



January 9, 2015

Oil Conservation Division
District 2 – Artesia
811 S. First St.
Artesia, NM 88210

Re: West Brushy 5 Federal SWD #5
30-015-31869
Sec. 5, T26S-R29E
Eddy County, NM

Mr. Mike Bratcher,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated November 5, 2014.

Background

The release was due to a split in the poly line resulting in the release of 225 barrels of produced water of which 200 barrels were recovered. The release impacted the surrounding pasture, lease road, and crossed pipeline right of ways running parallel to the lease road. The release path ranged from approximately 30' in width at the initial point of release to 2' in width on the west side of the lease road and pipeline right of way. The release path followed an existing water run off channel down a slight incline for approximately 2,000'. The attached Site Diagrams depict the approximate area impacted by the release (Overview Diagram) and two separate diagrams (North and South) zoom in on the areas sampled. The fourth diagram (Impacted Area) shows the extent of additional surface damage that is to be expected during excavation of the release area.

Groundwater

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of Zero with depth to groundwater at greater than 100'. The information obtained through the New Mexico Office of the State Engineer shows the average depth to ground water at ~75 feet for a well drilled in Unit M of Section 5 which is on the west side of the river and 1 mile west of the release area classifying the area at a site ranking of Ten.

Soil Assessment and Analytical Results

Sample points noted on the attached Site Diagrams are labeled with either a B to denote samples taken with a coring unit, S for hand samples, and BG for background samples taken outside of the release area.

Sample results for TPH and BTEX were tested at the 1' depth for all sample points and proved to be non-detect based on the attached Analytical Results. Chloride results proved to be elevated at a depth of 1' for all sample points with the exception of S7 which had elevated levels to a depth of 2'. Background samples were obtained outside of the impacted area and are shown for your consideration.

Work Plan

COG Operating LLC proposes the following work plan based on delineation samples:

- B1: Excavate to a depth of 1.5' and backfill with topsoil.
- B2: Excavate to a depth of 1.5' and backfill with topsoil.
- B3: Excavate to a depth of 1.5' and backfill with topsoil.
- B4: Excavate to a depth of 1.5' and backfill with topsoil.
- S6: Excavate to a depth of 1.5' and backfill with topsoil.
- S7: Excavate to a depth of 2.5' and backfill with topsoil

B1	Cl-	B2	Cl-	B3	Cl-	B4	Cl-	S6	Cl-	S7	Cl-	BG	Cl-
1'	14200	1'	14400	1'	15600	1'	17400	1'	15000	1'	17000	3'	608
2'	96	2'	160	2'	64	2'	1150	2'	800	2'	6160	6'	1040
3'	112	3'	240	3'	112	3'	912	3'	208	3'	1600	9'	1120

Areas such as the lease road and the pipeline right of way will not be excavated or sampled due to safety concerns associated with work performed in these areas. The areas of B4, S6, and S7 will require additional disturbance of the surrounding vegetation. An area of approximately 25' will need to be cleared to excavate and haul a 2' wide excavation. The excavated or disturbed areas will be reseeded with a BLM approved seed mixture in June 2015.

If there are no objections or further stipulations, COG Operating LLC would like to begin the remediation process based on approval of this work plan. Please feel free to contact me with any questions or concerns at (575) 748-6933.

