



February 13, 2018

Mr. Mike Bratcher
New Mexico Oil Conservation Division (OCD), District 2
811 South First Street
Artesia, NM 88210

Re: Site Characterization Work Plan
North Dagger Draw Water Station
2RP-3651 & Recently Identified Pipeline Affected Area
Section 20, T19S-R25E
Eddy County, New Mexico

Dear Mr. Bratcher:

On behalf of EOG Resources, Inc. (EOG Y), Ranger Environmental Services, Inc. (Ranger) has prepared the following work plan in response to the C-141 report dated July 24, 2017 for the 2RP-3651 release location. Ranger has also included provisions in this work plan to further assess an affected area west of the facility tank battery where a historic pipeline release appears to have occurred.

SITE LOCATION

The North Dagger Draw Water Station is located in Eddy County, New Mexico. The facility is situated in Section 20, T19S-R25E at GPS coordinates 32.64091; -104.51321.

BACKGROUND

On April 15, 2016, Yates Petroleum Corporation (Yates), submitted to the NMOCD District II office a Form C-141 for the release of 100 B/O with 94 B/O recovered. The release occurred within an unlined/bermed battery. The cause of the release was from a valve found open on the bottom of an equalizing tank. It is suspected that an unknown party, not associated with Yates Petroleum, opened the valve on the bottom of the equalizing tank. The valve was shut and vacuum trucks were called to recover released crude oil. NMOCD approved the initial Form C-141 on April 19, 2016 and issued remediation permit 2RP-3651. A copy of the approved initial Form C-141 is included as an attachment.

The release response activities appeared to have also unearthed historical issues at the site in addition to the 2RP-3651 release. Due to site constraint and safety issues, Yates and NMOCD agreed to leave the RP open until such time that the site storage tanks could be moved so that access to the affected area could be obtained for assessment and remediation purposes. The facility storage tanks have been relocated north of the release location and a new tank battery has been constructed. Therefore, the former tank battery location is cleared to conduct proper assessment and remediation activities.

North Dagger Draw Water Station
Site Characterization Work Plan

Delineation samples were collected on October 9, 2017 and sent to a NMOCD-approved laboratory (results enclosed). During the delineation sample collection activities, an area west of the tank battery was discovered to have been impacted. Therefore, a total of three (3) soil borings were installed in the 2RP-3651 release area (S1 through S3) and one soil boring (S1) was installed in the area west of the tank battery. A total of 42 soil samples were collected for analysis of BTEX, TPH and chlorides. Laboratory reports and a table summarizing the laboratory results from the October 2017 sampling is included as an attachment. Additionally, an aerial site map documenting the location of the October 2017 soil borings is attached.

SURFACE AND GROUND WATER

The New Mexico Office of the State Engineer (NM OSE) did not have any records for average depth to water in the vicinity of the site. The ChevronTexaco Trend Map (Section 20, T19S-R25E) displays at this location that the depth to groundwater is approximately 150' making the site ranking for this site a zero (0).

The ranking for this site is zero (0) based on the as following:

| Ranking Criteria | | Ranking Score |
|---------------------------------|---------|----------------------|
| Depth to Groundwater: | >100' | 0 |
| Wellhead Protection Area | >1,000' | 0 |
| Distance to Surface Water Body: | >1,000' | <u>0</u> |
| Total Ranking Score: | | 0 |

Site RRALS

Benzene: 10 mg/Kg
BTEX: 50 mg/Kg
TPH: 5,000 mg/Kg

Chloride Delineation Goals

Chloride: 600 mg/Kg

DELINEATION STATUS

Soil Delineation Current Status (2RP-3651)

- Horizontal & Vertical BTEX/TPH Delineation:

Horizontal - The horizontal BTEX/TPH delineation goals were not achieved during the initial October 2017 soil assessment activities. Based on the sample results, there were documented exceedances of the site RRALS in soil borings S1 and S2. The exceedances were limited to soils occurring at depths of eight (8) feet or shallower. The horizontal extent of the BTEX/TPH RRAL exceedances thus far have not been defined.
Additional Horizontal BTEX/TPH Delineation Required.

Vertical - The vertical BTEX/TPH delineation goals were achieved during the initial October 2017 soil assessment activities. Based on the sample results, there were no exceedances of the site RRALS in any of the three soil boring beneath eight (8) feet. The terminal drilling depth benzene concentrations in the soil borings ranged from

nondetectable concentrations to 0.100 mg/Kg in soil boring S-1 at 18'. The terminal drilling depth BTEX concentrations in the soil borings were all reported as nondetectable. The terminal drilling depth TPH concentrations in the soil borings ranged from nondetectable to a maximum of 69.5 mg/Kg (at a depth of 18' in boring S2). **No Additional Vertical BTEX/TPH Delineation Required.**

- Horizontal & Vertical Chloride Delineation:

Horizontal - The horizontal chloride delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, most critically in the 0'-4' depth interval. All three (3) soil borings (S1 through S3) installed in October 2017 were found to exhibit chloride concentrations in excess of 600 mg/Kg. Within the 0' - 4' depth interval, only soil borings S1 and S3 were found to exhibit chloride concentrations in excess of 600 mg/Kg. Thus, the horizontal extent of chloride concentrations in excess of 600 mg/Kg have not been defined. **Additional Horizontal Chloride Delineation Required.**

Vertical - The vertical chloride delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, and to document at least 10' of separation between the base of the 600 mg/Kg chlorides level and the underlying groundwater. Soil boring S3 had the highest documented site chloride concentration (7,300 mg/Kg @ 10'). Soil boring S1 exhibited the deepest chloride impact in excess of 600 mg/kg (1,140 mg/Kg @ 18'). Thus, the vertical chloride delineation goal has not been achieved. **Additional Vertical Chloride Delineation Required.**

Soil Delineation Current Status (Pipeline Area west of the Former Tank Battery)

- Horizontal & Vertical BTEX/TPH Delineation: The October 2017 soil assessment activities did not document any detectable BTEX or TPH concentrations in the Pipeline Area. **No Additional Horizontal or Vertical BTEX/TPH Delineation Required.**

- Horizontal & Vertical Chloride Delineation:

Horizontal - The horizontal chloride delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, most critically in the 0'-4' depth interval. Only one (1) soil boring (S1) has been installed to date in the North Pipeline Area. All soil samples from 1' to 17' (boring terminal depth) were documented to contain chlorides concentrations in excess of 600 mg/Kg. **Additional Horizontal Chloride Delineation Required.**

Vertical - The vertical chloride delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, most critically in the 0'-4' depth interval. Only one (1) soil boring (S1) has been installed to date in the North Pipeline Area. All soil samples from 1' to 17' (boring terminal depth) were documented to contain chlorides concentrations in excess of 600 mg/Kg. **Additional Horizontal Chloride Delineation Required.**

Soil Delineation Work Plan (2RP-3651)

As summarized above, additional horizontal BTEX/TPH delineation activities are needed to delineate the BTEX/TPH concentrations to below the site RRALs. Additional horizontal and vertical chloride delineation is needed to delineate the extent of the soil chloride impacts to 600

mg/Kg. As the release occurred within the interior a former tank battery enclosed within an earthen berm, it is suspected that the horizontal extent of the impacts may be largely confined to the former bermed area.

