

**APPROVED**

*By Olivia Yu at 7:21 am, Oct 02, 2017*

D-1-2 Line Leak  
Lea County, New Mexico  
1RP 4719

NMOCD approves of the proposed remediation for 1RP-4719. Completion of vertical delineation for Vertical 1, Area 2 after liner placement and is granted. Backfill of Area 1 and Area 2 is granted.

Prepared for:



370 17<sup>th</sup> St., Suite 2500  
Denver, CO 80202

*Prepared by:*



2620 W. Marland  
Hobbs, NM 88240

**September 28, 2017**

## Summary

Tasman Geosciences, Inc. (Tasman) has prepared this Project Summary on behalf of DCP Midstream, LP (DCP) to document the results of field activities that were conducted at the D-1-2 Line Leak. The site is located approximately 2.3 miles north of Hobbs, New Mexico at UL/O sec. 11 T18S R38E. NMOSE well records indicate that groundwater will likely be encountered at a depth of approximately 83 +/- feet.

DCP Midstream operator was notified by third party of a possible leak. The line was shut in and blown down. NMOCD was notified of the release on May 16, 2017 and an initial C-141 was approved by NMOCD on June 12, 2017 (Appendix A). Tasman personnel were on site on May 22, 2017 to assess the release. The release area was GPS mapped (Figure 1) and samples were collected, the samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B and C) and photographed (Appendix D).

Approximately 700 cubic yards of contaminated soil was exported and disposed of at a NMOCD approved facility.

### Corrective Action Plan

Based on the assessment and sampling data, we propose a 20-mil reinforced poly liner that will be installed and properly seated at four feet in area 1 and area 2 (figures 1 and 2). The excavations will then be backfilled with clean soil.

Revegetation of the site will be performed as follows:

Disturbed areas associated with the remediation efforts will be reseeded. The seed will be spread using a hand-held broadcaster and the area raked or dragged to cover the seed. Because the seed will be broadcast, the pounds per acre will be doubled. Lea Co. seed mix.

The seed mixture will be planted in the amounts specified in pounds of pure live seed (PLS) per acre. Commercially sold seed will be either certified or registered. The area will be seeded following backfilling of the excavated area.

Once these activities have been completed, a report will be sent to NMOCD requesting 'remediation termination' and site closure.

Tasman appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

Sincerely,

Kyle Norman Project Manager Tasman Geosciences (575) 318-5017

Attachments:

Figure 1–Area 1 Excavation and samples

Figure 2–Area 2 Excavation and samples

Figure 3–Overview map

Appendix A – Initial C-141

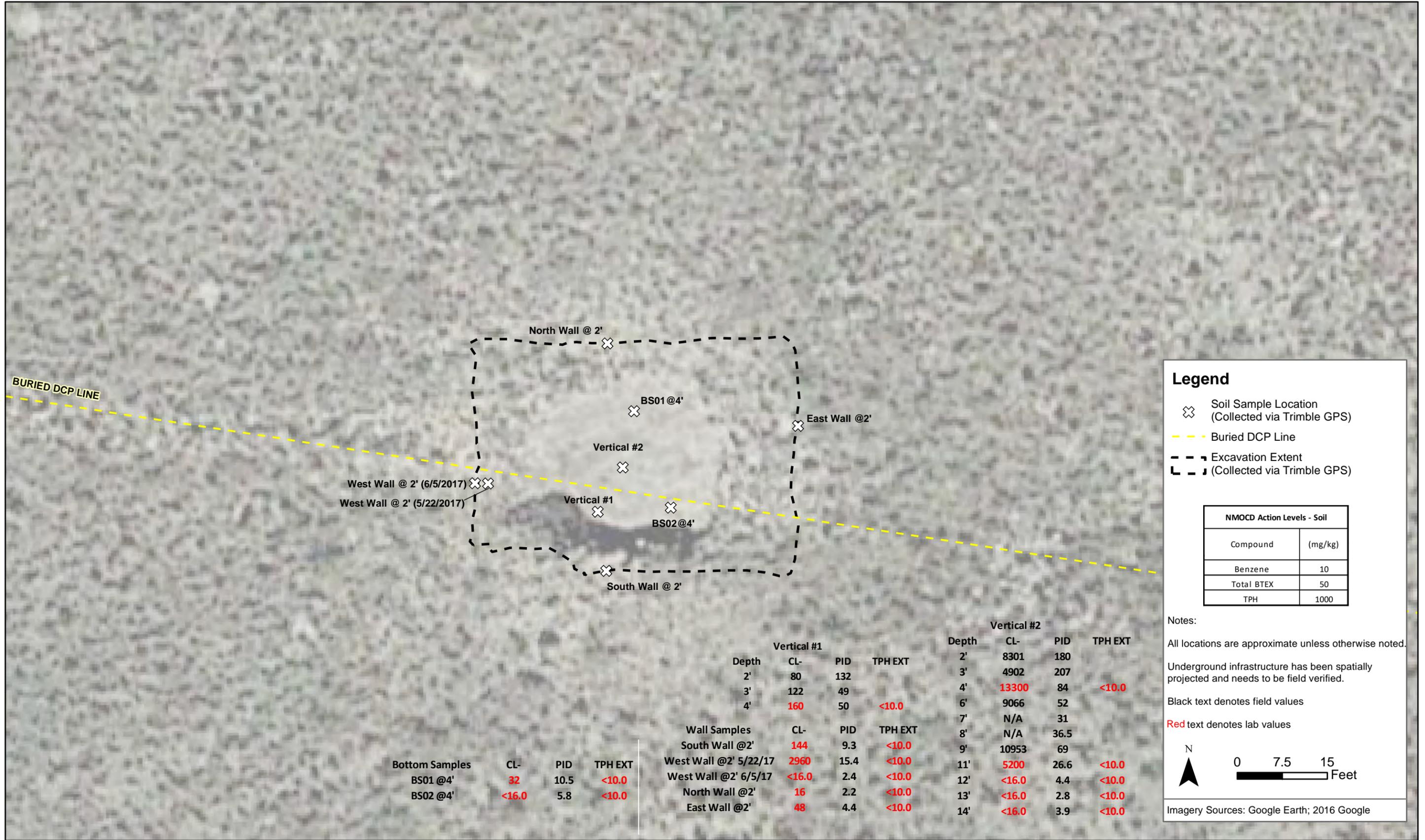
Appendix B – Area 1 Laboratory Analyses

Appendix C – Area 2 Laboratory Analyses

Appendix D - Photo Documentation

Appendix E – NMOSE DGW

Figures



**Legend**

- ⊗ Soil Sample Location (Collected via Trimble GPS)
- - - Buried DCP Line
- - - Excavation Extent
- - - (Collected via Trimble GPS)

NMOCD Action Levels - Soil	
Compound	(mg/kg)
Benzene	10
Total BTEX	50
TPH	1000

Notes:

All locations are approximate unless otherwise noted.

Underground infrastructure has been spatially projected and needs to be field verified.

Black text denotes field values

Red text denotes lab values

N

0 7.5 15 Feet

Imagery Sources: Google Earth; 2016 Google

	Vertical #1			Depth	Vertical #2		TPH EXT
	CL-	PID	TPH EXT		CL-	PID	
				2'	8301	180	
				3'	4902	207	
				4'	13300	84	<10.0
				6'	9066	52	
				7'	N/A	31	
Wall Samples	CL-	PID	TPH EXT	8'	N/A	36.5	
South Wall @2'	144	9.3	<10.0	9'	10953	69	
West Wall @2' 5/22/17	2960	15.4	<10.0	11'	5200	26.6	<10.0
West Wall @2' 6/5/17	<16.0	2.4	<10.0	12'	<16.0	4.4	<10.0
North Wall @2'	16	2.2	<10.0	13'	<16.0	2.8	<10.0
East Wall @2'	48	4.4	<10.0	14'	<16.0	3.9	<10.0

