane |  |  | 89.7 % |  | 41-142 | 9020109 | MS | 02-Feb-19 | 8015B |  |
|---------------------------|--|--|--------|--|--------|---------|----|-----------|-------|--|

|                               |  |  |        |  |          |         |    |           |       |  |
|-------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane |  |  | 88.2 % |  | 37.6-147 | 9020109 | MS | 02-Feb-19 | 8015B |  |
|-------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**G3 SW WALL 0-4'**  
**H900350-05 (Soil)**

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Analyst | Analyzed | Method | Notes |
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|
|---------|--------|-----|-----------------|-------|----------|-------|---------|----------|--------|-------|

**Cardinal Laboratories****Inorganic Compounds**

|          |      |  |      |       |   |         |    |           |           |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|
| Chloride | 48.0 |  | 16.0 | mg/kg | 4 | 9013114 | AC | 31-Jan-19 | 4500-Cl-B |  |
|----------|------|--|------|-------|---|---------|----|-----------|-----------|--|

**Volatile Organic Compounds by EPA Method 8021**

|                |        |  |       |       |    |         |    |           |       |  |
|----------------|--------|--|-------|-------|----|---------|----|-----------|-------|--|
| Benzene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Toluene*       | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Ethylbenzene*  | <0.050 |  | 0.050 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total Xylenes* | <0.150 |  | 0.150 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |
| Total BTEX     | <0.300 |  | 0.300 | mg/kg | 50 | 9020407 | MS | 05-Feb-19 | 8021B |  |

|                                       |  |  |        |  |          |         |    |           |       |  |
|---------------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|
| Surrogate: 4-Bromofluorobenzene (PID) |  |  | 91.4 % |  | 73.3-129 | 9020407 | MS | 05-Feb-19 | 8021B |  |
|---------------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|

**Petroleum Hydrocarbons by GC FID**

|                  |       |  |      |       |   |         |    |           |       |  |
|------------------|-------|--|------|-------|---|---------|----|-----------|-------|--|
| GRO C6-C10*      | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| DRO >C10-C28*    | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |
| EXT DRO >C28-C36 | <10.0 |  | 10.0 | mg/kg | 1 | 9020109 | MS | 02-Feb-19 | 8015B |  |

|                           |  |  |        |  |        |         |    |           |       |  |
|---------------------------|--|--|--------|--|--------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctane |  |  | 74.8 % |  | 41-142 | 9020109 | MS | 02-Feb-19 | 8015B |  |
|---------------------------|--|--|--------|--|--------|---------|----|-----------|-------|--|

|                               |  |  |        |  |          |         |    |           |       |  |
|-------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|
| Surrogate: 1-Chlorooctadecane |  |  | 73.2 % |  | 37.6-147 | 9020109 | MS | 02-Feb-19 | 8015B |  |
|-------------------------------|--|--|--------|--|----------|---------|----|-----------|-------|--|

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

| Analyte  | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result               | %REC<br>Limits | RPD    | RPD<br>Limit | Notes |
|--|--------|--------------------|-------|----------------|--------------------------------|----------------|--------|--------------|-------|
| <b>Batch 9013114 - General Prep - Wet Chem</b> |        |                    |       |                |                                |                |        |              |       |
| <b>Blank (9013114-BLK1)</b>                    |        |                    |       |                | Prepared & Analyzed: 31-Jan-19 |                |        |              |       |
| Chloride                                       | ND     | 16.0               | mg/kg |                |                                |                |        |              |       |
| <b>LCS (9013114-BS1)</b>                       |        |                    |       |                | Prepared & Analyzed: 31-Jan-19 |                |        |              |       |
| Chloride                                       | 432    | 16.0               | mg/kg | 400            |                                | 108            | 80-120 |              |       |
| <b>LCS Dup (9013114-BSD1)</b>                  |        |                    |       |                | Prepared & Analyzed: 31-Jan-19 |                |        |              |       |
| Chloride                                       | 400    | 16.0               | mg/kg | 400            |                                | 100            | 80-120 | 7.69         | 20    |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 9020303 - Volatiles****Blank (9020303-BLK1)**

Prepared &amp; Analyzed: 03-Feb-19

|                                       |        |       |       |       |  |      |          |  |  |  |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|--|--|--|
| Benzene                               | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Toluene                               | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Ethylbenzene                          | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Total Xylenes                         | ND     | 0.150 | mg/kg |       |  |      |          |  |  |  |
| Total BTEX                            | ND     | 0.300 | mg/kg |       |  |      |          |  |  |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0995 |       | mg/kg | 0.100 |  | 99.5 | 73.3-129 |  |  |  |

**LCS (9020303-BS1)**

Prepared &amp; Analyzed: 03-Feb-19

|                                       |        |       |       |       |  |      |          |  |  |  |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|--|--|--|
| Benzene                               | 2.17   | 0.050 | mg/kg | 2.00  |  | 108  | 72.2-131 |  |  |  |
| Toluene                               | 2.06   | 0.050 | mg/kg | 2.00  |  | 103  | 71.7-126 |  |  |  |
| Ethylbenzene                          | 2.04   | 0.050 | mg/kg | 2.00  |  | 102  | 68.9-126 |  |  |  |
| Total Xylenes                         | 6.19   | 0.150 | mg/kg | 6.00  |  | 103  | 71.4-125 |  |  |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0988 |       | mg/kg | 0.100 |  | 98.8 | 73.3-129 |  |  |  |

**LCS Dup (9020303-BSD1)**

Prepared &amp; Analyzed: 03-Feb-19

|                                       |        |       |       |       |  |      |          |       |      |  |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|-------|------|--|
| Benzene                               | 2.18   | 0.050 | mg/kg | 2.00  |  | 109  | 72.2-131 | 0.766 | 6.91 |  |
| Toluene                               | 2.06   | 0.050 | mg/kg | 2.00  |  | 103  | 71.7-126 | 0.165 | 7.12 |  |
| Ethylbenzene                          | 2.00   | 0.050 | mg/kg | 2.00  |  | 100  | 68.9-126 | 1.83  | 7.88 |  |
| Total Xylenes                         | 6.10   | 0.150 | mg/kg | 6.00  |  | 102  | 71.4-125 | 1.33  | 7.46 |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0971 |       | mg/kg | 0.100 |  | 97.1 | 73.3-129 |       |      |  |

**Batch 9020407 - Volatiles****Blank (9020407-BLK1)**

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

|                                       |        |       |       |       |  |      |          |  |  |  |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|--|--|--|
| Benzene                               | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Toluene                               | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Ethylbenzene                          | ND     | 0.050 | mg/kg |       |  |      |          |  |  |  |
| Total Xylenes                         | ND     | 0.150 | mg/kg |       |  |      |          |  |  |  |
| Total BTEX                            | ND     | 0.300 | mg/kg |       |  |      |          |  |  |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0909 |       | mg/kg | 0.100 |  | 90.9 | 73.3-129 |  |  |  |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|----------------|-----|--------------|-------|

**Batch 9020407 - Volatiles****LCS (9020407-BS1)**

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

|                                       |        |       |       |       |  |      |          |  |  |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|--|--|
| Benzene                               | 1.86   | 0.050 | mg/kg | 2.00  |  | 93.0 | 72.2-131 |  |  |
| Toluene                               | 1.88   | 0.050 | mg/kg | 2.00  |  | 94.1 | 71.7-126 |  |  |
| Ethylbenzene                          | 1.85   | 0.050 | mg/kg | 2.00  |  | 92.6 | 68.9-126 |  |  |
| Total Xylenes                         | 5.40   | 0.150 | mg/kg | 6.00  |  | 89.9 | 71.4-125 |  |  |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0978 |       | mg/kg | 0.100 |  | 97.8 | 73.3-129 |  |  |

**LCS Dup (9020407-BSD1)**

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

|                                       |        |       |       |       |  |      |          |      |      |
|---------------------------------------|--------|-------|-------|-------|--|------|----------|------|------|
| Benzene                               | 1.82   | 0.050 | mg/kg | 2.00  |  | 91.0 | 72.2-131 | 2.12 | 6.91 |
| Toluene                               | 1.83   | 0.050 | mg/kg | 2.00  |  | 91.7 | 71.7-126 | 2.58 | 7.12 |
| Ethylbenzene                          | 1.76   | 0.050 | mg/kg | 2.00  |  | 88.1 | 68.9-126 | 4.94 | 7.88 |
| Total Xylenes                         | 5.15   | 0.150 | mg/kg | 6.00  |  | 85.9 | 71.4-125 | 4.62 | 7.46 |
| Surrogate: 4-Bromofluorobenzene (PID) | 0.0929 |       | mg/kg | 0.100 |  | 92.9 | 73.3-129 |      |      |

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**Analytical Results For:**

R T HICKS CONSULTANTS  
901 RIO GRANDE BLVD SUITE F-142  
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY  
Project Number: BSU 2H  
Project Manager: ANDREW PARKER  
Fax To: NONE

Reported:  
06-Feb-19 10:31

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch 9020109 - General Prep - Organics****Blank (9020109-BLK1)**

Prepared &amp; Analyzed: 01-Feb-19

|                               |      |      |       |      |  |      |          |  |  |  |
|-------------------------------|------|------|-------|------|--|------|----------|--|--|--|
| GRO C6-C10                    | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| DRO >C10-C28                  | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| EXT DRO >C28-C36              | ND   | 10.0 | mg/kg |      |  |      |          |  |  |  |
| Surrogate: 1-Chlorooctane     | 45.9 |      | mg/kg | 50.0 |  | 91.7 | 41-142   |  |  |  |
| Surrogate: 1-Chlorooctadecane | 47.4 |      | mg/kg | 50.0 |  | 94.8 | 37.6-147 |  |  |  |

**LCS (9020109-BS1)**

Prepared &amp; Analyzed: 01-Feb-19

|                               |      |      |       |      |  |      |          |  |  |  |
|-------------------------------|------|------|-------|------|--|------|----------|--|--|--|
| GRO C6-C10                    | 167  | 10.0 | mg/kg | 200  |  | 83.5 | 76.5-133 |  |  |  |
| DRO >C10-C28                  | 179  | 10.0 | mg/kg | 200  |  | 89.3 | 72.9-138 |  |  |  |
| Total TPH C6-C28              | 346  | 10.0 | mg/kg | 400  |  | 86.4 | 78-132   |  |  |  |
| Surrogate: 1-Chlorooctane     | 47.7 |      | mg/kg | 50.0 |  | 95.4 | 41-142   |  |  |  |
| Surrogate: 1-Chlorooctadecane | 48.6 |      | mg/kg | 50.0 |  | 97.1 | 37.6-147 |  |  |  |

**LCS Dup (9020109-BSD1)**

Prepared &amp; Analyzed: 01-Feb-19

|                               |      |      |       |      |  |      |          |       |      |  |
|-------------------------------|------|------|-------|------|--|------|----------|-------|------|--|
| GRO C6-C10                    | 168  | 10.0 | mg/kg | 200  |  | 83.8 | 76.5-133 | 0.387 | 20.6 |  |
| DRO >C10-C28                  | 186  | 10.0 | mg/kg | 200  |  | 93.2 | 72.9-138 | 4.23  | 20.6 |  |
| Total TPH C6-C28              | 354  | 10.0 | mg/kg | 400  |  | 88.5 | 78-132   | 2.39  | 18   |  |
| Surrogate: 1-Chlorooctane     | 47.5 |      | mg/kg | 50.0 |  | 95.0 | 41-142   |       |      |  |
| Surrogate: 1-Chlorooctadecane | 47.9 |      | mg/kg | 50.0 |  | 95.8 | 37.6-147 |       |      |  |

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**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<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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# CARDINAL

## Laboratories

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| Company Name: <u>RT Hicks Consultants</u> |  |                |  | <b>BILL TO</b>                |  |                            |  | <b>ANALYSIS REQUEST</b>  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
|---|--|----------------|--|-------------------------------|--|----------------------------|--|--|--|-------------|--|------------|--|----------|--|-----|--|--------|--|--------|--|------------|--|------------|--|--------|--|----------------|--|--------------|--|--|--|
| Project Manager: <u>Andrew Parker</u>     |  |                |  | P.O. #:                       |  |                            |  | <div style="position: relative; height: 100px;"> <span style="position: absolute; left: 0; top: 0; transform: rotate(-90deg); font-size: 2em;">added 1/31/19</span> </div> |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Address: <u>on file</u>                   |  |                |  | Company: <u>RT Hicks</u>      |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| City:                                     |  | State:         |  | Zip:                          |  | Attn: <u>Andrew Parker</u> |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Phone #:                                  |  | Fax #:         |  | Address:                      |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Project #:                                |  | Project Owner: |  | City:                         |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Project Name: <u>Advance Energy</u>       |  |                |  | State:                        |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  | Zip:   |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Project Location: <u>BSU 2H</u>           |  |                |  | Phone #:                      |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| Sampler Name: <u>Andrew Parker</u>        |  |                |  | Fax #:                        |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
| FOR LAB USE ONLY                          |  | Lab I.D.       |  | Sample I.D.                   |  | (G/RAB OR (C)OMP.          |  | # CONTAINERS   |  | MATRIX      |  | PRESERV.   |  | SAMPLING |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |
|   |  |                |  |                               |  |                            |  |  |  | GROUNDWATER |  | WASTEWATER |  | SOIL     |  | OIL |  | SLUDGE |  | OTHER: |  | ACID/BASE: |  | ICE / COOL |  | OTHER: |  | DATE           |  | TIME         |  |  |  |
|   |  | <u>H900350</u> |  | <u>G5</u>                     |  | <u>6</u>                   |  | <u>1</u>   |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  | <u>1-30-19</u> |  | <u>14:00</u> |  |  |  |
|   |  | <u>1</u>       |  | <u>S-B WALL 0-4 ft</u>        |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  | <u>14:05</u> |  |  |  |
|   |  | <u>2</u>       |  | <u>G5 N-E WALL 0-4 ft</u>     |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  | <u>15:00</u> |  |  |  |
|   |  | <u>3</u>       |  | <u>G2 W. WALL 0-4 ft</u>      |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  | <u>15:30</u> |  |  |  |
|   |  | <u>4</u>       |  | <u>G2 +2 f W. WALL 0-4 ft</u> |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  | <u>13:30</u> |  |  |  |
|   |  | <u>5</u>       |  | <u>G3 SW WALL 0-4 ft</u>      |  |                            |  |  |  |             |  |            |  |          |  |     |  |        |  |        |  |            |  |            |  |        |  |                |  |              |  |  |  |

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|  |  |                      |  |  |  |  |  |                |  |
|--|--|----------------------|--|--|--|--|--|----------------|--|
| Relinquished By: <u>Andrew Parker</u>        |  | Date: <u>1-31-19</u> |  | Received By: <u>Jamara [Signature]</u>   |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No                       |  | Add'l Phone #: |  |
|  |  | Time: <u>0800</u>    |  |  |  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No                         |  | Add'l Fax #:   |  |
| Relinquished By:                             |  | Date:                |  | Received By:   |  | REMARKS:<br><u>CI (RFN)</u><br><u>If CI &lt; 600 will run BTEX, Benzene TPH EXT (Normal)</u> |  |                |  |
|  |  | Time:                |  |  |  |  |  |                |  |
| Delivered By: (Circle One)                   |  |                      |  | Sample Condition   |  | CHECKED BY: (Initials)   |  |                |  |
| Sampler - UPS - Bus - Other: <u>4.1c H91</u> |  |                      |  | Cool Intact<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  | <u>TP</u>  |  |                |  |

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 62807

CONDITIONS

|  |   |
|--|---|
| Operator:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 | OGRID:<br>372417  |
|  | Action Number:<br>62807                                   |
|  | Action Type:<br>[C-141] Release Corrective Action (C-141) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| nvelez     | None      | 1/18/2022      |