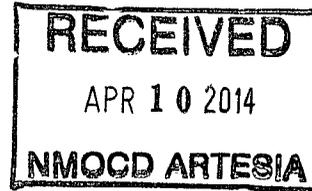




April 9, 2014

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

Re: Sly Hawk State #5
30-015-35103
Sec. 3, T25S-R28E
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 3/14/14.

Background

The release was due to a 3" polyline weld failure which impacted an area of approximately 2' wide X 480' long. The initial release consisted of 130 bbls of produced water with 125 bbls recovered. The affected section of polyline was cut out and replaced.

Groundwater

Based on the Chevron Trend Maps, the release area would be classified as a site ranking of Ten (~50'-75').

Soil Assessment and Analytical Results

Delineation samples were taken along the impacted area labeled as S1, S2, S3, and S4 on the attached Site Diagram. Sampling was halted at depths of 5' (S4) and 9' (S1, S2, S3) due to the inability to delineate past the natural bedrock formations in the area. A Sample Summary Table and a copy of the Analytical Results are attached for your consideration.

Sample results show TPH and BTEX levels to be non-detect with elevated chloride concentrations for S1 to a depth of 3', S2 and S3 to a depth of 5', and S4 to a depth of 1'. Below these depths, chloride concentrations drop significantly and pose no threats to root development and groundwater.

Work Plan

COG proposes that S1 be excavated to a depth of 3', S2 and S3 excavated to a depth of 5', and S4 to a depth of 1'. All impacted material will be hauled and disposed at a NMOCD approved facility. Backfill of the excavation would consist of packed caliche with a 1' top soil cover. This combination of soil media would aide in the immobilization of chlorides and promotes a healthy seed bed for the re-growth of the impacted area. The bedrock encountered during sampling acts as a natural barrier to also aide in the prevention of chloride leaching. The top soil would also be packed with enough loft to prevent future pooling over the impacted area. A copy of the NRCS Soil Survey for this area has been attached for your information.

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 my with any questions or concerns at (575) 748-6933

Sincerely,



Lupe Carrasco

Bratcher, Mike, EMNRD

From: Guadalupe Carrasco <GCarrasco@concho.com>
Sent: Thursday, April 10, 2014 2:04 PM
To: Bratcher, Mike, EMNRD
Cc: Robert McNeill
Subject: Sly Hawk State #5

Mike,

As per our conversation on April 10, 2014, in regards to the Sly Hawk State #5 proposed work plan, COG Operating LLC was presented with two options towards the amendment of the plan submitted.

Option 1: Delineate the impacted area further thru bedrock and develop a remediation proposal based on results.
Option 2: Accept the proposed work plan for the excavation of S1 to a depth of 3' and S2 & S3 to a depth of 5'. Change excavation of S4 from a depth of 1' to excavation to a depth of 5'.

COG will accept option 2 and continue with the proposed work plan with the amendment of excavating S4 to a depth of 5'.

Please let me know if you have any questions or concerns.

Thanks!

Lupe Carrasco

Environmental Coordinator
Concho Resources
Cell: 575.725.0787
Office: 575.748.6933
gcarrasco@concho.com

2208 W. Main St.
Artesia, NM 88210

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Sample Summary Table

Sly Hawk State #5

Site Ranking: Ten

Depth to GW per Chevron Trend Maps: 50-75'

S1	DRO	GRO	TPH	BTEX	Cl-
1'			ND	ND	3400
3'			ND	ND	2000
5'			ND	ND	1250
S2	DRO	GRO	TPH	BTEX	Cl-
1'			ND	ND	17400
3'			ND	ND	10500
5'			ND	ND	7040
7'					3840
9'					1800
S3	DRO	GRO	TPH	BTEX	Cl-
1'			ND	ND	8320
3'			ND	ND	9200
5'			ND	ND	4080
7'					400
9'					2600
S4	DRO	GRO	TPH	BTEX	Cl-
1'			ND	ND	5920
3'			ND	ND	1500
5'			ND	ND	2200
Bold values exceed RRALs per NMOCD Guidelines (1993)					

DCU Gas Line

32.166452, -104.064605

Sly Hawk 45

10'x30'

480'x7'