Sincerely,

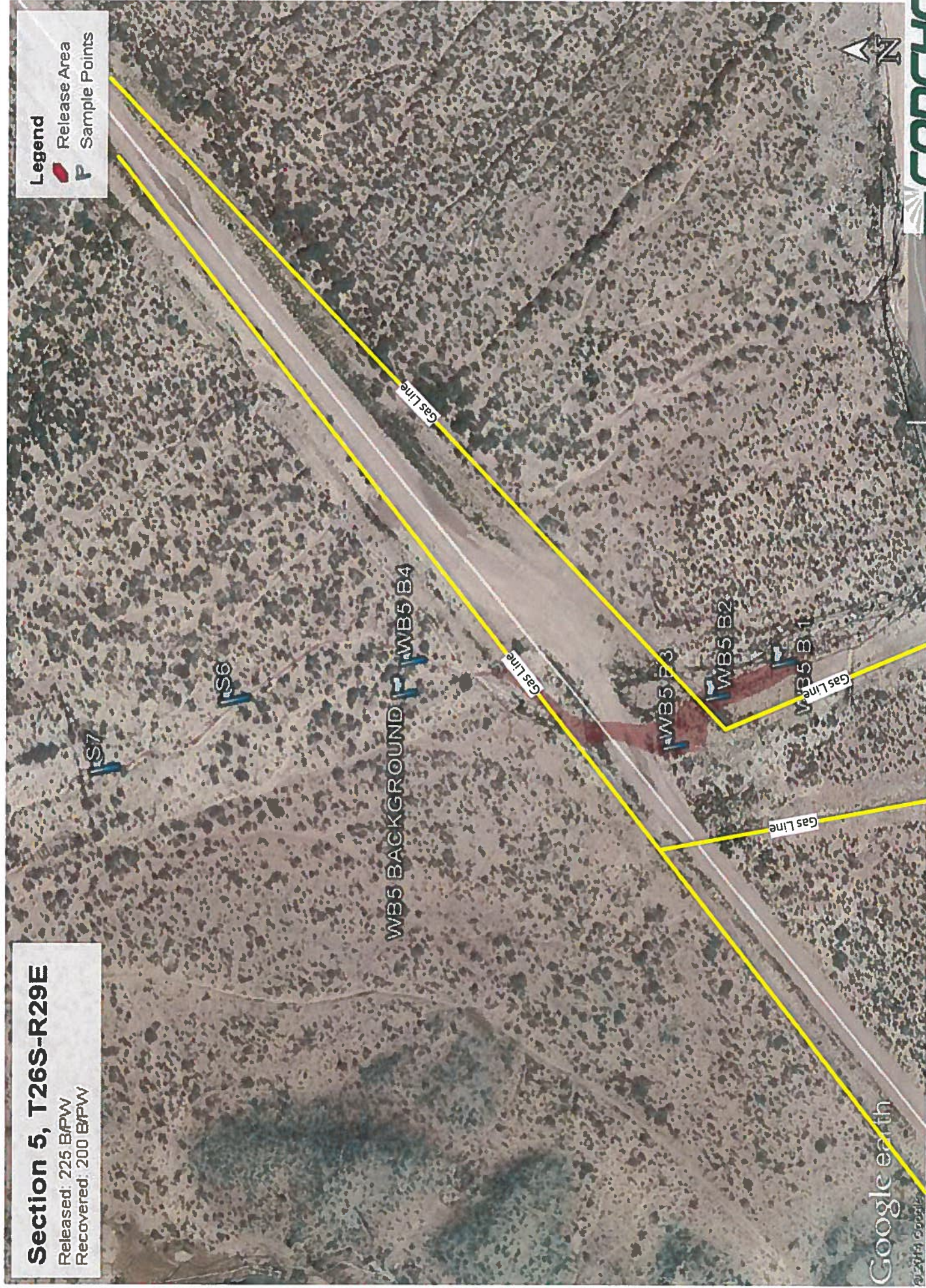
A handwritten signature in black ink, appearing to read "Lupe Carrasco", written in a cursive style.

Lupe Carrasco
Environmental Coordinator

Enclosure(s): Site Diagrams (Overview, South, North, Impacted Area)
Analytical Results
C-141 Initial (Copy)

October 16, 2014

West Brushy 5 Federal SWD #5 (Overview)



West Brushy 5 Federal SWD #5 (South)

October 16, 2014

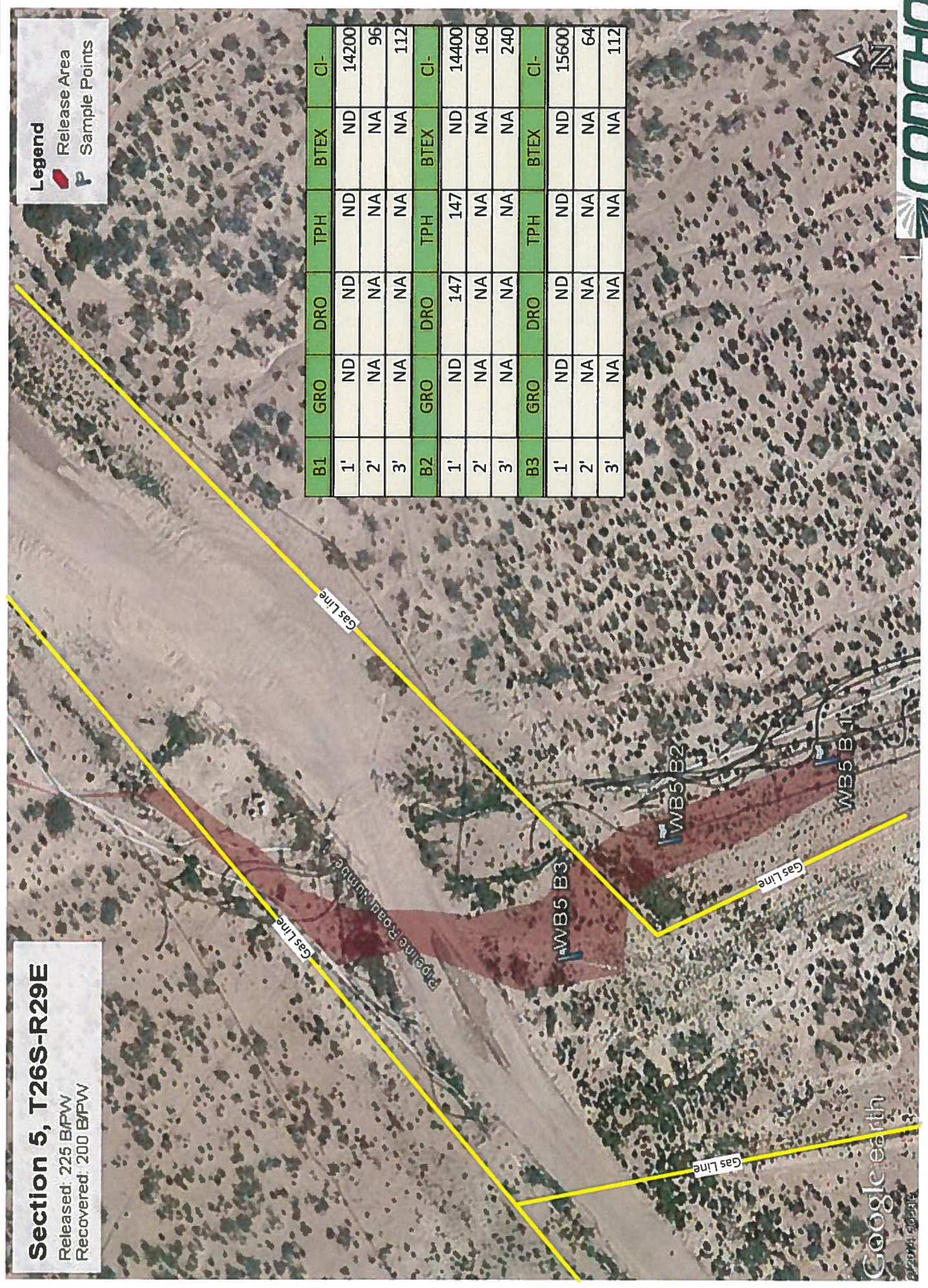
Section 5, T26S-R29E

Released: 225 B/PW
Recovered: 200 B/PW

Legend

- Release Area
- Sample Points

B1	GRO	DRO	TPH	BTEX	CI-
1'	ND	ND	ND	ND	14200
2'	NA	NA	NA	NA	96
3'	NA	NA	NA	NA	112
B2	GRO	DRO	TPH	BTEX	CI-
1'	ND	147	147	ND	14400
2'	NA	NA	NA	NA	160
3'	NA	NA	NA	NA	240
B3	GRO	DRO	TPH	BTEX	CI-
1'	ND	ND	ND	ND	15600
2'	NA	NA	NA	NA	64
3'	NA	NA	NA	NA	112



Google earth



West Brushy 5 Federal SWD #5 (North)

October 16, 2014

Section 5, T26S-R29E

Released: 225 B/PW
Recovered: 200 B/PW

Legend

- Release Area
- Sample Points

B4	GRO	DRO	TPH	BTEX	CI-
1'	ND	ND	ND	ND	17400
2'	NA	NA	NA	NA	1150
3'	NA	NA	NA	NA	912
S6	GRO	DRO	TPH	BTEX	CI-
1'	NA	NA	NA	NA	15000
2'	NA	NA	NA	NA	800
3'	NA	NA	NA	NA	208
S7	GRO	DRO	TPH	BTEX	CI-
1'	NA	NA	NA	NA	17000
2'	NA	NA	NA	NA	6160
3'	NA	NA	NA	NA	1600
BG	GRO	DRO	TPH	BTEX	CI-
3'	NA	NA	NA	NA	608
6'	NA	NA	NA	NA	1040
9'	NA	NA	NA	NA	1120

Google earth

© 2014 Google

WB5 BACKGROUND

WB5 B4

Gas Line

Highway Road Project



October 16, 2014

West Brushy 5 Federal SWD #5 (Impact Area)



Section 5, T26S-R29E

Released: 225 B/PW
Recovered: 200 B/PW



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

November 26, 2014

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: WEST BRUSHY 5 FEDERAL SWD #5

Enclosed are the results of analyses for samples received by the laboratory on 11/20/14 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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,

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B1-1' (H403576-01)

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	11/25/2014	ND	1.75	87.7	2.00	5.86	
Toluene*	<0.050	0.050	11/25/2014	ND	1.64	81.9	2.00	5.45	
Ethylbenzene*	<0.050	0.050	11/25/2014	ND	1.56	78.0	2.00	5.73	
Total Xylenes*	<0.150	0.150	11/25/2014	ND	4.70	78.3	6.00	5.86	
Total BTEX	<0.300	0.300	11/25/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.4 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14200	16.0	11/24/2014	ND	400	100	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	11/24/2014	ND	184	91.9	200	4.85	
DRO >C10-C28	<10.0	10.0	11/24/2014	ND	181	90.5	200	8.98	

Surrogate: 1-Chlorooctane 118 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

Sample ID: B1-2' (H403576-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/24/2014	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B1-3' (H403576-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: B2-1' (H403576-04)

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	11/25/2014	ND	1.75	87.7	2.00	5.86	
Toluene*	<0.050	0.050	11/25/2014	ND	1.64	81.9	2.00	5.45	
Ethylbenzene*	<0.050	0.050	11/25/2014	ND	1.56	78.0	2.00	5.73	
Total Xylenes*	<0.150	0.150	11/25/2014	ND	4.70	78.3	6.00	5.86	
Total BTEX	<0.300	0.300	11/25/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.5 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14400	16.0	11/24/2014	ND	400	100	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	11/24/2014	ND	184	91.9	200	4.85	
DRO >C10-C28	147	10.0	11/24/2014	ND	181	90.5	200	8.98	

Surrogate: 1-Chlorooctane 119 % 47.2-157

Surrogate: 1-Chlorooctadecane 139 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:	11/20/2014	Sampling Date:	11/12/2014
Reported:	11/26/2014	Sampling Type:	Soil
Project Name:	WEST BRUSHY 5 FEDERAL SWD #5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Mike Snyder
Project Location:	NOT GIVEN		

Sample ID: B2-2' (H403576-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: B2-3' (H403576-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	11/24/2014	ND	400	100	400	0.00	

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B3-1' (H403576-07)

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	11/25/2014	ND	1.75	87.7	2.00	5.86	
Toluene*	<0.050	0.050	11/25/2014	ND	1.64	81.9	2.00	5.45	
Ethylbenzene*	<0.050	0.050	11/25/2014	ND	1.56	78.0	2.00	5.73	
Total Xylenes*	<0.150	0.150	11/25/2014	ND	4.70	78.3	6.00	5.86	
Total BTEX	<0.300	0.300	11/25/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.1 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15600	16.0	11/24/2014	ND	400	100	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	11/24/2014	ND	184	91.9	200	4.85	
DRO >C10-C28	<10.0	10.0	11/24/2014	ND	181	90.5	200	8.98	

Surrogate: 1-Chlorooctane 115 % 47.2-157

Surrogate: 1-Chlorooctadecane 124 % 52.1-176

Sample ID: B3-2' (H403576-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/24/2014	ND	400	100	400	0.00	

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*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B3-3' (H403576-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/24/2014	ND	400	100	400	0.00	

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*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



Company Name: COG Operating LLC

BILL TO

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax:

LING

Chloride

× × × × × × × × ×

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 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.