BTEX/TPH Horizontal Delineation

Ranger proposes to install five (5) horizontal delineation soil borings north, south, and west of S1 and S2. The area along the southeastern portion of the former tank battery location was previously remediated and a liner was installed at approximately 8' below ground surface (bgs). Therefore, no borings in this area will exceed a depth of 8' bgs. As RRAL exceedances were noted to a depth of 8 feet in soil boring S2, the horizontal delineation borings will be installed to a depth of 8 feet in order to delineate both the BTEX/TPH RRAL exceedances. Six soil samples will be collected for laboratory analysis from each boring at depths of 1', 2', 3', 4', 6' and 8'. The samples will be analyzed for BTEX using either Method 8021 or 8260, TPH using Method 8015 extended range (GRO+DRO+MRO; C6-C36). If soil samples from the 1', 2', 3', and 4' intervals document no exceedances of the site BTEX/TPH RRALs, then the samples from the 6' and 8' intervals will not be analyzed.

BTEX/TPH Vertical Delineation

None

Chloride Horizontal Delineation

Ranger proposes to install six (6) horizontal delineation soil borings in all cardinal directions of the former tank battery and S1, S2, and S3. The horizontal delineation borings will be installed to a depth of 4 feet so that the boundaries of chloride-affected soils requiring remediation can be determined. Four soil samples will be collected for laboratory analysis from each boring at depths of 1', 2', 3', and 4'. The samples will be analyzed for chlorides using Method 300 (or equivalent). If elevated chloride concentrations are suspected within the proposed horizontal delineation borings based upon the field screening results, then Ranger may advance additional horizontal delineation soil borings and collect soil samples from appropriate depth intervals for laboratory analysis.

Chloride Vertical Delineation

Ranger proposes to install one (1) vertical delineation soil boring offset to existing soil boring S1. The vertical delineation boring will be installed in order to attempt to delineate the soil chloride concentrations to below 600 mg/Kg, and to document at least 10' of separation between the base of the 600 mg/Kg chlorides level and the underlying groundwater. Ranger anticipates this boring to be installed to 30' bgs. Since boring S1 was already sampled to a depth of 18 feet, these depth intervals will not be re-sampled. Samples will be collected at appropriate depths in order to comply with the requirement that vertical characterization samples be taken at depth intervals no greater than five feet apart. Thus, the proposed boring will be sampled at 20', 25' and 30'. The samples will be analyzed for chlorides using Method 300 (or equivalent). Please note that Ranger will also conduct field screening activities using a soil electrical conductivity (EC) meter. If elevated chloride concentrations are suspected at the 30' depth interval based upon the field screening results, then Ranger may advance the chloride vertical delineation soil boring to a depth greater than 30' and collect additional soil samples for laboratory analysis.

Attached are figures illustrating the locations of the proposed horizontal and vertical soil borings.

Please note that a vertical BTEX/TPH delineation map is not included since no further BTEX/TPH vertical delineation was determined to be needed.

Soil Delineation Work Plan (Pipeline Area west of the Former Tank Battery)

As summarized above, additional horizontal and vertical chloride delineation is needed in the pipeline area west of former tank battery location to delineate the extent of the soil chloride impacts to 600 mg/Kg. As this previously unknown release has yet to be reported to the NM OCD, a C-141 will be forthcoming.

BTEX/TPH Horizontal Delineation

None

BTEX/TPH Vertical Delineation

None

Chloride Horizontal Delineation

Ranger proposes to install four (4) horizontal delineation soil borings in all cardinal directions of soil boring S1. The horizontal delineation borings will be installed to a depth of 4 feet so that the boundaries of chloride-affected soils requiring remediation can be determined. Four soil samples will be collected for laboratory analysis from each boring at depths of 1', 2', 3', and 4'. The samples will be analyzed for chlorides using Method 300 (or equivalent). If elevated chloride concentrations are suspected within the proposed horizontal delineation borings based upon the field screening results, then Ranger may advance additional horizontal delineation soil borings and collect soil samples from appropriate depth intervals for laboratory analysis.

Chloride Vertical Delineation

Ranger proposes to install one (1) vertical delineation soil boring offset to existing soil boring S1 Pipeline. The vertical delineation boring will be installed in order to attempt to delineate the soil chloride concentrations to below 600 mg/Kg, and to document at least 10' of separation between the base of the 600 mg/Kg chlorides level and the underlying groundwater. Ranger anticipates this boring to be installed to 30' bgs. Since boring S1 Pipeline was already sampled to a depth of 17 feet, these depth intervals will not be re-sampled. Samples will be collected at appropriate depths in order to comply with the requirement that vertical characterization samples be taken at depth intervals no greater than five feet apart. Thus, the proposed boring will be sampled at 20', 25' and 30'. The samples will be analyzed for chlorides using Method 300 (or equivalent). Please note that Ranger will also conduct field screening activities using a soil electrical conductivity (EC) meter. If elevated chloride concentrations are suspected at the 30' depth interval based upon the field screening results, then Ranger may advance the chloride vertical delineation soil boring to a depth greater than 30' and collect additional soil samples for laboratory analysis.

Attached are figures illustrating the locations of the proposed horizontal and vertical soil borings for this area. Please note that a horizontal and vertical BTEX/TPH delineation map is not included since no further BTEX/TPH delineation was determined to be needed.

Soil Remediation Work Plan

Once the soil delineation activities are completed, all soil in excess of the BTEX and TPH

North Dagger Draw Water Station
Site Characterization Work Plan

RRALs will be excavated and backfilled with clean fill material. All soils in the depth interval of 0'-4' which contain chlorides in excess of 600 mg/Kg will also be excavated and backfilled with clean fill material. Excavation confirmation samples will be collected following site excavation to confirm removal of all soils in excess of the target remediation levels. All excavated soil will be hauled to a NMOCD-approved facility for disposal.

When the remediation work is completed, a C-141 Final Report will be submitted to the NMOCD and site closure will be requested. The Final Report will include a summary of all completed site activities, including all analytical results, figures and analytical summary tables.

Ranger sincerely appreciates your regulatory oversight. If you have any questions or need any additional information, please contact us at 512/335-1785.

Sincerely,

RANGER ENVIRONMENTAL SERVICES, INC.



Patrick K. Finn
Project Geologist



Max Cook
Project Manager

MC/PKF

Attachments

INITIAL C-141
(2RP-3651)

NM OIL CONSERVATION
ARTESIA DISTRICT

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

APR 15 2016

Form C-141
Revised August 8, 2011

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

RECEIVED
Submit to appropriate District Office in accordance with 19.15.29 NMAC.