Bottom Samples	CL-	PID	TPH EXT
BS01 @4'	32	10.5	<10.0
BS02 @4'	<16.0	5.8	<10.0

DATE: September 2017

DESIGNED BY: K. Norman

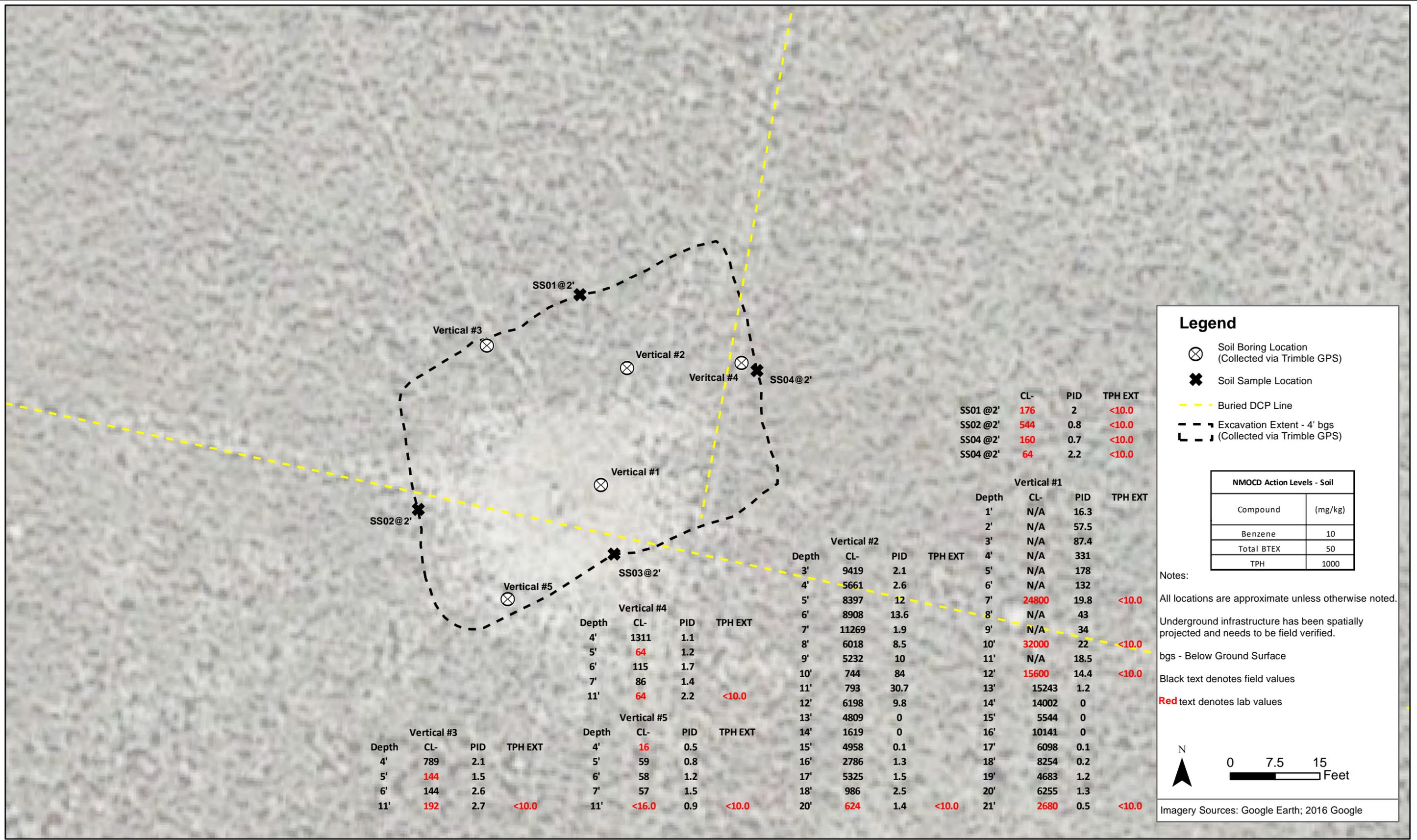
DRAWN BY: D. Arnold

Tasman Geosciences Inc.  
6899 Pecos Street - Unit C  
Denver, CO 80221

**DCP Midstream**  
**D-1-2 - Area 1 (1RP-4719)**  
NWSE Section 23, Township 22 South, Range 34 East  
Lea County, New Mexico

Excavation Overview  
Figure

Figure  
1



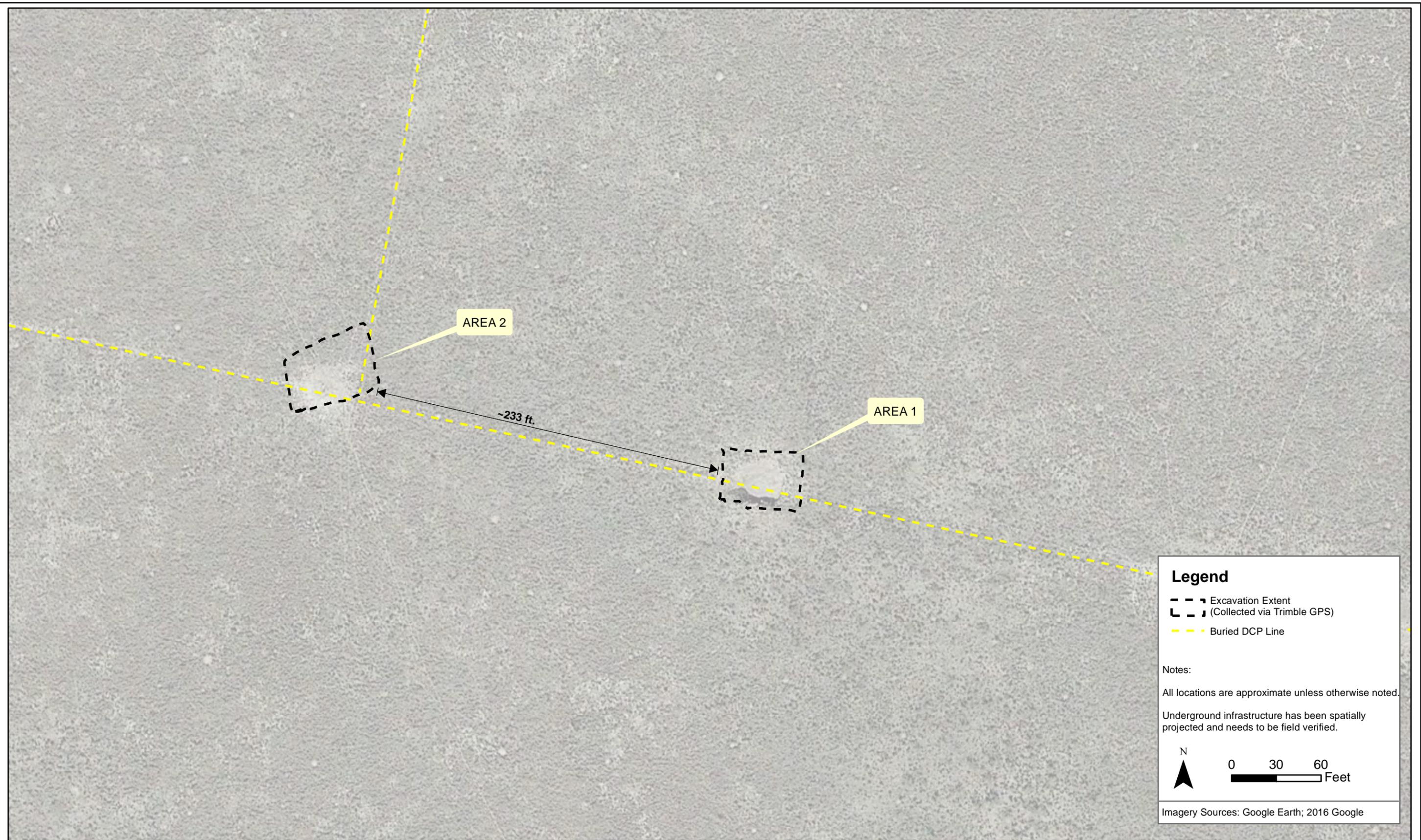
DATE: September 2017  
 DESIGNED BY: K. Norman  
 DRAWN BY: D. Arnold



**DCP Midstream**  
**D-1-2 - Area 2 (1RP-4719)**  
 NWSE Section 23, Township 22 South, Range 34 East  
 Lea County, New Mexico

Soil Analytical Results  
 Map

Figure  
 2



DATE:	August 2017
DESIGNED BY:	K. Norman
DRAWN BY:	D. Arnold



**DCP Midstream**  
**D-1-2 - Areas 1 & 2**  
NWSE Section 23, Township 22 South, Range 34 East  
Lea County, New Mexico

Excavation  
Overview Map

Figure  
3

## Appendix A

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

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company DCP	Contact Haskell Conder
Address 10 Desta Drive, Suite 400 West	Telephone No. cell 432-557-1127
Facility Name D-1-2 Line Leak	Facility Type Natural Gas Gathering Pipeline
Surface Owner Tom Jones	Mineral Owner
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	11	18S	38E					Lea

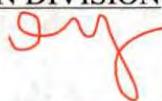
Latitude: 32.7567 Longitude: -103.1153

**NATURE OF RELEASE**

Type of Release: Natural Gas	Volume of Release 7 Barrels	Volume Recovered 0
Source of Release pipeline	Date and Hour of Occurrence UNK	Date and Hour of Discovery 05/16/17 08:00AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.* N / A		
Describe Cause of Problem and Remedial Action Taken.* DCPM Operator was notified by third party of possible line leak. The line has been shut in and blown down.		
Describe Area Affected and Cleanup Action Taken.* A cleanup plan will be submitted for NMOCD Approval.		

**RECEIVED**  
By Olivia Yu at 9:25 am, Jun 12, 2017

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.

Signature: <i>Haskell Conder</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Haskell Conder	Approved by Environmental Specialist: 	
Title: Compliance Coordinator	Approval Date: 6/12/2017	Expiration Date:
E-mail Address: hconder@dcpmidstream.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 06/05/17 Phone: 432-557-1127		

\* Attach Additional Sheets If Necessary

1RP-4719 fOY1716334427 nOY1716334892  
pOY1716335635

## Appendix B

May 26, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 05/22/17 16:05.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 05/22/2017  
 Reported: 05/26/2017  
 Project Name: D-1-2  
 Project Number: AREA#1  
 Project Location: NONE GIVEN

 Sampling Date: 05/22/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: VERTICAL #2 @ 4' (H701366-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>13300</b>	16.0	05/23/2017	ND	432	108	400	7.69	
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	05/23/2017	ND	179	89.6	200	14.4	
DRO >C10-C28	<10.0	10.0	05/23/2017	ND	179	89.6	200	12.0	
EXT DRO >C28-C36	<10.0	10.0	05/23/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	95.5 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	80.8 %	34.7-157							

**Sample ID: VERTICAL #2 @ 11' (H701366-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5200</b>	16.0	05/23/2017	ND	432	108	400	7.69	
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	05/23/2017	ND	179	89.6	200	14.4	
DRO >C10-C28	<10.0	10.0	05/23/2017	ND	179	89.6	200	12.0	
EXT DRO >C28-C36	<10.0	10.0	05/23/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	90.2 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	82.6 %	34.7-157							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 05/22/2017  
 Reported: 05/26/2017  
 Project Name: D-1-2  
 Project Number: AREA#1  
 Project Location: NONE GIVEN

 Sampling Date: 05/22/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WEST WALL @ 2' (H701366-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2960</b>	16.0	05/23/2017	ND	432	108	400	7.69	
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	05/23/2017	ND	179	89.6	200	14.4	
DRO >C10-C28	<10.0	10.0	05/23/2017	ND	179	89.6	200	12.0	
EXT DRO >C28-C36	<10.0	10.0	05/23/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	95.8 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	84.1 %	34.7-157							

**Sample ID: SOUTH WALL @ 2' (H701366-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>144</b>	16.0	05/23/2017	ND	432	108	400	7.69	
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	05/23/2017	ND	179	89.6	200	14.4	
DRO >C10-C28	<10.0	10.0	05/23/2017	ND	179	89.6	200	12.0	
EXT DRO >C28-C36	<10.0	10.0	05/23/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	93.4 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	78.9 %	34.7-157							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- QR-04            The RPD for the BS/BSD was outside of historical limits.
- ND                Analyte NOT DETECTED at or above the reporting limit
- RPD               Relative Percent Difference
- \*\*                 Samples not received at proper temperature of 6°C or below.
- \*\*\*                Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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---

Celey D. Keene, Lab Director/Quality Manager



May 26, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 05/22/17 16:05.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 05/22/2017  
 Reported: 05/26/2017  
 Project Name: D-1-2  
 Project Number: AREA#1  
 Project Location: NONE GIVEN

 Sampling Date: 05/22/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: VERTICAL #1 @ 4' (H701367-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>160</b>	16.0	05/24/2017	ND	432	108	400	7.69	
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	05/23/2017	ND	179	89.6	200	14.4	
DRO >C10-C28	<10.0	10.0	05/23/2017	ND	179	89.6	200	12.0	
EXT DRO >C28-C36	<10.0	10.0	05/23/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	88.6 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	78.8 %	34.7-157							

Cardinal Laboratories

\* = Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager



**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: DCP Midstream  
Project Manager:

P.O. #:  
Company:

**BILL TO**  
**ANALYSIS REQUEST**

Address:  
City: State: Zip:

Attn:

Phone #: Fax #:

Address:

Project #: Project Owner:

City: State: Zip:

Project Name:

Phone #: Fax #:

Project Location: D-1-2 Arca #1

Sampler Name: Kyle Norman

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H70367

Vertical #1 @ Y

(G)RAB OR (C)OMP.  
# CONTAINERS  
GROUNDWATER  
WASTEWATER  
SOIL  
OIL  
SLUDGE  
OTHER:  
ACID/BASE:  
ICE / COOL  
OTHER:

DATE TIME  
5-27-14 0800

Chlorides  
TPH 8015 M  
BTEX  
Texas TPH  
Complete Cations/Anions  
TDS

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

Relinquished By: *[Signature]*  
Date: 5-27-14  
Time:

Received By: *[Signature]*  
Date: 5-22-17  
Time: 9:05

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

Delivered By: (Circle One)  
Sampler - UPS - Bus - Other:

Received By: *[Signature]*  
Sample Condition  
Cool  Intact   
Yes  No   
CHECKED BY: *[Signature]*  
(Initials) *[Signature]*

email results: hpconder@dcpmidstream.com  
yblair@dcpmidstream.com  
knorman@tasman-geo.com:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

June 07, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 06/05/17 15:10.

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Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/05/2017  
 Reported: 06/07/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #1  
 Project Location: NONE GIVEN

 Sampling Date: 06/05/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NORTH WALL @ 2' (H701470-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>94.9 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>85.4 %</i>	<i>34.7-157</i>						

**Sample ID: WEST WALL @ 2' (H701470-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>&lt;16.0</b>	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>112 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>91.9 %</i>	<i>34.7-157</i>						

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/05/2017  
 Reported: 06/07/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #1  
 Project Location: NONE GIVEN

 Sampling Date: 06/05/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EAST WALL @ 2' (H701470-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>112 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>87.4 %</i>	<i>34.7-157</i>						

**Sample ID: BS01 @ 4' (H701470-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>114 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>90.4 %</i>	<i>34.7-157</i>						

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/05/2017  
 Reported: 06/07/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #1  
 Project Location: NONE GIVEN

 Sampling Date: 06/05/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS02 @ 4' (H701470-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>122 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>101 %</i>	<i>34.7-157</i>						

**Sample ID: VERTICAL #2 @ 12' (H701470-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>97.4 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>90.0 %</i>	<i>34.7-157</i>						

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/05/2017  
 Reported: 06/07/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #1  
 Project Location: NONE GIVEN

 Sampling Date: 06/05/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: VERTICAL #2 @ 13' (H701470-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>105 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>92.2 %</i>	<i>34.7-157</i>						

**Sample ID: VERTICAL #2 @ 14' (H701470-08)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>144</b>	16.0	06/06/2017	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	06/05/2017	ND	197	98.3	200	1.52	
DRO >C10-C28	<10.0	10.0	06/05/2017	ND	182	91.1	200	1.71	
EXT DRO >C28-C36	<10.0	10.0	06/05/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>103 %</i>	<i>28.3-164</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>89.3 %</i>	<i>34.7-157</i>						

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report



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Celey D. Keene, Lab Director/Quality Manager



**CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

RUSH

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: DCP Midstream  
 Project Manager: Hack Conder  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
 Project #: \_\_\_\_\_ Project Owner: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project Location: D-1-2 Area # 1  
 Sampler Name: Kyle Norman  
 P.O. #: \_\_\_\_\_ Company: \_\_\_\_\_  
 Attn: \_\_\_\_\_ Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:								
HT01470	1 North Wall @ 2'	G	1								6-5-17	0900						
	2 West Wall @ 2'											0915						
	3 East Wall @ 2'											0930						
	4 BS01 @ 4'											1000						
	5 BS02 @ 4'											1030						
	6 Vertical # 2 @ 12'											1300						
	7 Vertical # 2 @ 13'											1330						
	8 Vertical # 2 @ 14'											1400						

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Relinquished By: Kyle N. Date: 6-5-17 Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: 6-5-17 Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: 6-5-17 Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: 6-5-17 Time: \_\_\_\_\_  
 Delivered By: (Circle One) \_\_\_\_\_  
 Sampler - UPS - Bus - Other: \_\_\_\_\_  
 Sample Condition: Cool  Intact   
 Checked By: (Initials) \_\_\_\_\_  
 Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

REMARKS: email results: hpconder@dcpmidstream.com  
 yblair@dcpmidstream.com  
 knorman@tasman-geo.com:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

## Appendix C

June 14, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 06/08/17 8:20.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/08/2017  
 Reported: 06/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #2  
 Project Location: NONE GIVEN

 Sampling Date: 06/07/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: VERTICAL #1 @ 7' (H701507-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>24800</b>	16.0	06/09/2017	ND	448	112	400	3.64	
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	06/09/2017	ND	181	90.3	200	7.10	
DRO >C10-C28	<10.0	10.0	06/09/2017	ND	179	89.4	200	8.25	
<b>EXT DRO &gt;C28-C36</b>	<b>10.6</b>	10.0	06/09/2017	ND					

Surrogate: 1-Chlorooctane 103 % 28.3-164  
 Surrogate: 1-Chlorooctadecane 88.3 % 34.7-157

**Sample ID: VERTICAL #1 @ 10' (H701507-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32000</b>	16.0	06/09/2017	ND	448	112	400	3.64	
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	06/09/2017	ND	181	90.3	200	7.10	
DRO >C10-C28	<10.0	10.0	06/09/2017	ND	179	89.4	200	8.25	
EXT DRO >C28-C36	<10.0	10.0	06/09/2017	ND					

Surrogate: 1-Chlorooctane 107 % 28.3-164  
 Surrogate: 1-Chlorooctadecane 96.3 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/08/2017  
 Reported: 06/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #2  
 Project Location: NONE GIVEN

 Sampling Date: 06/07/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: VERTICAL #1 @ 12' (H701507-03)**

Chloride, SM4500CI-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>15600</b>	16.0	06/09/2017	ND	448	112	400	3.64	
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	06/09/2017	ND	181	90.3	200	7.10	
DRO >C10-C28	<10.0	10.0	06/09/2017	ND	179	89.4	200	8.25	
EXT DRO >C28-C36	<10.0	10.0	06/09/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>104 %</i>	<i>28.3-164</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>90.3 %</i>	<i>34.7-157</i>							

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



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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

**BILL TO**

**ANALYSIS REQUEST**

Company Name: DCP Midstream  
 Project Manager: Hack Conder  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
 Project #: \_\_\_\_\_ Project Owner: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project Location: D-1-2 Area #2  
 Sampler Name: Kyle Norman  
 P.O. #: \_\_\_\_\_ Company: \_\_\_\_\_  
 Attn: \_\_\_\_\_ Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :									
<u>H701507</u>	<u>1 Vertical #1 @ 7'</u>		<u>1</u>			<input checked="" type="checkbox"/>				<u>6-7-17</u>	<u>12:00</u>	<input checked="" type="checkbox"/>						
	<u>2 Vertical #1 @ 10'</u>		<u>1</u>			<input checked="" type="checkbox"/>					<u>12:30</u>	<input checked="" type="checkbox"/>						
	<u>3 Vertical #1 @ 12'</u>		<u>1</u>			<input checked="" type="checkbox"/>					<u>13:00</u>	<input checked="" type="checkbox"/>						

TPH EXT  
CL

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

Relinquished By: \_\_\_\_\_ Date: 6-8-17 Received By: \_\_\_\_\_  
 Date: 6-8-17 Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: 6-8-17 Received By: \_\_\_\_\_  
 Date: 8:20 Time: \_\_\_\_\_

Sample Condition:  Cool  Intact  
 Yes  No  Yes  No

Checked By: \_\_\_\_\_ (Initials) TPH

REMARKS:  Yes  No  Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No  Add'l Fax #: \_\_\_\_\_

hpcander@dcpmidstream.com  
yblair@v  
knorman@tasman-geos.com

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

June 26, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 06/23/17 11:20.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/23/2017  
 Reported: 06/26/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #2  
 Project Location: NONE GIVEN

 Sampling Date: 06/23/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SS01 @ 2' (H701643-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>176</b>	16.0	06/23/2017	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	06/23/2017	ND	207	103	200	0.0508		
DRO >C10-C28	<10.0	10.0	06/23/2017	ND	221	110	200	0.480		
EXT DRO >C28-C36	<10.0	10.0	06/23/2017	ND						
<i>Surrogate: 1-Chlorooctane</i>	93.8 %	28.3-164								
<i>Surrogate: 1-Chlorooctadecane</i>	98.3 %	34.7-157								

**Sample ID: SS02 @ 2' (H701643-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>544</b>	16.0	06/23/2017	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	06/26/2017	ND	207	104	200	1.79		
DRO >C10-C28	<10.0	10.0	06/26/2017	ND	214	107	200	2.19		
EXT DRO >C28-C36	<10.0	10.0	06/26/2017	ND						
<i>Surrogate: 1-Chlorooctane</i>	78.6 %	28.3-164								
<i>Surrogate: 1-Chlorooctadecane</i>	79.3 %	34.7-157								

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 06/23/2017  
 Reported: 06/26/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA #2  
 Project Location: NONE GIVEN

 Sampling Date: 06/23/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SS03 @ 2' (H701643-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>160</b>	16.0	06/23/2017	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	06/26/2017	ND	207	104	200	1.79	
DRO >C10-C28	<10.0	10.0	06/26/2017	ND	214	107	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	06/26/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	82.1 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	81.2 %	34.7-157							

**Sample ID: SS04 @ 2' (H701643-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	06/23/2017	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	06/26/2017	ND	207	104	200	1.79	
DRO >C10-C28	<10.0	10.0	06/26/2017	ND	214	107	200	2.19	
EXT DRO >C28-C36	<10.0	10.0	06/26/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	94.2 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	92.7 %	34.7-157							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

QR-05	The RPD exceeded historical limits.
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



**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

*RASH*

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: DCP Midstream

Project Manager: *Hack Conde*

Address: State: Zip:

City: State: Zip:

Phone #: Fax #: Project Owner:

Project #:

Project Name:

Project Location: *D-1-2 Area #2*

Sampler Name: *Kyle Norman*

FOR LAB USE ONLY

**BILL TO**

**ANALYSIS REQUEST**

P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME						
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :								
<i>H701643</i>	<i>5501@2'</i>	<i>G</i>	<i>1</i>			<i>✓</i>				<i>6-23-17</i>	<i>0830</i>	<i>✓</i>					
	<i>5502@2'</i>	<i>V</i>	<i>3</i>			<i>✓</i>					<i>0845</i>	<i>✓</i>					
	<i>5503@2'</i>	<i>✓</i>	<i>4</i>			<i>✓</i>					<i>0900</i>	<i>✓</i>					
	<i>5504@2'</i>	<i>✓</i>				<i>✓</i>					<i>0930</i>	<i>✓</i>					

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Relinquished By: *[Signature]* Date: *6-23-17* Received By: *[Signature]* Date: *6-23-17*

Relinquished By: *[Signature]* Date: *6-23-17* Received By: *[Signature]* Date: *6-23-17*

Delivered By: (Circle One) *UPS* *186*

Sampler - UPS - Bus - Other: *186*

Sample Condition: Cool  Intact  Yes  No  Yes  No  No

Checked By: *[Signature]* Initials: *[Signature]* Phone Result:  Yes  No Add'l Phone #:  Yes  No Add'l Fax #:  Yes  No

\* Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



September 14, 2017

HACK CONDER

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: D-1-2

Enclosed are the results of analyses for samples received by the laboratory on 09/13/17 15:50.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 09/13/2017  
 Reported: 09/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA 2  
 Project Location: NONE GIVEN

 Sampling Date: 09/11/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL #1 @ 21' (H702471-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2680</b>	16.0	09/14/2017	ND	400	100	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/14/2017	ND	180	90.2	200	0.273	
DRO >C10-C28	<10.0	10.0	09/14/2017	ND	193	96.5	200	2.02	
EXT DRO >C28-C35	<10.0	10.0	09/14/2017	ND					
EXT DRO >C28-C36	<10.0	10.0	09/14/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>96.0 %</i>	<i>28.3-164</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>99.5 %</i>	<i>34.7-157</i>							

Cardinal Laboratories

\*=Accredited Analyte

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

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 09/13/2017  
 Reported: 09/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA 2  
 Project Location: NONE GIVEN

 Sampling Date: 09/12/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL #2 @ 20' (H702471-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>624</b>	16.0	09/14/2017	ND	400	100	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/14/2017	ND	180	90.2	200	0.273	
DRO >C10-C28	<10.0	10.0	09/14/2017	ND	193	96.5	200	2.02	
EXT DRO >C28-C35	<10.0	10.0	09/14/2017	ND					
EXT DRO >C28-C36	<10.0	10.0	09/14/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>92.0 %</i>	<i>28.3-164</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>95.1 %</i>	<i>34.7-157</i>							

**Sample ID: VERTICAL #3 @ 5' (H702471-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>144</b>	16.0	09/14/2017	ND	400	100	400	7.69	

Cardinal Laboratories

\*=Accredited Analyte

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

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 09/13/2017  
 Reported: 09/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA 2  
 Project Location: NONE GIVEN

 Sampling Date: 09/12/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL #3 @ 11' (H702471-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>192</b>	16.0	09/14/2017	ND	400	100	400	7.69	
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	09/14/2017	ND	180	90.2	200	0.273	
DRO >C10-C28	<10.0	10.0	09/14/2017	ND	193	96.5	200	2.02	
EXT DRO >C28-C35	<10.0	10.0	09/14/2017	ND					
EXT DRO >C28-C36	<10.0	10.0	09/14/2017	ND					

Surrogate: 1-Chlorooctane 87.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 93.1 % 34.7-157

**Sample ID: VERTICAL #4 @ 5' (H702471-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	09/14/2017	ND	400	100	400	7.69	

Cardinal Laboratories

\*=Accredited Analyte

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

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 09/13/2017  
 Reported: 09/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA 2  
 Project Location: NONE GIVEN

 Sampling Date: 09/13/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL #4 @ 11' (H702471-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	09/14/2017	ND	400	100	400	7.69	
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	09/14/2017	ND	180	90.2	200	0.273	
DRO >C10-C28	<10.0	10.0	09/14/2017	ND	193	96.5	200	2.02	
EXT DRO >C28-C35	<10.0	10.0	09/14/2017	ND					
EXT DRO >C28-C36	<10.0	10.0	09/14/2017	ND					

Surrogate: 1-Chlorooctane 99.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 98.7 % 34.7-157

**Sample ID: VERTICAL #5 @ 4' (H702471-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	09/14/2017	ND	400	100	400	7.69	

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

 DCP Midstream - Midland  
 HACK CONDER  
 10 Desta Dr., #400-W  
 Midland TX, 79705  
 Fax To: None

 Received: 09/13/2017  
 Reported: 09/14/2017  
 Project Name: D-1-2  
 Project Number: F-210 - AREA 2  
 Project Location: NONE GIVEN

 Sampling Date: 09/13/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL #5 @ 13' (H702471-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/14/2017	ND	400	100	400	7.69	
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	09/14/2017	ND	180	90.2	200	0.273	
DRO >C10-C28	<10.0	10.0	09/14/2017	ND	193	96.5	200	2.02	
EXT DRO >C28-C35	<10.0	10.0	09/14/2017	ND					
EXT DRO >C28-C36	<10.0	10.0	09/14/2017	ND					
<i>Surrogate: 1-Chlorooctane</i>	86.8 %	28.3-164							
<i>Surrogate: 1-Chlorooctadecane</i>	96.4 %	34.7-157							

Cardinal Laboratories

\*=Accredited Analyte

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

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report



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



**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

*PCSH*

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: DCP Midstream  
 Project Manager: Hack Conder  
 Address:  
 City: State: Zip:  
 Phone #: Fax #:  
 Project #: Project Owner:  
 Project Name:  
 Project Location: *D-1-2 Area 2*  
 Sampler Name: Kyle Norman  
 P.O. #:  
 Company:  
 Attn:  
 Address:  
 City: State: Zip:  
 Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV		DATE	TIME	Chlorides	TPH 8015 M EXT	BTEX	Texas TPH	Complete Cations/Anions	TDS	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL									OTHER :
<i>H702471</i>																				
	<i>Vertical #1 @ 21'</i>	<i>G</i>	<i>1</i>									<i>9-11-17</i>	<i>14 00</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #2 @ 20'</i>											<i>9-12-17</i>	<i>15 00</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #3 @ 5'</i>											<i>9-12-17</i>	<i>09 00</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #4 @ 5'</i>											<i>9-12-17</i>	<i>12 00</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #5 @ 5'</i>											<i>9-13-17</i>	<i>08 00</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #4 @ 11'</i>												<i>09 50</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #4 @ 11'</i>												<i>10 45</i>	<i>✓</i>	<i>✓</i>					
	<i>Vertical #5 @ 13'</i>												<i>13 00</i>	<i>✓</i>	<i>✓</i>					

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Relinquished By: *Kyle* Date: *9-13-17* Time: *11:12*  
 Received By: *Hack Conder*  
 Delivered By: (Circle One) *#715 4358* Sample Condition: Cool  Intact   
 Sampler - UPS - Bus - Other: *#715 4358*  Yes  No  
 CHECKED BY: (Initials) *HC*  
 Phone Result:  Yes  No Add'l Phone #: *419*  
 Fax Result:  Yes  No Add'l Fax #: *419*  
 REMARKS: email results: *hpconder@dcpmidstream.com*  
*yblair@dcpmidstream.com*  
*knorman@tasman-geo.com*

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476  
*corrected 9/25/17*

## Appendix D

# DCP Midstream D-1-2 Line Leak

1RP-4719



Area 2 initial leak

5/22/17



Area 1 export soil

5/22/17



Area 1 excavating vertical 1

6/05/17



Area 2 excavating vertical 1

9/11/17



Area 2 vertical 1

9/11/17



Area 2 excavating vertical 2

9/11/17

## **Appendix E**



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">L 11339</a>	L	LE		2	4	4	11	18S	38E	676901	3625969*	328	160	90	70
<a href="#">L 03332</a>	L	LE			2	4	11	18S	38E	676795	3626272*	442	125	60	65
<a href="#">L 12245 POD1</a>	L	LE		2	4	3	11	18S	38E	676079	3626022	523	155		
<a href="#">L 07772</a>	L	LE		2	2	1	14	18S	38E	676104	3625553*	582	200	65	135
<a href="#">L 11635</a>	L	LE		3	3	2	11	18S	38E	676284	3626568*	747	185	78	107
<a href="#">L 03487</a>	L	LE			4	2	11	18S	38E	676787	3626675*	817	112	45	67
<a href="#">L 07721</a>	L	LE		2	4	1	14	18S	38E	676111	3625150*	872	150	70	80
<a href="#">L 13802 POD1</a>		LE		1	3	2	11	18S	38E	676357	3626791	935	190	111	79
<a href="#">L 10517</a>	L	LE				2	11	18S	38E	676586	3626870*	986	112	86	26
<a href="#">L 11022</a>	L	LE				2	11	18S	38E	676586	3626870*	986	200	150	50
<a href="#">L 11103</a>	L	LE				2	11	18S	38E	676586	3626870*	986	200		

Average Depth to Water: **83 feet**  
 Minimum Depth: **45 feet**  
 Maximum Depth: **150 feet**

Record Count: 11

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 676583.93

**Northing (Y):** 3625883.54

**Radius:** 1000

\*UTM location was derived from PLSS - see Help

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