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

Fax Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:
REMARKS:	ocarrasco@concho.com		

PLANNING

CHECKED BY:

☒ Yes ☐ Yes

#54



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

November 26, 2014

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: WEST BRUSHY 5 FEDERAL SWD #5

Enclosed are the results of analyses for samples received by the laboratory on 11/20/14 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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,

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B4-1' (H403577-01)

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	11/25/2014	ND	1.75	87.7	2.00	5.86	
Toluene*	<0.050	0.050	11/25/2014	ND	1.64	81.9	2.00	5.45	
Ethylbenzene*	<0.050	0.050	11/25/2014	ND	1.56	78.0	2.00	5.73	
Total Xylenes*	<0.150	0.150	11/25/2014	ND	4.70	78.3	6.00	5.86	
Total BTEX	<0.300	0.300	11/25/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.1 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17400	16.0	11/24/2014	ND	400	100	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	11/24/2014	ND	184	91.9	200	4.85	
DRO >C10-C28	<10.0	10.0	11/24/2014	ND	181	90.5	200	8.98	

Surrogate: 1-Chlorooctane 118 % 47.2-157

Surrogate: 1-Chlorooctadecane 128 % 52.1-176

Sample ID: B4-2' (H403577-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	11/24/2014	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 11/20/2014
Reported: 11/26/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder

Sample ID: B4-3' (H403577-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	912	16.0	11/24/2014	ND	400	100	400	0.00	

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Hope S. Moreno

Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



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

November 24, 2014

GARRETT MERKET
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: WBP 5 SWD

Enclosed are the results of analyses for samples received by the laboratory on 11/20/14 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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,

Hope S. Moreno For Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:COG OPERATING
GARRETT MERKET
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONEReceived: 11/20/2014
Reported: 11/24/2014
Project Name: WBP 5 SWD
Project Number: NONE GIVEN
Project Location: NOT GIVENSampling Date: 11/18/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder**Sample ID: S6-1' (H403578-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15000	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: S6-2' (H403578-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: S6-3' (H403578-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: S7-1' (H403578-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17000	16.0	11/24/2014	ND	400	100	400	0.00	

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:COG OPERATING
GARRETT MERKET
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONEReceived: 11/20/2014
Reported: 11/24/2014
Project Name: WBP 5 SWD
Project Number: NONE GIVEN
Project Location: NOT GIVENSampling Date: 11/18/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Mike Snyder**Sample ID: S7-2' (H403578-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6160	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: S7-3' (H403578-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	11/24/2014	ND	400	100	400	0.00	

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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RPD	Relative Percent Difference
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***	Insufficient time to reach temperature.
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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



(575) 393-2326 FAX (575) 393-2476
COG Operating LLC

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Chloride
H40357B	S6-1'	G				X					X		11/18/14				X
	S6-2'	G				X				X	X		11/18/14				X
	S6-3'	G				X				X	X		11/18/14				X
	S7-1'	G				X				X	X		11/18/14				X
	S7-2'	G				X				X	X		11/18/14				X
	S7-3'	G				X				X	X		11/18/14				X

* Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



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

November 24, 2014

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: WEST BRUSHY 5 FEDERAL SWD #5

Enclosed are the results of analyses for samples received by the laboratory on 11/20/14 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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,

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:COG OPERATING
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONEReceived: 11/20/2014
Reported: 11/24/2014
Project Name: WEST BRUSHY 5 FEDERAL SWD #5
Project Number: NONE GIVEN
Project Location: NOT GIVENSampling Date: 11/12/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson**Sample ID: BG-3' (H403579-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: BG-6' (H403579-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	11/24/2014	ND	400	100	400	0.00	

Sample ID: BG-9' (H403579-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	11/24/2014	ND	400	100	400	0.00	

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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***	Insufficient time to reach temperature.
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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: West Brushy 5 Federal SWD #5	Facility Type: SWD

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-31869
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LOCATION OF RELEASE

Unit Letter P	Section 5	Township 26S	Range 29E	Feet from the 800	North/South Line South	Feet from the 850	East/West Line East	County Eddy
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Latitude 32.0665385200141 Longitude -104.000346200798

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 225 bbls	Volume Recovered: 220 bbls
Source of Release: Flowline	Date and Hour of Occurrence: 10-16-2014 7:30 pm	Date and Hour of Discovery: 10-16-2014 7:30 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher – OCD / Jeffery Robertson – BLM	
By Whom? Amanda Trujillo	Date and Hour: 10/17/2014 4:40 pm	
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.*

An over pressured a poly flowline caused the release. Vacuum trucks were dispatched to pick up standing fluid and the flowline was repaired. All fluids were disposed of at an NMOCD approved facility.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was in the pasture approximately a half mile long and 2' wide. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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: 	OIL CONSERVATION DIVISION		
Printed Name: Amanda Trujillo	Approved by Environmental Specialist:		
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address: atrujillo@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: November 5, 2014	Phone: 575-748-6940		

* Attach Additional Sheets If Necessary