F JMW 1325435121 Release Notification and Corrective Action

AB 1611040253

OPERATOR

Initial Report Final Report

| | |
|--|---|
| Name of Company Yates Petroleum Corporation | Contact Amber Griffin |
| Address 104 S. 4 th Street | Telephone No. 575-748-1471 |
| Facility Name North Dagger Draw Water Station | Facility Type Water Transfer Station |

| | | |
|----------------------|----------------------|----------------|
| Surface Owner Fee | Mineral Owner N/A | API No. N/A |
|----------------------|----------------------|----------------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|--------------------|-----------------------|--------------------|---------------------|----------------|
| Unit Letter K | Section 20 | Township 19S | Range 25E | Feet from the - | North/South Line - | Feet from the - | East/West Line - | County Eddy |
|------------------|---------------|-----------------|--------------|--------------------|-----------------------|--------------------|---------------------|----------------|

Latitude 32.64091 Longitude 104.51321

NATURE OF RELEASE

| | | |
|---|---|--|
| Type of Release Crude Oil | Volume of Release 100 B/O | Volume Recovered 94 B/O |
| Source of Release Tank | Date and Hour of Occurrence 4/7/2016; AM | Date and Hour of Discovery 4/7/2016; AM |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NMOCD – Mike Bratcher, Heather Patterson, NMSLO – Ion Dolly, Amber Groves, Mathew Hagman, Mark Naranjo, Dana Vackar Strang | |
| By Whom? Robert Asher/Yates Petroleum Corporation | Date and Hour 4/8/2016; 8:00 AM (Email) | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*
Describe Cause of Problem and Remedial Action Taken.*
It is suspected that an unknown party, not associated with Yates Petroleum, opened a valve on the bottom of an equalizing tank. The valve was shut and vacuum trucks were called to recover released crude oil.

Describe Area Affected and Cleanup Action Taken.*
The affected area was within an unlined/bermed battery. The visually impacted soils were scraped with shovel crews and placed on plastic at the location. Vertical and horizontal delineation samples will be taken, and analysis ran for TPH & BTEX. If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: >100' (approximately 150', Section 20, T19S-R25E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.**

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

OIL CONSERVATION DIVISION

| | | |
|---|---|-----------------------------|
| Signature: <i>Amber Griffin</i> | Signed By: <i>Mike Bratcher</i> | |
| Printed Name: Amber Griffin | Approved by Environmental Specialist: | |
| Title: Environmental Representative | Approval Date: <i>4/19/16</i> | Expiration Date: <i>N/A</i> |
| E-mail Address: agriffin@yatespetroleum.com | Conditions of Approval: | |
| Date: April 14, 2016 Phone: 575-748-4111 | Remediation per O.C.D. Rules & Guidelines <input type="checkbox"/> Attached SUBMIT REMEDIATION PROPOSAL NO LATER THAN: <u>5/20/16</u> | |

* Attach Additional Sheets If Necessary

2RP-3651

Bratcher, Mike, EMNRD

From: Amber Griffin <AGriffin@yatespetroleum.com>
Sent: Friday, April 15, 2016 9:42 AM
To: Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD
Cc: Bob Asher; Chase Settle; Katie Parker; Veronica Alvarado
Subject: North Dagger Draw Water Transfer
Attachments: NorthDaggerDrawWaterTransfer_C141_040716 Initial.pdf

Heather/Mike,

Please find attached an Initial C-141 for the release that occurred on April 7, 2016 at the North Dagger Draw Water Transfer. Will you please let me know the RP number assigned for this release?

Thank you,

Amber Griffin

Environmental Representative
Yates Petroleum Corporation
Office: (575) 748-4111
Cell: (575) 513-8799

Patterson, Heather, EMNRD

From: Bob Asher <BobA@yatespetroleum.com>
Sent: Friday, April 08, 2016 8:00 AM
To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD; NMSLO (Carlsbad/Ton Dolly); NMSLO (Hobbs/Amber Grroves); NMSLO (Hobbs/Mathew Hagman); Naranjo, Mark M.; NMSLO (Santa Fe/Dana Vackar Strang)
Cc: IncidentReportingNM; Amber Griffin; Chase Settle; Katie Parker; Veronica Alvarado
Subject: Release Notification (North Dagger Draw Water Station)

Yates Petroleum Corporation is reporting a release at the following location (4/7/2016, 12:04 PM).

North Dagger Draw Water Station
Section 20, T19S-R25E
Eddy County, New Mexico

Released: 100 B/O; Recovered: 94 B/O

Cause of the release was from a valve found open on the bottom of an equalizing tank. Vacuum truck(s) were called and a crew has started excavating impacted soils. A Form C-141 with complete information will be submitted.

Thank you.

Robert Asher
NM Environmental Regulatory Supervisor
Health & Environmental Department
Yates Petroleum Corporation
105 S. 4th Street
Artesia, NM 88210
575-748-4217 (Office)
575-365-4021 (Cell)
Yates Safety Begins With YOUR Safety

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Bratcher, Mike, EMNRD

From: Chase Settle <CSettle@yatespetroleum.com>
Sent: Tuesday, June 07, 2016 1:38 PM
To: Bratcher, Mike, EMNRD
Cc: Katie Parker; Bob Asher; Amber Griffin
Subject: North Dagger Draw Water Station
Attachments: Rpt_1605565_Final_v1.pdf; North Dagger Draw Water Station Sample Sketch.pdf

North Dagger Draw Water Station

Section 20, T19S-R25E
Eddy County, New Mexico

Mr. Bratcher,

The release that occurred at the North Dagger Draw Water Station on April 7, 2016, has unearthed historical issues to combine with current impaction at this location as evidenced by the sample results attached with this email considering how hard and compact with ground was, as well as approximately one foot of impacted soil removed prior to sampling. The release consisted of 100 B/O with 94 B/O recovered within the tank battery berm. The release affected the areas immediately around and between the tanks. The tanks referred to in the impacted area are 1000 bbl tanks constructed of fiberglass. This tight area between the tanks, as well as the underground transfer lines and electrical lines, have rendered sampling using heavy equipment to be impossible due to safety reasons. These same hazards and safety issues also limit the quantity of soil that may be excavated at this location. Unfortunately it is impracticable to shut down this transfer station and remove the tanks because it would cause more releases at the conjoined Salt Water Disposals in this system, as well as placing tremendous pressure on the transfer lines incorporated with the North Dagger Draw Water Station, which could possibly cause more releases in pasture circumstances rather than bermed locations.

With the number of underground transfer and equalizing lines, it would also be impracticable to install a liner at this battery. A liner would not allow any releases that could occur from these lines to be identified quickly enough to perform proper emergency clean up actions, leading to further contamination with a much greater detrimental impact.

Yates Petroleum Corporation proposes to perform mitigation activities while leaving the RP open until the time of abandonment, when full delineation and remediation can be accomplished safely. YPC will excavate as much soil as safely possible, up to one additional foot so as not to impede the balance of the tanks and cause a catastrophe, within the release area between/around the tanks. This soil will be placed on plastic with a berm constructed to prevent any runoff due to rain events. Once stockpiled on plastic, YPC will remediate this soil using a 3% MicroBlaze solution and 13-13-13 fertilizer, alternating monthly between the 2 treatments, until the soil has tested below RRALs for TPH and BTEX with a site ranking zero (0). YPC also proposes to treat the impacted area between/around the tanks that is exposed by the excavation with a 3% MicroBlaze solution and 13-13-13 fertilizer, alternating monthly between the 2 treatments. This treatment will continue until the excavated soils have been fully remediated below RRALs, at which point the excavation will be backfilled with the remediated soils.

Thank you,

Chase Settle, M.S.