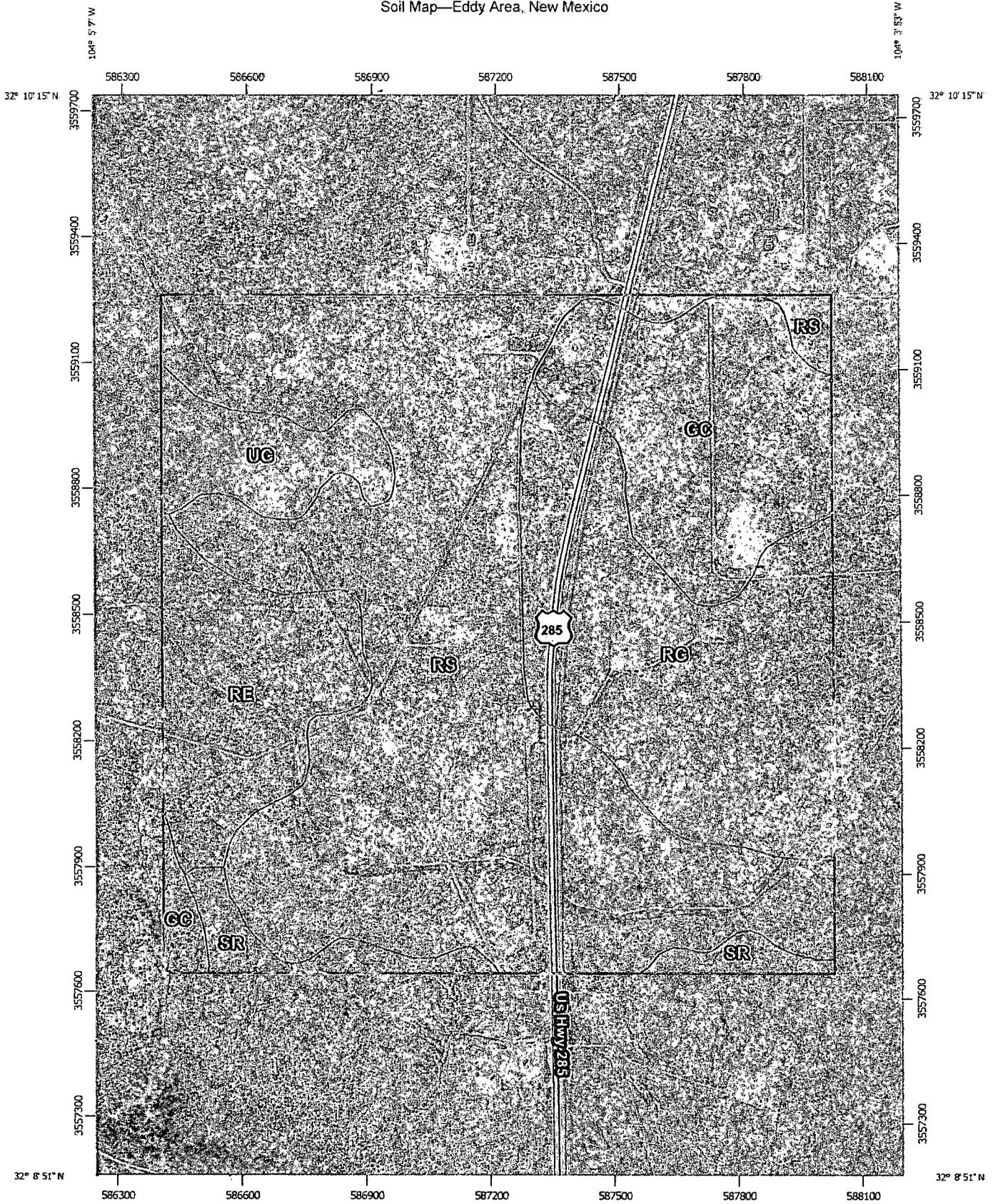
N32.165

Google earth



© 1995

Soil Map—Eddy Area, New Mexico



Map Scale: 1:12,600 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84



Map Unit Legend

Eddy Area, New Mexico (NM614)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GC	Gypsum land-Cottonwood complex, 0 to 3 percent slopes	91.6	14.1%
RE	Reagan-Upton association, 0 to 9 percent slopes	63.5	9.7%
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	130.6	20.1%
RS	Russler loam, 1 to 3 percent slopes	314.8	48.3%
SR	Stony and Rough broken land	21.4	3.3%
UG	Upton gravelly loam, 0 to 9 percent slopes	29.5	4.5%
Totals for Area of Interest		651.3	100.0%

Eddy Area, New Mexico

RS—Russler loam, 1 to 3 percent slopes

Map Unit Setting

Elevation: 3,000 to 3,800 feet

Mean annual precipitation: 10 to 14 inches

Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 210 to 220 days

Map Unit Composition

Russler and similar soils: 100 percent

Description of Russler

Setting

Landform: Plains, alluvial fans

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Alluvium

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 60 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 40 percent

Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 4.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 7e

Hydrologic Soil Group: C

Ecological site: Loamy (R042XC007NM)

Typical profile

0 to 11 inches: Loam

11 to 45 inches: Clay loam



March 27, 2014

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: SLYHAWK #5

Enclosed are the results of analyses for samples received by the laboratory on 03/17/14 11:45.