Environmental Representative
Yates Petroleum Corporation

105 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)
575-703-6537 (Cell)

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Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Wednesday, June 08, 2016 7:21 AM
To: 'Chase Settle'
Cc: Katie Parker; Bob Asher; Amber Griffin; Patterson, Heather, EMNRD
Subject: RE: North Dagger Draw Water Station

RE: Yates Pet * North Dagger Draw Station * 2RP-3651 * DOR: 4/7/16

Chase,

Your proposal for remedial actions at the above referenced site is approved. Please submit a report outlining work performed, once completed. Yates and OCD understands the incident will be deferred until such time as access to the impacted area is more practicable.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Chase Settle [mailto:CSettle@yatespetroleum.com]
Sent: Tuesday, June 07, 2016 1:38 PM
To: Bratcher, Mike, EMNRD
Cc: Katie Parker; Bob Asher; Amber Griffin
Subject: North Dagger Draw Water Station

North Dagger Draw Water Station
Section 20, T19S-R25E
Eddy County, New Mexico

Mr. Bratcher,

The release that occurred at the North Dagger Draw Water Station on April 7, 2016, has unearthed historical issues to combine with current impaction at this location as evidenced by the sample results attached with this email considering how hard and compact with ground was, as well as approximately one foot of impacted soil removed prior to

sampling. The release consisted of 100 B/O with 94 B/O recovered within the tank battery berm. The release affected the areas immediately around and between the tanks. The tanks referred to in the impacted area are 1000 bbl tanks constructed of fiberglass. This tight area between the tanks, as well as the underground transfer lines and electrical lines, have rendered sampling using heavy equipment to be impossible due to safety reasons. These same hazards and safety issues also limit the quantity of soil that may be excavated at this location. Unfortunately it is impracticable to shut down this transfer station and remove the tanks because it would cause more releases at the conjoined Salt Water Disposals in this system, as well as placing tremendous pressure on the transfer lines incorporated with the North Dagger Draw Water Station, which could possibly cause more releases in pasture circumstances rather than bermed locations.

With the number of underground transfer and equalizing lines, it would also be impracticable to install a liner at this battery. A liner would not allow any releases that could occur from these lines to be identified quickly enough to perform proper emergency clean up actions, leading to further contamination with a much greater detrimental impact.

Yates Petroleum Corporation proposes to perform mitigation activities while leaving the RP open until the time of abandonment, when full delineation and remediation can be accomplished safely. YPC will excavate as much soil as safely possible, up to one additional foot so as not to impede the balance of the tanks and cause a catastrophe, within the release area between/around the tanks. This soil will be placed on plastic with a berm constructed to prevent any runoff due to rain events. Once stockpiled on plastic, YPC will remediate this soil using a 3% MicroBlaze solution and 13-13-13 fertilizer, alternating monthly between the 2 treatments, until the soil has tested below RRALs for TPH and BTEX with a site ranking zero (0). YPC also proposes to treat the impacted area between/around the tanks that is exposed by the excavation with a 3% MicroBlaze solution and 13-13-13 fertilizer, alternating monthly between the 2 treatments. This treatment will continue until the excavated soils have been fully remediated below RRALs, at which point the excavation will be backfilled with the remediated soils.

Thank you,

Chase Settle, M.S.

Environmental Representative

Yates Petroleum Corporation

105 S. 4th Street

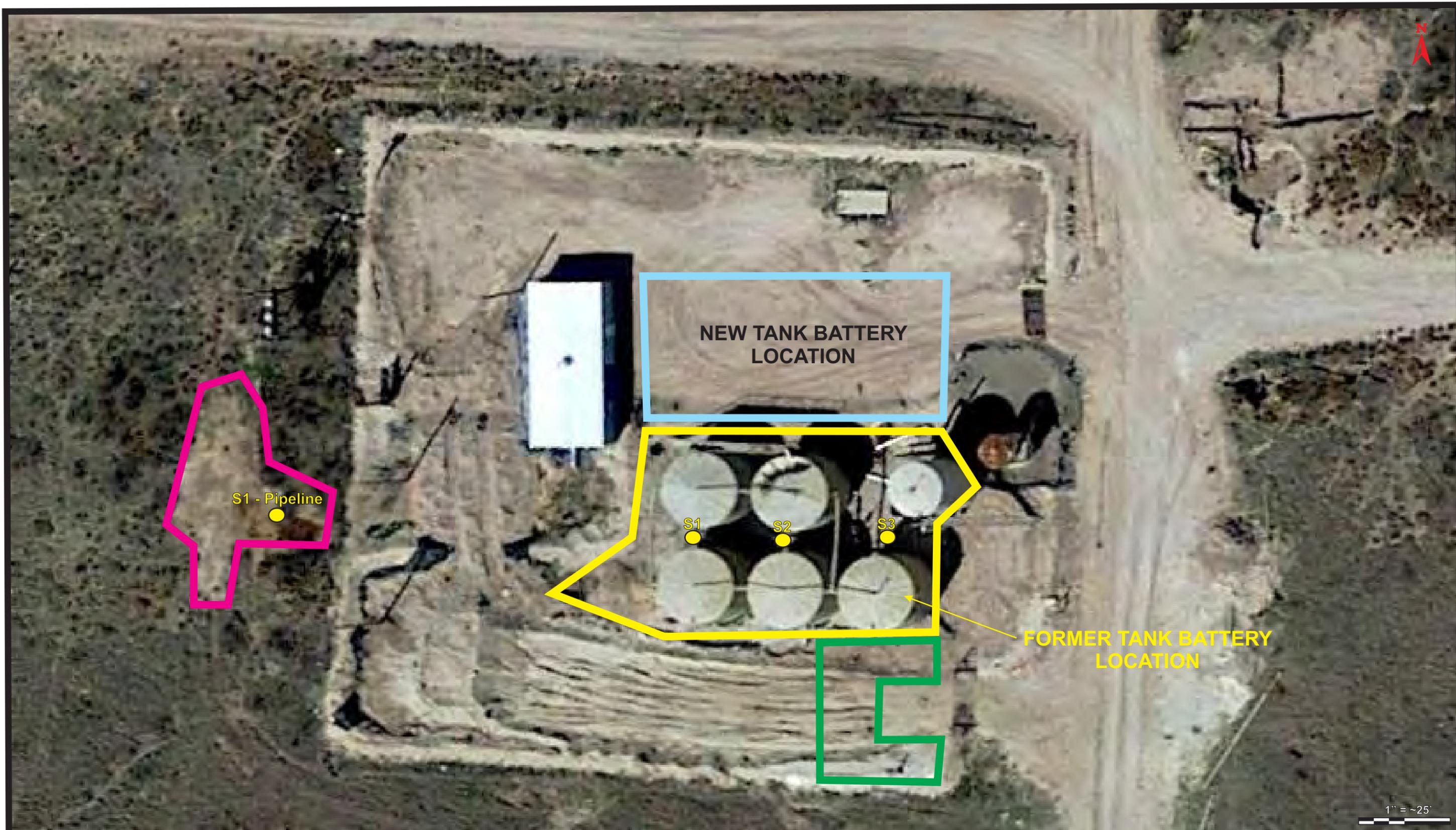
Artesia, NM 88210

575-748-4171 (Office)

575-703-6537 (Cell)

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SITE MAP & TABLE(S)



NEW TANK BATTERY LOCATION

S1 - Pipeline

S1

S2

S3

FORMER TANK BATTERY LOCATION

1" = ~25'

LEGEND

- - SAMPLE LOCATION
- ▬ - PIPELINE AREA WEST OF FORMER TANK BATTERY
- ▬ - IMPACTED AREA (2RP-3651)
- ▬ - FORMERLY REMEDIATED AREA LINED AREA AT 8'

* ALL PROPERTY BOUNDARIES ARE APPROXIMATE & NOT TO BE USED FOR CONSTRUCTION PURPOSES

RANGER ENVIRONMENTAL SERVICES, INC.

SITE MAP
 NORTH DAGGER DRAW WATER STATION
 SECTION 20, T19S-R25E
 EDDY COUNTY, NEW MEXICO

DATE: **RANGER REFERENCE #5375**

COMMENTS:

North Dagger Draw Sample Analysis

| Sample ID | Depth (ft. bgs) | Date | Benzene | Toluene | Ethylbenzene | Xylenes | BTEX | TPH (GRO) | TPH (DRO) | TPH EXT DRO | Total TPH | Chlorides |
|--|-----------------|---------|---------|---------|--------------|---------|--------|-----------|-----------|-------------|-----------|-----------|
| Pipeline Area West of Former Tank Battery | | | | | | | | | | | | |
| S1-1' N. Pipe | 1' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 4560 |
| S1-2' N. Pipe | 2' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 3880 |
| S1-3' N. Pipe | 3' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2440 |
| S1-4' N. Pipe | 4' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 3760 |
| S1-6' N. Pipe | 6' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 4640 |
| S1-8' N. Pipe | 8' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2240 |
| S1-10' N. Pipe | 10' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2640 |
| S1-12' N. Pipe | 12' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 1300 |
| S1-14' N. Pipe | 14' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 1260 |
| S1-16' N. Pipe | 16' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 880 |
| S1-17' N. Pipe | 17' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 800 |
| 2RP-3651 | | | | | | | | | | | | |
| S1-1' | 1' | 10/9/17 | 1.76 | 7.27 | 65.8 | 74.0 | 149 | 1280 | 3390 | 481 | 5151 | 48 |
| S1-2' | 2' | 10/9/17 | 0.093 | 0.224 | 5.43 | 7.23 | 13.0 | 75.2 | 497 | 60.1 | 632.3 | 224 |
| S1-3' | 3' | 10/9/17 | <0.050 | <0.050 | 0.496 | 0.506 | 1.00 | <10.0 | 18.5 | <10.0 | 18.5 | 224 |
| S1-4' | 4' | 10/9/17 | <0.050 | <0.050 | 0.172 | <0.150 | 0.305 | <10.0 | <10.0 | <10.0 | 0 | 1310 |
| S1-6' | 6' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2500 |
| S1-8' | 8' | 10/9/17 | 0.099 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 944 |
| S1-10' | 10' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2360 |
| S1-12' | 12' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 2760 |
| S1-14' | 14' | 10/9/17 | 0.122 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 5760 |
| S1-16' | 16' | 10/9/17 | 0.111 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 3560 |
| S1-18' | 18' | 10/9/17 | 0.100 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 1140 |
| S2-1' | 1' | 10/9/17 | 6.75 | 57.5 | 51.6 | 70.6 | 187 | 868 | 3710 | 621 | 5199 | 144 |
| S2-2' | 2' | 10/9/17 | 11.4 | 55.5 | 57.1 | 86.2 | 210 | 1110 | 3120 | 481 | 4711 | 144 |
| S2-3' | 3' | 10/9/17 | 2.67 | 0.834 | 21.8 | 20.6 | 45.8 | 189 | 2250 | 422 | 2861 | 256 |
| S2-4' | 4' | 10/9/17 | 1.33 | 7.62 | 15.3 | 20.5 | 44.8 | 142 | 491 | 84.9 | 717.9 | 144 |
| S2-6' | 6' | 10/9/17 | 5.21 | 26.1 | 79.8 | 101 | 212 | 1330 | 4070 | 592 | 5992 | 160 |
| S2-8' | 8' | 10/9/17 | 5.65 | 19.4 | 74.8 | 97.5 | 197 | 1710 | 4910 | 614 | 7234 | 192 |
| S2-10' | 10' | 10/9/17 | 0.170 | 1.13 | 16.6 | 21.2 | 39.1 | 285 | 1620 | 219 | 2124 | 240 |
| S2-12' | 12' | 10/9/17 | <0.050 | <0.050 | 0.062 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 768 |
| S2-14' | 14' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 1470 |
| S2-16' | 16' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 112 |
| S2-18' | 18' | 10/9/17 | <0.050 | <0.050 | 0.067 | <0.150 | <0.300 | <10.0 | 69.5 | <10.0 | 0 | 48 |
| S3-1' | 1' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 608 |
| S3-2' | 2' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 5040 |
| S3-3' | 3' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 1570 |
| S3-4' | 4' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 576 |
| S3-6' | 6' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 4240 |
| S3-8' | 8' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 5600 |
| S3-10' | 10' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 7300 |
| S3-12' | 12' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 5000 |
| S3-13' | 13' | 10/9/17 | <0.050 | <0.050 | <0.050 | <0.150 | <0.300 | <10.0 | <10.0 | <10.0 | 0 | 4400 |

LABORATORY REPORT(S)



October 16, 2017

CHASE SETTLE
EOG Y RESOURCES, INC
105 SOUTH 4TH STREET
ARTESIA, NM 88210

RE: NORTH DAGGER DRAW

Enclosed are the results of analyses for samples received by the laboratory on 10/11/17 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive.

Mike Snyder For Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 1' (H702755-01)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 1.76 | 0.500 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | |
| Toluene* | 7.27 | 0.500 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | |
| Ethylbenzene* | 65.8 | 0.500 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | |
| Total Xylenes* | 74.0 | 1.50 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | |
| Total BTEX | 149 | 3.00 | 10/12/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 120 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 1280 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 3390 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 481 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 151 % 28.3-164

Surrogate: 1-Chlorooctadecane 113 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 2' (H702755-02)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | S-06 | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 0.093 | 0.050 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | |
| Toluene* | 0.224 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | |
| Ethylbenzene* | 5.43 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | |
| Total Xylenes* | 7.23 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | |
| Total BTEX | 13.0 | 0.300 | 10/12/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 150 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 224 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 75.2 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 497 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 60.1 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 87.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 80.6 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 3' (H702755-03)

| 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 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | |
| Ethylbenzene* | 0.496 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | |
| Total Xylenes* | 0.506 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | |
| Total BTEX | 1.00 | 0.300 | 10/12/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 113 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 224 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 18.5 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 79.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 80.2 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 4' (H702755-04)

| 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 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | |
| Ethylbenzene* | 0.172 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | |
| Total BTEX | 0.305 | 0.300 | 10/12/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 116 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1310 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 80.9 % 28.3-164
Surrogate: 1-Chlorooctadecane 85.4 % 34.7-157