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,

Caley D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	03/17/2014	Sampling Date:	03/12/2014
Reported:	03/27/2014	Sampling Type:	Soil
Project Name:	SLYHAWK #5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S1 - 1' (H400792-01)

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	03/18/2014	ND	2.20	110	2.00	0.692		
Toluene*	<0.050	0.050	03/18/2014	ND	2.07	104	2.00	0.762		
Ethylbenzene*	<0.050	0.050	03/18/2014	ND	2.01	101	2.00	1.19		
Total Xylenes*	<0.150	0.150	03/18/2014	ND	5.82	97.0	6.00	0.549		
Total BTEX	<0.300	0.300	03/18/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3400	16.0	03/20/2014	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	03/19/2014	ND	228	114	200	6.70		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	225	112	200	1.08		

Surrogate: 1-Chlorooctane 108 % 65.2-140
Surrogate: 1-Chlorooctadecane 114 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 3' (H400792-02)

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	03/18/2014	ND	2.20	110	2.00	0.692	
Toluene*	<0.050	0.050	03/18/2014	ND	2.07	104	2.00	0.762	
Ethylbenzene*	<0.050	0.050	03/18/2014	ND	2.01	101	2.00	1.19	
Total Xylenes*	<0.150	0.150	03/18/2014	ND	5.82	97.0	6.00	0.549	
Total BTEX	<0.300	0.300	03/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	03/20/2014	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	03/19/2014	ND	222	111	200	1.06	
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	212	106	200	0.464	

Surrogate: 1-Chlorooctane 103 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 5' (H400792-03)

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	03/18/2014	ND	2.20	110	2.00	0.692	
Toluene*	<0.050	0.050	03/18/2014	ND	2.07	104	2.00	0.762	
Ethylbenzene*	<0.050	0.050	03/18/2014	ND	2.01	101	2.00	1.19	
Total Xylenes*	<0.150	0.150	03/18/2014	ND	5.82	97.0	6.00	0.549	
Total BTEX	<0.300	0.300	03/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	03/20/2014	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	03/19/2014	ND	222	111	200	1.06	
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	212	106	200	0.464	

Surrogate: 1-Chlorooctane 107 % 65.2-140

Surrogate: 1-Chlorooctadecane 114 % 63.6-154

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 1' (H400792-06)

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	03/19/2014	ND	2.20	110	2.00	0.692		
Toluene*	<0.050	0.050	03/19/2014	ND	2.07	104	2.00	0.762		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.01	101	2.00	1.19		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	5.82	97.0	6.00	0.549		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 89.4-126

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	03/20/2014	ND	432	108	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	03/19/2014	ND	222	111	200	1.06		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	212	106	200	0.464		

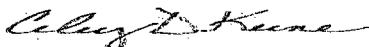
Surrogate: 1-Chlorooctane 114 % 65.2-140

Surrogate: 1-Chlorooctadecane 114 % 63.6-154

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 3' (H400792-07)

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	03/19/2014	ND	2.20	110	2.00	0.692	
Toluene*	<0.050	0.050	03/19/2014	ND	2.07	104	2.00	0.762	
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.01	101	2.00	1.19	
Total Xylenes*	<0.150	0.150	03/19/2014	ND	5.82	97.0	6.00	0.549	
Total BTEX	<0.300	0.300	03/19/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10500	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	222	111	200	1.06	
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	212	106	200	0.464	

Surrogate: 1-Chlorooctane 108 % 65.2-140
Surrogate: 1-Chlorooctadecane 117 % 63.6-154

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* = Accredited Analyte

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 5' (H400792-08)

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	03/19/2014	ND	2.20	110	2.00	0.692		
Toluene*	<0.050	0.050	03/19/2014	ND	2.07	104	2.00	0.762		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.01	101	2.00	1.19		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	5.82	97.0	6.00	0.549		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7040	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	222	111	200	1.06		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	212	106	200	0.464		

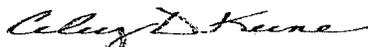
Surrogate: 1-Chlorooctane 88.7 % 65.2-140
Surrogate: 1-Chlorooctadecane 101 % 63.6-154
Sample ID: S2 - 7' (H400792-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3840	16.0	03/26/2014	ND	416	104	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

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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:	03/17/2014	Sampling Date:	03/12/2014
Reported:	03/27/2014	Sampling Type:	Soil
Project Name:	SLYHAWK #5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S2 - 9' (H400792-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1800	16.0	03/26/2014	ND	416	104	400	0.00		

Sample ID: S3 - 1' (H400792-11)

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	03/19/2014	ND	2.20	110	2.00	0.692		
Toluene*	<0.050	0.050	03/19/2014	ND	2.07	104	2.00	0.762		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.01	101	2.00	1.19		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	5.82	97.0	6.00	0.549		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8320	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35		

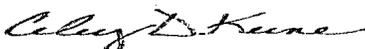
Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 3' (H400792-12)

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	03/19/2014	ND	2.39	119	2.00	3.72	
Toluene*	<0.050	0.050	03/19/2014	ND	2.30	115	2.00	4.96	
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.27	114	2.00	6.01	
Total Xylenes*	<0.150	0.150	03/19/2014	ND	6.62	110	6.00	6.80	
Total BTEX	<0.300	0.300	03/19/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05	
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35	

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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Analytical Results For:

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

Received:	03/17/2014	Sampling Date:	03/12/2014
Reported:	03/27/2014	Sampling Type:	Soil
Project Name:	SLYHAWK #5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S3 - 5' (H400792-13)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/19/2014	ND	2.39	119	2.00	3.72		
Toluene*	<0.050	0.050	03/19/2014	ND	2.30	115	2.00	4.96		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.27	114	2.00	6.01		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	6.62	110	6.00	6.80		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4080	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35		

Surrogate: 1-Chlorooctane 114 % 65.2-140

Surrogate: 1-Chlorooctadecane 116 % 63.6-154

Sample ID: S3 - 7' (H400792-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	03/26/2014	ND	416	104	400	0.00		

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 9' (H400792-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2600	16.0	03/26/2014	ND	416	104	400	0.00		

Sample ID: S4 - 1' (H400792-16)

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	03/19/2014	ND	2.39	119	2.00	3.72		
Toluene*	<0.050	0.050	03/19/2014	ND	2.30	115	2.00	4.96		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.27	114	2.00	6.01		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	6.62	110	6.00	6.80		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5920	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35		

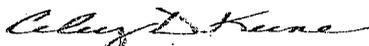
Surrogate: 1-Chlorooctane 106 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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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: 03/17/2014
 Reported: 03/27/2014
 Project Name: SLYHAWK #5
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/12/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S4 - 3' (H400792-17)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/19/2014	ND	2.39	119	2.00	3.72		
Toluene*	<0.050	0.050	03/19/2014	ND	2.30	115	2.00	4.96		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.27	114	2.00	6.01		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	6.62	110	6.00	6.80		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1500	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35		

Surrogate: 1-Chlorooctane 100 % 65.2-140

Surrogate: 1-Chlorooctadecane 108 % 63.6-154

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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:	03/17/2014	Sampling Date:	03/12/2014
Reported:	03/27/2014	Sampling Type:	Soil
Project Name:	SLYHAWK #5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S4 - 5' (H400792-18)

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	03/19/2014	ND	2.39	119	2.00	3.72		
Toluene*	<0.050	0.050	03/19/2014	ND	2.30	115	2.00	4.96		
Ethylbenzene*	<0.050	0.050	03/19/2014	ND	2.27	114	2.00	6.01		
Total Xylenes*	<0.150	0.150	03/19/2014	ND	6.62	110	6.00	6.80		
Total BTEX	<0.300	0.300	03/19/2014	ND						

Surrogate: 4-Bromofluorobenzene (PII) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2200	16.0	03/20/2014	ND	432	108	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	03/19/2014	ND	225	112	200	5.05		
DRO >C10-C28	<10.0	10.0	03/19/2014	ND	213	106	200	2.35		

Surrogate: 1-Chlorooctane 107 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

Company Name: COG Operating LLC	BILL TO	ANALYSIS REQUEST
Project Manager: Lupe Carrasco	P.O. #:	
Address: 2208 West Main	Company: COG Operating LLC	
City: Artesia State: NM Zip: 88210	Attn: Robert McNeill	
Phone #: (575) 748-6940 Fax #:	Address: 600 W Illinois	
Project #: Project Owner:	City: Midland	
Project Name: Slyhawk #5	State: TX Zip: 79701	
Project Location:	Phone #: (432) 221-0388	
Sampler Name: Lupe Carrasco	Fax #:	

FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(GRAB OR C/COMP.)	# CONTAINERS	MATRIX					PRESERV.			SAMPLING		BTEX	TPH	Chloride	
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE				TIME
	H400792																	
	1	S1 - 1'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	2	S1 - 3'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	3	S1 - 5'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	4	S1 - 7'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	5	S1 - 9'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	6	S2 - 1'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	7	S2 - 3'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	8	S2 - 5'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	9	S2 - 7'	1	1			X				X			3/12/14	10:20 AM	x	x	x
	10	S2 - 9'	1	1			X				X			3/12/14	10:20 AM	x	x	x

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Relinquished By: <i>[Signature]</i>	Date: 3/17/14	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No (Add'l Phone #:
	Time: 11:45		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No (Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: only run 1', 3', 5'. Hold 7', 8', 9' till final results.
	Time:		
Delivered By: (Circle One)	Sample Condition	CHECKED BY: <i>[Signature]</i>	gcarrasco@concho.com
Sampler - UPS - Bus - Other:	3.80 Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		725-0787