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*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 6' (H702755-05)

| 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 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2500 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 80.7 % 28.3-164
Surrogate: 1-Chlorooctadecane 86.7 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 8' (H702755-06)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | | |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | 0.099 | 0.050 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 117 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 944 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 79.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.9 % 34.7-157

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 10' (H702755-07)

| 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 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 114 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2360 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 81.6 % 28.3-164
Surrogate: 1-Chlorooctadecane 83.3 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 12' (H702755-08)

| 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 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 114 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2760 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 81.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.5 % 34.7-157

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 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 14' (H702755-09)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 0.122 | 0.050 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 114 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 5760 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 82.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.8 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 16' (H702755-10)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | | |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | 0.111 | 0.050 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 113 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 3560 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 81.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.7 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S1 - 18' (H702755-11)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | | |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | 0.100 | 0.050 | 10/12/2017 | ND | 2.01 | 100 | 2.00 | 0.565 | | |
| Toluene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.82 | 90.8 | 2.00 | 0.154 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/12/2017 | ND | 1.85 | 92.6 | 2.00 | 0.489 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/12/2017 | ND | 5.69 | 94.8 | 6.00 | 0.328 | | |
| Total BTEX | <0.300 | 0.300 | 10/12/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 115 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1140 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | | |

| 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 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 73.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.7 % 34.7-157

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 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 1' (H702755-12)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 6.75 | 0.500 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 57.5 | 0.500 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 51.6 | 0.500 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 70.6 | 1.50 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 187 | 3.00 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 121 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 868 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 3710 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 621 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 132 % 28.3-164

Surrogate: 1-Chlorooctadecane 131 % 34.7-157

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 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 2' (H702755-13)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 11.4 | 0.500 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 55.5 | 0.500 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 57.1 | 0.500 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 86.2 | 1.50 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 210 | 3.00 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 10/13/2017 | ND | 448 | 112 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 1110 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 3120 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 481 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 139 % 28.3-164

Surrogate: 1-Chlorooctadecane 111 % 34.7-157

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Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 3' (H702755-14)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 2.67 | 0.500 | 10/15/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 0.834 | 0.500 | 10/15/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 21.8 | 0.500 | 10/15/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 20.6 | 1.50 | 10/15/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 45.8 | 3.00 | 10/15/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 256 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 189 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 2250 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 422 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 123 % 34.7-157

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 4' (H702755-15)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 1.33 | 0.500 | 10/15/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 7.62 | 0.500 | 10/15/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 15.3 | 0.500 | 10/15/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 20.5 | 1.50 | 10/15/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 44.8 | 3.00 | 10/15/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 144 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 142 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 491 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 84.9 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 88.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 80.7 % 34.7-157

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 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 6' (H702755-16)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 5.21 | 1.00 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 26.1 | 1.00 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 79.8 | 1.00 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 101 | 3.00 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 212 | 6.00 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 160 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 1330 | 10.0 | 10/12/2017 | ND | 185 | 92.6 | 200 | 1.05 | |
| DRO >C10-C28 | 4070 | 10.0 | 10/12/2017 | ND | 201 | 100 | 200 | 2.44 | |
| EXT DRO >C28-C36 | 592 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 163 % 28.3-164

Surrogate: 1-Chlorooctadecane 130 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 8' (H702755-17)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 5.65 | 1.00 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 19.4 | 1.00 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 74.8 | 1.00 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 97.5 | 3.00 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 197 | 6.00 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 192 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | S-06 |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|--------|-----------|------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | 1710 | 100 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | 4910 | 100 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | 614 | 100 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 193 % 28.3-164

Surrogate: 1-Chlorooctadecane 138 % 34.7-157

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 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 10' (H702755-18)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | 0.170 | 0.100 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | 1.13 | 0.100 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 16.6 | 0.100 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | 21.2 | 0.300 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | 39.1 | 0.600 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 140 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 240 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|--------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 285 | 10.0 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | 1620 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | 219 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 112 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 12' (H702755-19)

| BTEX 8021B | | mg/kg | | Analyzed By: MS | | | | | |
|----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|---------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 0.062 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 120 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 768 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/16/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/16/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/16/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.7 % 28.3-164
Surrogate: 1-Chlorooctadecane 87.9 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 14' (H702755-20)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 121 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1470 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 79.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.1 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 16' (H702755-21)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 124 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 79.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.2 % 34.7-157

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 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S2 - 18' (H702755-22)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | 0.067 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 121 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | 69.5 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 83.1 % 28.3-164
Surrogate: 1-Chlorooctadecane 84.6 % 34.7-157

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 1' (H702755-23)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 608 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 79.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.6 % 34.7-157

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 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 2' (H702755-24)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 5040 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 80.7 % 28.3-164
Surrogate: 1-Chlorooctadecane 88.6 % 34.7-157

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 3' (H702755-25)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1570 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 82.2 % 28.3-164
Surrogate: 1-Chlorooctadecane 82.2 % 34.7-157

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 4' (H702755-26)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 120 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 84.6 % 28.3-164
Surrogate: 1-Chlorooctadecane 83.6 % 34.7-157

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 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 6' (H702755-27)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 4240 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 80.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.8 % 34.7-157

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 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 8' (H702755-28)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 5600 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 78.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.7 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 10' (H702755-29)

| 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 | 10/13/2017 | ND | 2.03 | 101 | 2.00 | 0.0522 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.80 | 90.2 | 2.00 | 0.138 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.84 | 92.0 | 2.00 | 0.00375 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.57 | 92.9 | 6.00 | 0.282 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 119 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 7300 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 82.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.2 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 12' (H702755-30)

| 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 | 10/13/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 5000 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 82.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.9 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|-----------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/16/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW | Sampling Condition: | Cool & Intact |
| Project Number: | WATER TRANSFER / 3651 | Sample Received By: | Tamara Oldaker |
| Project Location: | NONE GIVEN | | |

Sample ID: S3 - 13' (H702755-31)

| 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 | 10/13/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 4400 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 79.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.8 % 34.7-157

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



October 18, 2017

CHASE SETTLE
EOG Y RESOURCES, INC
105 SOUTH 4TH STREET
ARTESIA, NM 88210

RE: NORTH DAGGER DRAW WATER TRANSFER

Enclosed are the results of analyses for samples received by the laboratory on 10/11/17 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 1' (H702756-01)

| 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 | 10/13/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 121 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4560 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 64.8 % 28.3-164
Surrogate: 1-Chlorooctadecane 68.3 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 2' (H702756-02)

| 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 | 10/13/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/13/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/13/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/13/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 3880 | 16.0 | 10/13/2017 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 80.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.1 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 3' (H702756-03)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2440 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | QM-07 | |

| 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 | 10/13/2017 | ND | 187 | 93.7 | 200 | 0.0379 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/13/2017 | ND | 201 | 101 | 200 | 1.23 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/13/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 71.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.0 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

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 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 4' (H702756-04)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 123 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 3760 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 75.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.9 % 34.7-157

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 EOG Y RESOURCES, INC
 CHASE SETTLE
 105 SOUTH 4TH STREET
 ARTESIA NM, 88210
 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 6' (H702756-05)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 4640 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 77.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 74.1 % 34.7-157

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| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 8' (H702756-06)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 122 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2240 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | |

Surrogate: 1-Chlorooctane 70.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 66.7 % 34.7-157

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| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 10' (H702756-07)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 124 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 2640 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 75.3 % 28.3-164
Surrogate: 1-Chlorooctadecane 69.3 % 34.7-157

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| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 12' (H702756-08)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 124 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1300 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 71.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 71.5 % 34.7-157

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 Fax To: (575) 748-4131

| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 14' (H702756-09)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 126 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1260 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 88.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.1 % 34.7-157

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| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 16' (H702756-10)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 123 % 72-148

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 880 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 82.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 78.4 % 34.7-157

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 ARTESIA NM, 88210
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| | | | |
|-------------------|---------------------------------|---------------------|----------------|
| Received: | 10/11/2017 | Sampling Date: | 10/09/2017 |
| Reported: | 10/18/2017 | Sampling Type: | Soil |
| Project Name: | NORTH DAGGER DRAW WATER TRANSF | Sampling Condition: | Cool & Intact |
| Project Number: | NORTH PIPELINE | Sample Received By: | Tamara Oldaker |
| Project Location: | NORTH DAGGER DRAQ WATER TRANSFE | | |

Sample ID: S1 - 17' (H702756-11)

| 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 | 10/14/2017 | ND | 2.10 | 105 | 2.00 | 1.68 | | |
| Toluene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.90 | 95.2 | 2.00 | 3.53 | | |
| Ethylbenzene* | <0.050 | 0.050 | 10/14/2017 | ND | 1.93 | 96.5 | 2.00 | 2.79 | | |
| Total Xylenes* | <0.150 | 0.150 | 10/14/2017 | ND | 5.78 | 96.3 | 6.00 | 2.55 | | |
| Total BTEX | <0.300 | 0.300 | 10/14/2017 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 125 % 72-148

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: HM | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 800 | 16.0 | 10/13/2017 | ND | 416 | 104 | 400 | 3.77 | | |

| 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 | 10/12/2017 | ND | 209 | 105 | 200 | 1.02 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 10/12/2017 | ND | 219 | 109 | 200 | 0.795 | | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 10/12/2017 | ND | | | | | | |

Surrogate: 1-Chlorooctane 82.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.3 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager

PROPOSED SOIL BORING LOCATIONS



Horizontal BTEX/TPH Delineation (North Pipeline Area): The October 2017 soil assessment activities did not document any detectable BTEX or TPH concentrations in the North Pipeline Area.
Status: No Further Horizontal or Vertical BTEX/TPH Delineation Required

Horizontal BTEX/TPH Delineation (2RP-3651): The horizontal BTEX/TPH delineation goal is to delineate the soil benzene, BTEX and TPH concentrations to below the site RRALs (10 mg/Kg benzene; 50 mg/Kg BTEX; and 5,000 mg/Kg TPH). The October 2017 soil assessment activities documented exceedances of the referenced RRALs in soil borings S1 and S2. The exceedances were limited to soils occurring at depths of eight (8) feet or shallower. It is suspected that the BTEX/TPH impacts may be largely confined to the former bermed area around the tanks.
Status: Additional Horizontal BTEX/TPH Delineation Required to Delineate BTEX/TPH Concentrations To < RRALs

NEW TANK BATTERY LOCATION



FORMER TANK BATTERY LOCATION

LEGEND

- - All soil analytical results < RRALs for benzene, BTEX and TPH
- - Soil analytical results > RRALs for benzene, BTEX and/or TPH. Sample depths where RRALs were exceeded are noted.
- - Proposed Horizontal 8'-deep Delineation Soil Boring
- - SAMPLE LOCATION
- - PIPELINE AREA WEST OF FORMER TANK BATTERY
- - IMPACTED AREA (2RP-3651)
- - FORMERLY REMEDIATED AREA LINED AREA AT 8'

* ALL PROPERTY BOUNDARIES ARE APPROXIMATE & NOT TO BE USED FOR CONSTRUCTION PURPOSES

1" = ~25'

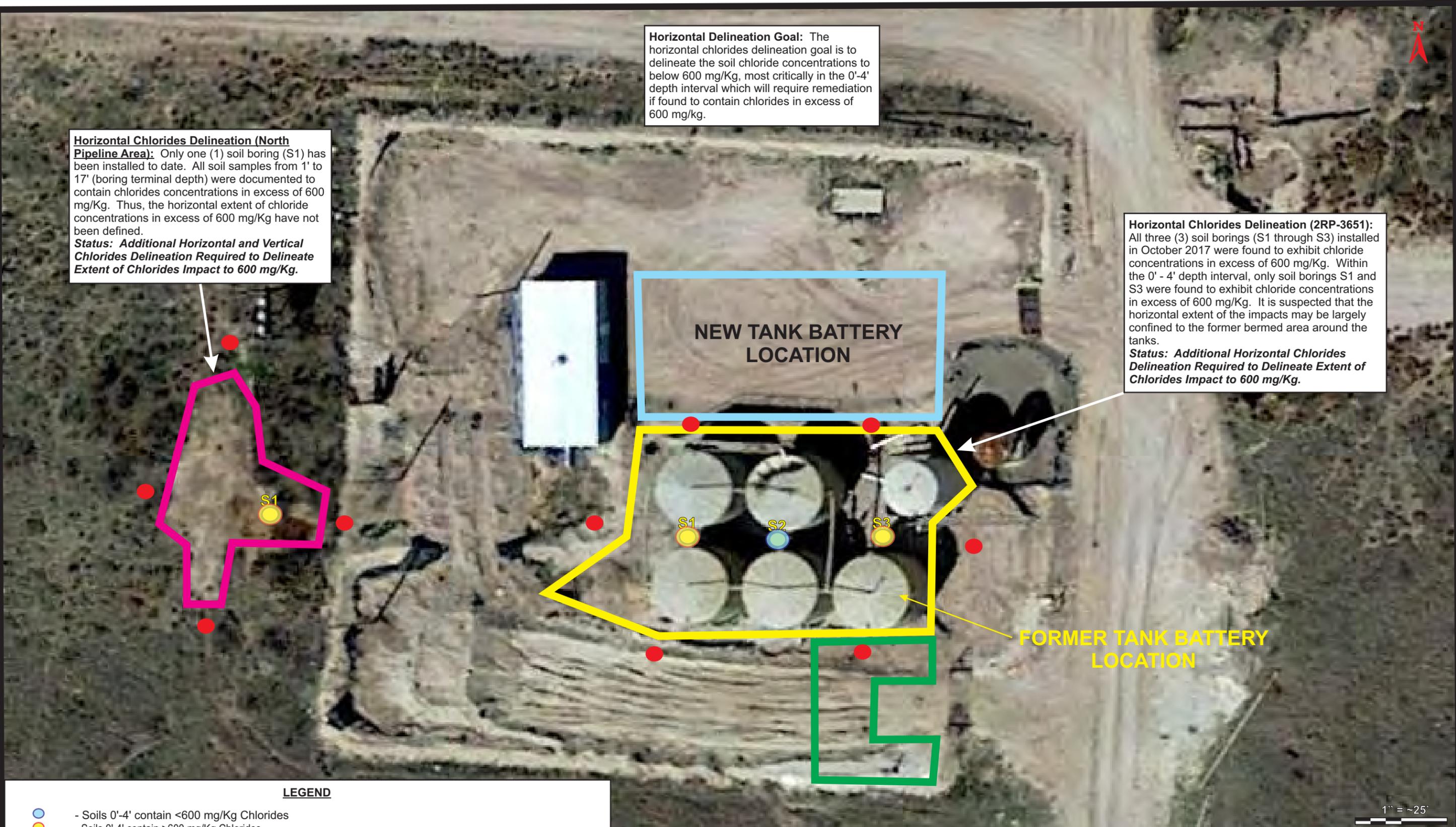
RANGER ENVIRONMENTAL SERVICES, INC.
 HORIZONTAL BENZENE, BTEX & TPH DELINEATION MAP
 NORTH DAGGER DRAW WATER STATION
 SECTION 20, T19S-R25E
 EDDY COUNTY, NEW MEXICO
 DATE: **RANGER REFERENCE #5375**
 COMMENTS:



Horizontal Delineation Goal: The horizontal chlorides delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, most critically in the 0'-4' depth interval which will require remediation if found to contain chlorides in excess of 600 mg/kg.

Horizontal Chlorides Delineation (North Pipeline Area): Only one (1) soil boring (S1) has been installed to date. All soil samples from 1' to 17' (boring terminal depth) were documented to contain chlorides concentrations in excess of 600 mg/Kg. Thus, the horizontal extent of chloride concentrations in excess of 600 mg/Kg have not been defined.
Status: *Additional Horizontal and Vertical Chlorides Delineation Required to Delineate Extent of Chlorides Impact to 600 mg/Kg.*

Horizontal Chlorides Delineation (2RP-3651): All three (3) soil borings (S1 through S3) installed in October 2017 were found to exhibit chloride concentrations in excess of 600 mg/Kg. Within the 0' - 4' depth interval, only soil borings S1 and S3 were found to exhibit chloride concentrations in excess of 600 mg/Kg. It is suspected that the horizontal extent of the impacts may be largely confined to the former bermed area around the tanks.
Status: *Additional Horizontal Chlorides Delineation Required to Delineate Extent of Chlorides Impact to 600 mg/Kg.*



LEGEND

- - Soils 0'-4' contain <600 mg/Kg Chlorides
- - Soils 0'-4' contain >600 mg/Kg Chlorides
- - Proposed Horizontal 4'-deep Delineation Soil Boring
- - SAMPLE LOCATION
- - PIPELINE AREA WEST OF FORMER TANK BATTERY
- - IMPACTED AREA (2RP-3651)
- - FORMER REMEDIATED LINED AREA AT 8'

* ALL PROPERTY BOUNDARIES ARE APPROXIMATE & NOT TO BE USED FOR CONSTRUCTION PURPOSES

1" = ~25'

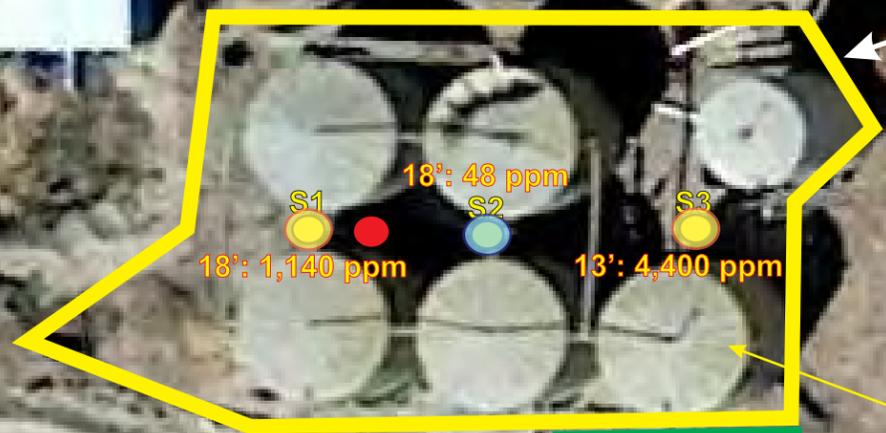
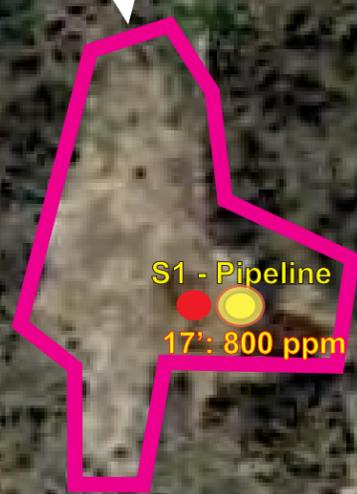
RANGER ENVIRONMENTAL SERVICES, INC.
 HORIZONTAL CHLORIDE DELINEATION MAP
 NORTH DAGGER DRAW WATER STATION
 SECTION 20, T19S-R25E
 EDDY COUNTY, NEW MEXICO
 DATE: | **RANGER REFERENCE #5375**
 COMMENTS:



Vertical Chlorides Delineation Goal: The vertical chlorides delineation goal is to delineate the soil chloride concentrations to below 600 mg/Kg, and to document at least 10' of separation between the base of the 600 mg/Kg chlorides level and the underlying groundwater.

Vertical Chlorides Delineation (North Pipeline Area): Only one (1) soil boring (S1) has been installed to date in the North Pipeline Area. All soil samples from 1' to 17' (boring terminal depth) were documented to contain chlorides concentrations in excess of 600 mg/Kg. Thus, the horizontal and vertical extent of chloride concentrations in excess of 600 mg/Kg have not been defined.
Status: *Additional Horizontal and Vertical Chlorides Delineation Required to Delineate Extent of Chlorides Impact to 600 mg/Kg.*

Vertical Chlorides Delineation (2RP-3651): Soil boring S3 had the highest documented site chloride concentration (7,300 mg/Kg @ 10'). Soil boring S1 exhibited the deepest chloride impact in excess of 600 mg/kg (1,140 mg/Kg @ 18'). Thus, the vertical chloride delineation goal has not been achieved.
Status: *Additional Vertical Chlorides Delineation Required .*



FORMER TANK BATTERY LOCATION

LEGEND

- - Appears to be vertically delineated to 600 mg/Kg chlorides. Depth and concentration shown is current vertical delineation depth and chloride concentration (ppm)
- - Needs add'l chloride vertical delineation. Depth and concentration shown is current vertical delineation depth and chloride concentration (ppm)
- - Proposed Vertical Delineation Soil Boring (Minimum Depth = 30')
- - SAMPLE LOCATION
- PIPELINE AREA WEST OF FORMER TANK BATTERY
- IMPACTED AREA (2RP-3651)
- FORMERLY REMEDIATED AREA LINED AT 8'

* ALL PROPERTY BOUNDARIES ARE APPROXIMATE & NOT TO BE USED FOR CONSTRUCTION PURPOSES

1" = ~25'

RANGER ENVIRONMENTAL SERVICES, INC.

VERTICAL CHLORIDE DELINEATION MAP
 NORTH DAGGER DRAW WATER STATION
 SECTION 20, T19S-R25E
 EDDY COUNTY, NEW MEXICO

DATE: | **RANGER REFERENCE #5375**
 COMMENTS: