

## SITE INFORMATION

### Report Type: Work Plan

#### General Site Information:

<b>Site:</b>	Airbus 12 Federal #002H					
<b>Company:</b>	COG Operating LLC					
<b>Section, Township and Range</b>	Unit D	Sec. 12	T 19S	R 31E		
<b>Lease Number:</b>	API No. 30-015-38503					
<b>County:</b>	Eddy					
<b>GPS:</b>	32.68114° N			103.83085° W		
<b>Surface Owner:</b>	Federal					
<b>Mineral Owner:</b>						
<b>Directions:</b>	From the intersection of NM-243 & CR 126A, travel north on 126A for approximately 7.1 mi, turn west onto lease road for 2.25 mi, turn north onto lease road for 0.1 mi to location.					

#### Release Data:

<b>Date Released:</b>	6/15/2016
<b>Type Release:</b>	Oil & Produced Water
<b>Source of Contamination:</b>	Flare
<b>Fluid Released:</b>	3 bbls oil & 2 bbls water
<b>Fluids Recovered:</b>	1 bbl oil & 1 bbl water

#### Official Communication:

<b>Name:</b>	Robert McNeil	Ike Tavarez
<b>Company:</b>	COG Operating, LLC	Tetra Tech
<b>Address:</b>	One Concho Center 600 W. Illinois Ave.	4000 N. Big Spring Ste 401
<b>City:</b>	Midland Texas, 79701	Midland, Texas
<b>Phone number:</b>	(432) 686-3023	(432) 687-8110
<b>Fax:</b>	(432) 684-7137	
<b>Email:</b>	<a href="mailto:rmcneil@conchoresources.com">rmcneil@conchoresources.com</a>	<a href="mailto:Ike.Tavarez@tetrattech.com">Ike.Tavarez@tetrattech.com</a>

#### Ranking Criteria

	Ranking Score	Site Data
<b>Depth to Groundwater:</b>		
<50 ft	20	
50-99 ft	10	
>100 ft.	0	
<b>WellHead Protection:</b>		
Water Source <1,000 ft., Private <200 ft.	20	
Water Source >1,000 ft., Private >200 ft.	0	0
<b>Surface Body of Water:</b>		
<200 ft.	20	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0
<b>Total Ranking Score:</b>	0	

Acceptable Soil RRAL (mg/kg)		
Benzene	Total BTEX	TPH
10	50	5,000



September 2, 2016

Heather Patterson  
Environmental Engineer Specialist  
Oil Conservation Division, District 2  
811 S. First Street  
Artesia, New Mexico 88210

**Re: Work Plan for the COG Operating LLC., Airbus 12 Federal #002H, Unit D, Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico.**

Ms. Patterson:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC., (COG) to assess a spill from Airbus 12 Federal #002H, Unit D, Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.68114<sup>o</sup>, W 103.83085<sup>o</sup>. The site location is shown on Figures 1 and 2.

## **Background**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on June 15, 2016, and released approximately three (3) barrels of oil and two (2) barrels of produced water due to a failed dump valve on a FWKO. Approximately one (1) barrel of oil and one (1) barrel of produced water was recovered. The release is located on the location pad and in the pasture which measures approximately 75'x150'. The initial C-141 form is included in Appendix A.

## **Groundwater**

No water wells were listed within Section 12. According to the NMOCD groundwater map, the average depth to groundwater in this area is between 100' to 125' below surface. The groundwater data is shown in Appendix B.

## **Regulatory**

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels

(RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

### **Soil Assessment and Analytical Results**

On August 16, 2016, Tetra Tech personnel were onsite to evaluate and sample the release area. Two (2) auger holes (AH-1 and AH-2) were installed to depths of 4-4.5' and 6-6.5' below surface using a stainless steel hand auger to assess the impacted soils. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, the areas of auger holes (AH-1 and AH-2) exceeded the RRAL's for total TPH and total BTEX in the shallow soils. The areas of auger holes (AH-1 and AH-2) showed total TPH concentrations of 38,900 mg/kg and 20,200 mg/kg at 0-1' below surface, respectively. However, the TPH concentrations both declined with depth at 1-1.5' to 3,050 mg/kg (AH-1) and 122 mg/kg (AH-2). In addition, the area of auger hole (AH-1) showed a total BTEX concentration of 717 mg/kg at 0-1' below surface, which declined with depth to below laboratory reporting limits at 2-2.5' below surface. The area of auger hole (AH-2) showed a total BTEX concentration of 720 mg/kg at 0-1' below surface, which also declined with depth to 1.16 mg/kg at 1-1.5' below surface.

The chloride concentrations in all samples collected were below 250 mg/kg and does not appear to be an environmental concern.

### **Work Plan**

Based on the results, COG proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. The area of auger hole (AH-1) will be excavated to a depth of approximately 1.5-2.0' and the area of auger hole (AH-2) will be excavated to a depth of approximately 1-1.5' below surface to remove the hydrocarbon impacted soils. The excavated areas will be backfilled with clean material to surface grade. The excavated material will be transported offsite for proper disposal.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, Tetra Tech will excavate the impacted soils to the maximum extent practicable



Upon completion, a final report will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink that reads 'Clair Gonzales'.

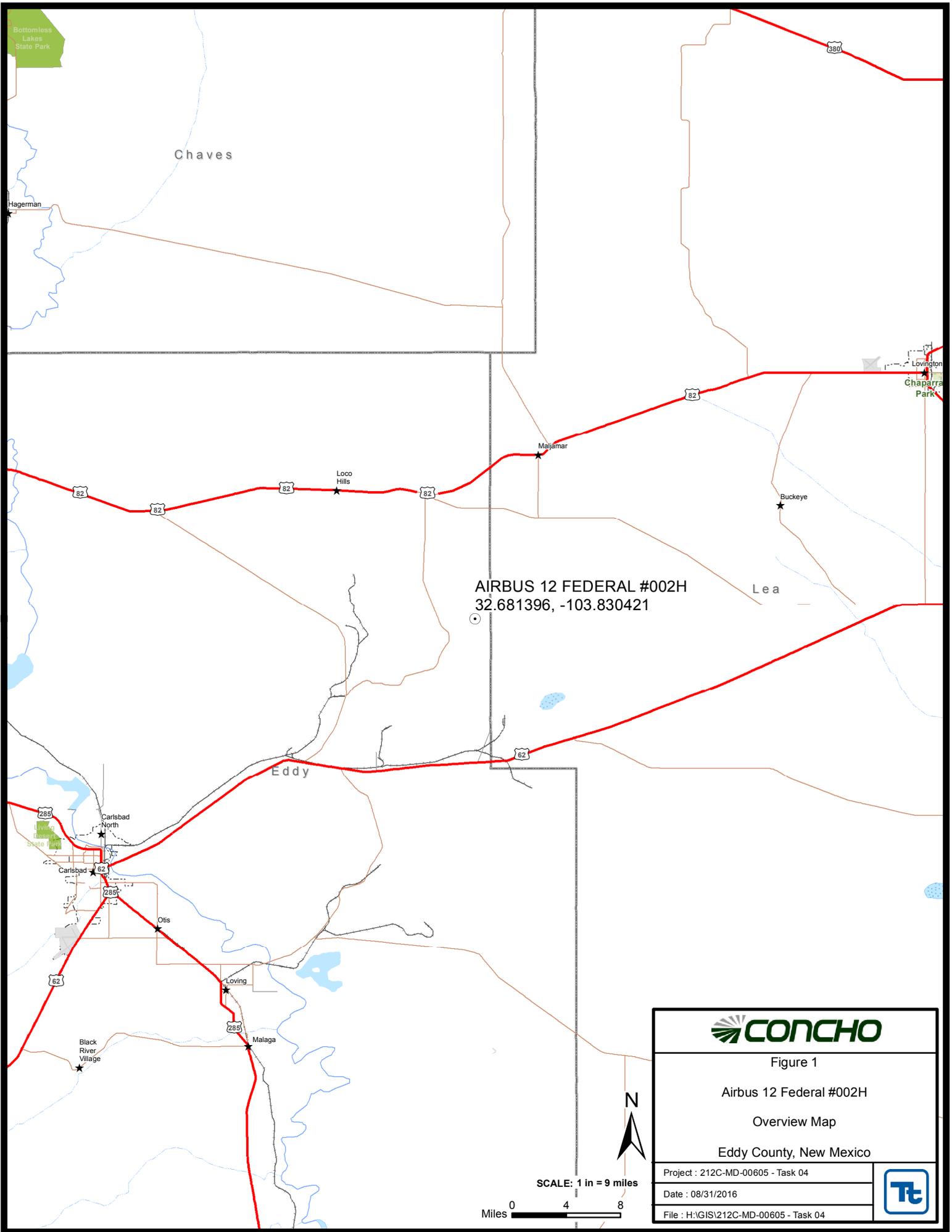
Clair Gonzales,  
Geologist I

A handwritten signature in blue ink that reads 'Ike Tavarez'.

Ike Tavarez,  
Senior Project Manager, P.G.

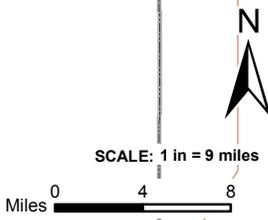
cc: Robert McNeill – COG  
Dakota Neel – COG

## Figures



AIRBUS 12 FEDERAL #002H  
 32.681396, -103.830421

Figure 1	
Airbus 12 Federal #002H	
Overview Map	
Eddy County, New Mexico	
Project : 212C-MD-00605 - Task 04	
Date : 08/31/2016	
File : H:\GIS\212C-MD-00605 - Task 04	



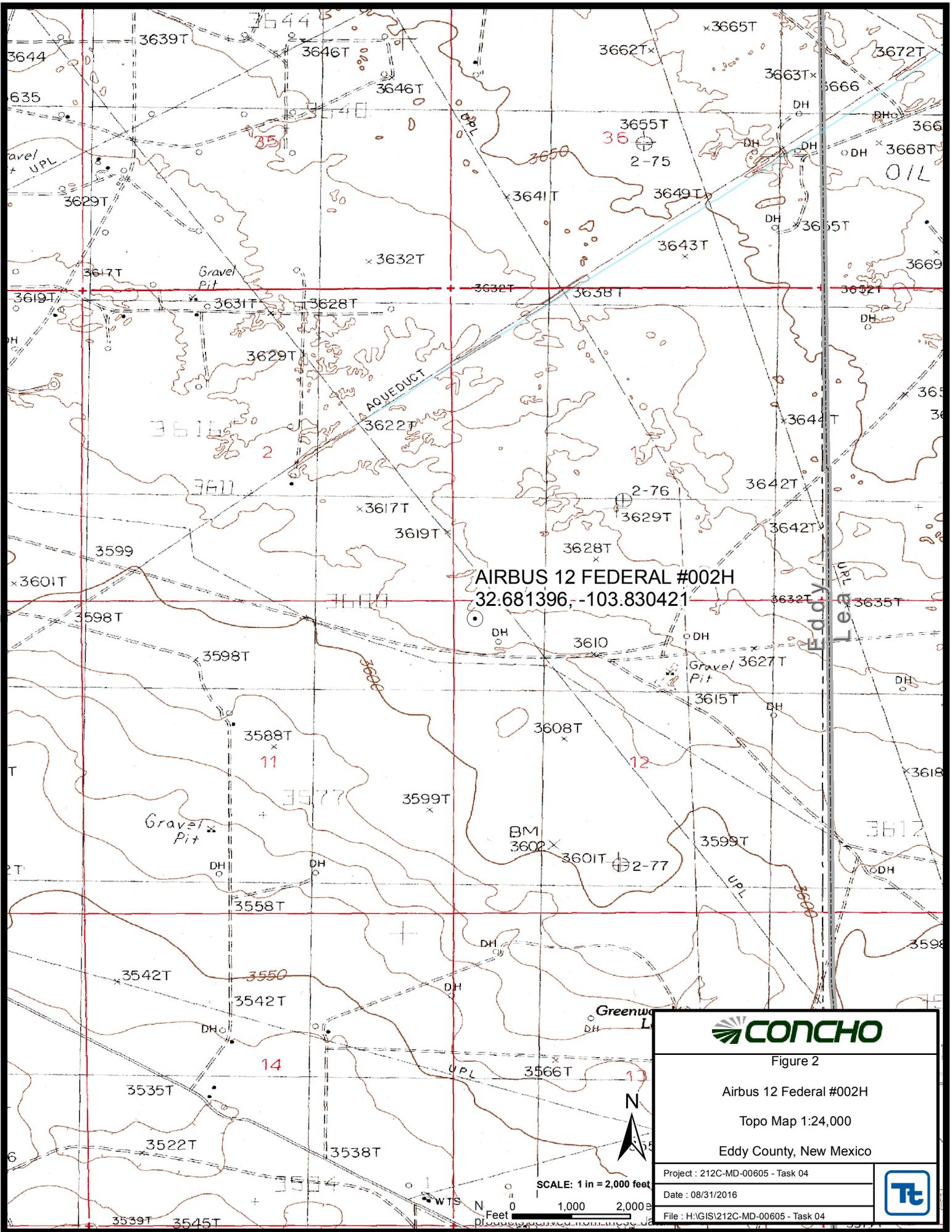


Figure 2

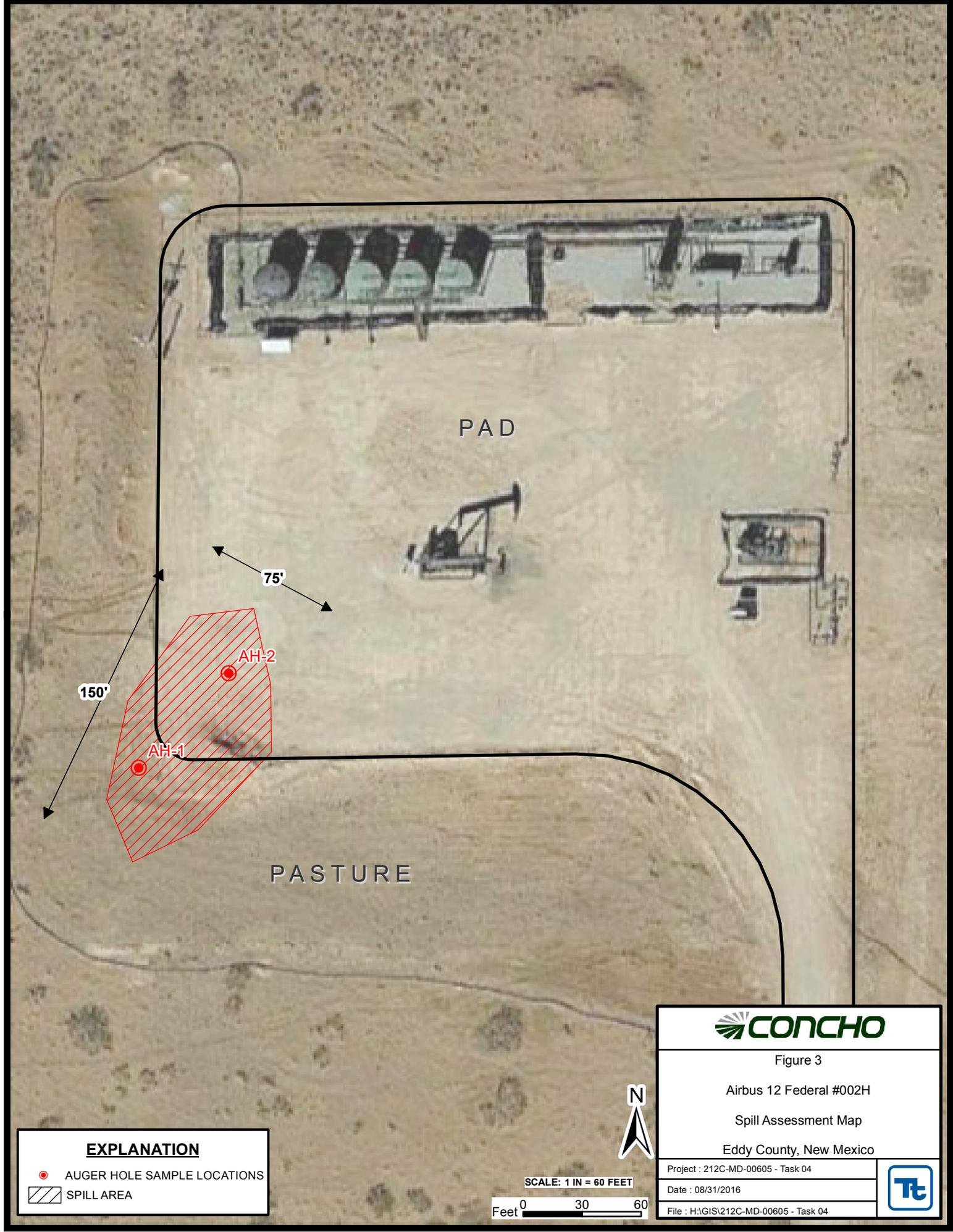
Airbus 12 Federal #002H  
Topo Map 1:24,000  
Eddy County, New Mexico

Project : 212C-MD-00605 - Task 04

Date : 08/31/2016

File : H:\GIS\212C-MD-00605 - Task 04





PAD

75'

150'

AH-2

AH-1

PASTURE



Figure 3

Airbus 12 Federal #002H

Spill Assessment Map

Eddy County, New Mexico

Project : 212C-MD-00605 - Task 04

Date : 08/31/2016

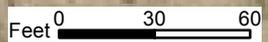
File : H:\GIS\212C-MD-00605 - Task 04

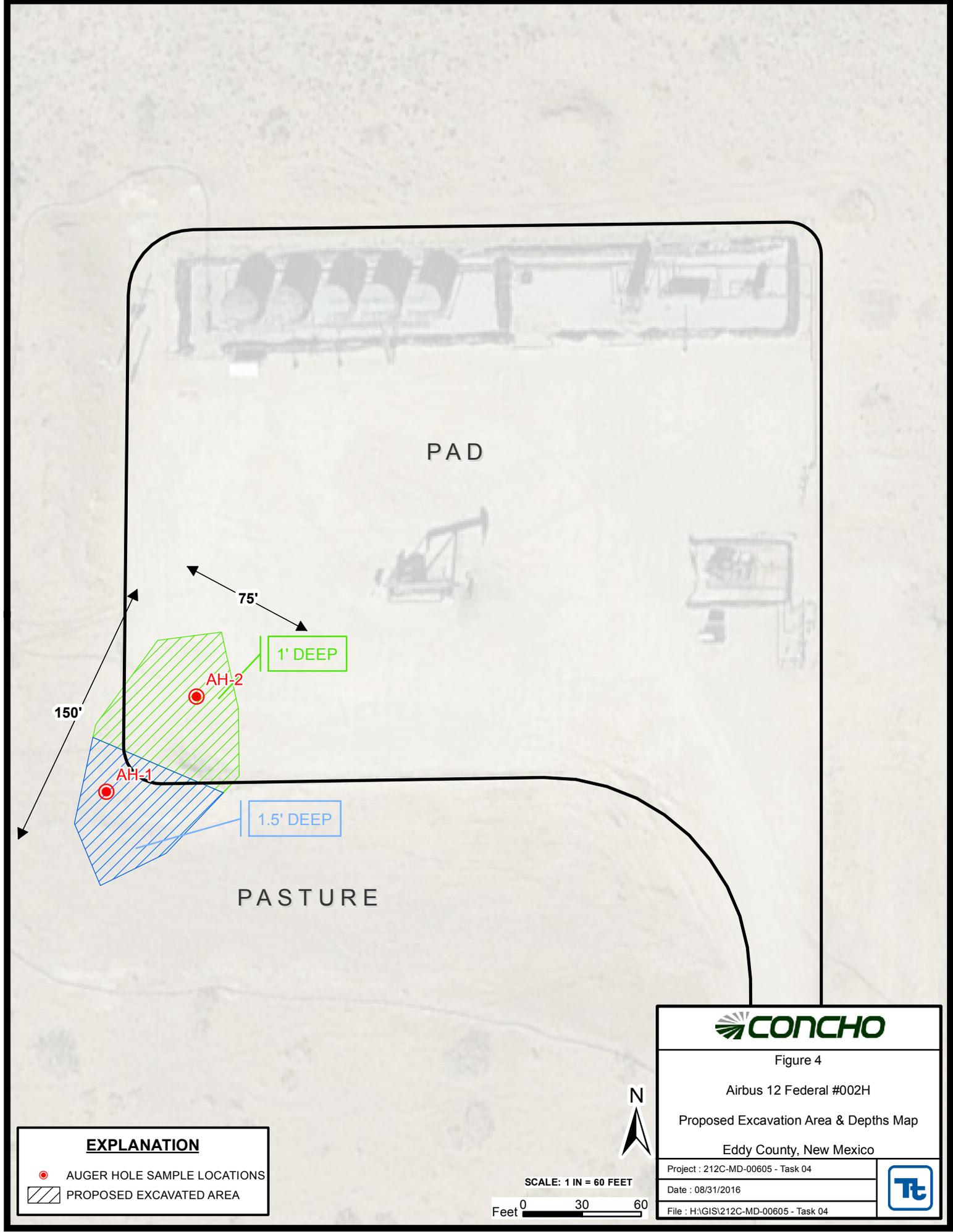


**EXPLANATION**

- AUGER HOLE SAMPLE LOCATIONS
- SPILL AREA

SCALE: 1 IN = 60 FEET





PAD

PASTURE

150'

75'

1' DEEP

1.5' DEEP

AH-2

AH-1

**EXPLANATION**

- AUGER HOLE SAMPLE LOCATIONS
- PROPOSED EXCAVATED AREA

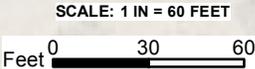


Figure 4

Airbus 12 Federal #002H

Proposed Excavation Area & Depths Map

Eddy County, New Mexico

Project : 212C-MD-00605 - Task 04

Date : 08/31/2016

File : H:\GIS\212C-MD-00605 - Task 04



# Tables

**Table 1**  
**COG Operating LLC.**  
**Airbus 12 Federal #2H**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-1	8/16/2016	0-1	X		10,400	28,500	<b>38,900</b>	<b>37.7</b>	273	165	241	<b>717</b>	80.0
	"	1-1.5	X		875	2,170	3,050	3.58	45.5	32.6	48.9	<b>131</b>	32.0
	"	2-2.5	X		-	-	-	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
	"	3-3.5	X		-	-	-	-	-	-	-	-	64.0
	"	4-4.5	X		-	-	-	-	-	-	-	-	80.0
AH-2	8/16/2016	0-1	X		4,410	15,800	<b>20,200</b>	<b>33.2</b>	271	165	250	<b>720</b>	112
	"	1-1.5	X		14.4	108	122	0.109	0.399	0.200	0.450	1.16	48.0
	"	2-2.5	X		-	-	-	-	-	-	-	-	48.0
	"	3-3.5	X		-	-	-	-	-	-	-	-	80.0
	"	4-4.5	X		-	-	-	-	-	-	-	-	176
	"	5-5.5	X		-	-	-	-	-	-	-	-	176
	"	6-6.5	X		-	-	-	-	-	-	-	-	128

(-) Not Analyzed

Proposed Excavation Depths

# 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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: AIRBUS 12 FEDERAL #002H	Facility Type: Battery

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-38503
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	12	19S	31E	330'	North	330'	West	Eddy

Latitude/Longitude 32.6813965,-103.8304214 NAD83

**NATURE OF RELEASE**

Type of Release: Oil & Produced Water	Volume of Release: 3 bbls Oil; 2 bbls PW	Volume Recovered: 1 bbls Oil ; 1 bbls PW
Source of Release: Flare	Date and Hour of Occurrence: 6/15/2016, unknown	Date and Hour of Discovery: 6/15/2016 10:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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.\*

Describe Cause of Problem and Remedial Action Taken.\*

This release was caused when the dump valve on the FWKO malfunctioned. Fluid was sent to flare as a result. A vacuum truck was dispatched to recover standing fluid.

Describe Area Affected and Cleanup Action Taken.\*

The spill impacted the pad and pasture around the flare. 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: <i>Amanda T. Davis</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Amanda Trujillo Davis	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: June 23, 2016	Phone: 575-748-6940	

\* Attach Additional Sheets If Necessary

## Appendix B

**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**COG - Airbus 12 Federal #002H, Eddy County, New Mexico**

**18 South 30 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23 <b>44</b>	24
30	29	28	27	26	25
31	32	33	34	35	36

**18 South 31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15 <b>98</b>	14	13 <b>400</b>
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 <b>261</b>

**18 South 32 East**

6	5	4 <b>65</b>	3	2	1
7 <b>460</b>	8	9	10	11	12
<b>82</b>	17	16	15	14	13
19	20	21	22	23	24
	<b>164</b>		<b>429</b>		
30	29	28	27	26	25
31	32	33	34	35	36
			<b>117</b>		

**19 South 30 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
<b>90</b>					
<b>115</b>					

**19 South 31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
<b>180</b>					
30	29	28	27	26	25
		<b>180</b>			
31	32	33	34	35	36
		<b>101</b>			<b>130</b>

**19 South 32 East**

6	5	4	3	2	1
7	8	9	10	11	12
	<b>365</b>				
18	17	16	15	14	13 135
19	20	21	22	23	24
<b>102</b>	<b>345</b>				
30	29	28	27	26	25
31	32	33	34	35	36
			<b>250</b>		

**20 South 30 East**

6	5	<b>3.5</b>	4	3	2	1
7	8	9	10	11	12	
18	17	16	15	14	13	
		<b>29</b>				
19	20	21	22	23	24	
	<b>29</b>	<b>150</b>				
30	29	28	27	26	25	
31	32	33	34	35	36	
	<b>170</b>	<b>191</b>				

**20 South 31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
			<b>130</b>		
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 <b>80</b>

**20 South 32 East**

6	5	4	3	2	1
7	8	9	10	11	12
					<b>21.8</b>
18	17	16	15	14	13
<b>89</b>					
19	20	21	22	23	24
30	29	28	27	26	25
<b>9.9</b>			<b>12.3</b>		
31	32	33	34	35	36
					<b>46</b>

- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)  
 Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34** NMOCD - Groundwater Data
- 121** Abandoned Waterwell (recently measured)



# 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	Depth Well	Depth Water	Water Column
<a href="#">CP 00641</a>			ED	4	1	36	19S	31E		610247	3609634*	300	130	170
<a href="#">CP 00642</a>			ED	2	2	25	19S	31E		611025	3611657*	250		
<a href="#">CP 00722 POD1</a>	CP		LE	4	3	3	28	19S	31E	605106	3610273*	200		
<a href="#">CP 00722 POD3</a>			LE	2	4	1	33	19S	31E	605519	3609673*	220	140	80
<a href="#">CP 00723</a>			ED	2	1	1	33	19S	31E	605111	3610071*	139		
<a href="#">CP 00725</a>			ED	1	3	3	28	19S	31E	604906	3610473*	231		
<a href="#">CP 00829</a>			LE	2	4	16	19S	31E		606165	3614009*	120		
<a href="#">CP 00873</a>			ED	1	1	19	19S	31E		601772	3613147*	340	180	160
<a href="#">CP 01554 POD1</a>	CP		LE	2	2	1	22	19S	31E	607166	3613354	400		
<a href="#">CP 01554 POD2</a>	CP		LE	2	2	1	22	19S	31E	607165	3613322	400		

Average Depth to Water: **150 feet**  
 Minimum Depth: **130 feet**  
 Maximum Depth: **180 feet**

**Record Count:** 10

**PLSS Search:**

**Township:** 19S      **Range:** 31E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

## Appendix C

August 23, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: AIRBUS 12 FED #2H

Enclosed are the results of analyses for samples received by the laboratory on 08/16/16 16:45.

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,



Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-1 (0-1')	H601831-01	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-1 (1-1.5')	H601831-02	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-1 (2-2.5')	H601831-03	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-1 (3-3.5')	H601831-04	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-1 (4-4.5')	H601831-05	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (0-1')	H601831-06	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (1-1.5')	H601831-07	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (2-2.5')	H601831-08	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (3-3.5')	H601831-09	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (4-4.5')	H601831-10	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (5-5.5')	H601831-11	Soil	16-Aug-16 00:00	16-Aug-16 16:45
AH-2 (6-6.5')	H601831-12	Soil	16-Aug-16 00:00	16-Aug-16 16:45

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 or 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 damage 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:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-1 (0-1')  
 H601831-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>37.7</b>		5.00	mg/kg	5000	6081701	MS	17-Aug-16	8021B	
<b>Toluene*</b>	<b>273</b>		5.00	mg/kg	5000	6081701	MS	17-Aug-16	8021B	
<b>Ethylbenzene*</b>	<b>165</b>		5.00	mg/kg	5000	6081701	MS	17-Aug-16	8021B	
<b>Total Xylenes*</b>	<b>241</b>		15.0	mg/kg	5000	6081701	MS	17-Aug-16	8021B	
<b>Total BTEX</b>	<b>717</b>		30.0	mg/kg	5000	6081701	MS	17-Aug-16	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			111 %		73.6-140	6081701	MS	17-Aug-16	8021B	
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**Petroleum Hydrocarbons by GC FID**
**S-06**

<b>GRO C6-C10</b>	<b>10400</b>		100	mg/kg	10	6081608	MS	17-Aug-16	8015B	
<b>DRO &gt;C10-C28</b>	<b>28500</b>		100	mg/kg	10	6081608	MS	17-Aug-16	8015B	

<i>Surrogate: 1-Chlorooctane</i>			682 %		35-147	6081608	MS	17-Aug-16	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			1200 %		28-171	6081608	MS	17-Aug-16	8015B	
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\*=Accredited Analyte

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-1 (1-1.5')  
 H601831-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	3.58		0.500	mg/kg	500	6081701	MS	17-Aug-16	8021B	
Toluene*	45.5		0.500	mg/kg	500	6081701	MS	17-Aug-16	8021B	
Ethylbenzene*	32.6		0.500	mg/kg	500	6081701	MS	17-Aug-16	8021B	
Total Xylenes*	48.9		1.50	mg/kg	500	6081701	MS	17-Aug-16	8021B	
Total BTEX	131		3.00	mg/kg	500	6081701	MS	17-Aug-16	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			119 %	73.6-140		6081701	MS	17-Aug-16	8021B	
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**Petroleum Hydrocarbons by GC FID**
**S-06**

GRO C6-C10	875		50.0	mg/kg	5	6081608	MS	17-Aug-16	8015B	
DRO >C10-C28	2170		50.0	mg/kg	5	6081608	MS	17-Aug-16	8015B	
Surrogate: 1-Chlorooctane			149 %	35-147		6081608	MS	17-Aug-16	8015B	
Surrogate: 1-Chlorooctadecane			130 %	28-171		6081608	MS	17-Aug-16	8015B	

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-1 (2-2.5')  
 H601831-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>32.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	6082001	MS	20-Aug-16	8021B	
Toluene*	<0.050		0.050	mg/kg	50	6082001	MS	20-Aug-16	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	6082001	MS	20-Aug-16	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	6082001	MS	20-Aug-16	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	6082001	MS	20-Aug-16	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			105 %		73.6-140	6082001	MS	20-Aug-16	8021B	
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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-1 (3-3.5')  
 H601831-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>64.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-1 (4-4.5')  
 H601831-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (0-1')  
 H601831-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>112</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>33.2</b>		2.00	mg/kg	2000	6081701	MS	17-Aug-16	8021B	
<b>Toluene*</b>	<b>271</b>		2.00	mg/kg	2000	6081701	MS	17-Aug-16	8021B	
<b>Ethylbenzene*</b>	<b>165</b>		2.00	mg/kg	2000	6081701	MS	17-Aug-16	8021B	
<b>Total Xylenes*</b>	<b>250</b>		6.00	mg/kg	2000	6081701	MS	17-Aug-16	8021B	
<b>Total BTEX</b>	<b>720</b>		12.0	mg/kg	2000	6081701	MS	17-Aug-16	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140 6081701 MS 17-Aug-16 8021B

**Petroleum Hydrocarbons by GC FID**
**S-06**

<b>GRO C6-C10</b>	<b>4410</b>		100	mg/kg	10	6081608	MS	17-Aug-16	8015B	
<b>DRO &gt;C10-C28</b>	<b>15800</b>		100	mg/kg	10	6081608	MS	17-Aug-16	8015B	

Surrogate: 1-Chlorooctane 189 % 35-147 6081608 MS 17-Aug-16 8015B

Surrogate: 1-Chlorooctadecane 382 % 28-171 6081608 MS 17-Aug-16 8015B

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (1-1.5')  
 H601831-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

Chloride	48.0		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	0.109		0.050	mg/kg	50	6081701	MS	17-Aug-16	8021B	
Toluene*	0.399		0.050	mg/kg	50	6081701	MS	17-Aug-16	8021B	
Ethylbenzene*	0.200		0.050	mg/kg	50	6081701	MS	17-Aug-16	8021B	
Total Xylenes*	0.450		0.150	mg/kg	50	6081701	MS	17-Aug-16	8021B	
Total BTEX	1.16		0.300	mg/kg	50	6081701	MS	17-Aug-16	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	73.6-140		6081701	MS	17-Aug-16	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	14.4		10.0	mg/kg	1	6081608	MS	17-Aug-16	8015B	
DRO >C10-C28	108		10.0	mg/kg	1	6081608	MS	17-Aug-16	8015B	
Surrogate: 1-Chlorooctane			100 %	35-147		6081608	MS	17-Aug-16	8015B	
Surrogate: 1-Chlorooctadecane			105 %	28-171		6081608	MS	17-Aug-16	8015B	

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (2-2.5')  
 H601831-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (3-3.5')  
 H601831-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (4-4.5')  
 H601831-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>176</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (5-5.5')  
 H601831-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>176</b>		16.0	mg/kg	4	6081705	AC	18-Aug-16	4500-Cl-B	
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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

**AH-2 (6-6.5')  
 H601831-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

<b>Chloride</b>	<b>128</b>		16.0	mg/kg	4	6081706	AC	18-Aug-16	4500-Cl-B	
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**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 6081705 - 1:4 DI Water</b>										
<b>Blank (6081705-BLK1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	ND	16.0	mg/kg							
<b>LCS (6081705-BS1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	400	16.0	mg/kg	400		100	80-120			
<b>LCS Dup (6081705-BSD1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	400	16.0	mg/kg	400		100	80-120	0.00	20	
<b>Batch 6081706 - 1:4 DI Water</b>										
<b>Blank (6081706-BLK1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	ND	16.0	mg/kg							
<b>LCS (6081706-BS1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	400	16.0	mg/kg	400		100	80-120			
<b>LCS Dup (6081706-BSD1)</b>										
Prepared: 17-Aug-16 Analyzed: 18-Aug-16										
Chloride	400	16.0	mg/kg	400		100	80-120	0.00	20	

Cardinal Laboratories

\* = Accredited Analyte

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6081701 - Volatiles**
**Blank (6081701-BLK1)**

Prepared &amp; Analyzed: 17-Aug-16

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	0.0537		mg/kg	0.0500		107	73.6-140			

**LCS (6081701-BS1)**

Prepared &amp; Analyzed: 17-Aug-16

Benzene	2.32	0.050	mg/kg	2.00		116	82.6-122			
Toluene	2.37	0.050	mg/kg	2.00		119	72.9-122			
Ethylbenzene	2.29	0.050	mg/kg	2.00		114	65.4-131			
Total Xylenes	6.90	0.150	mg/kg	6.00		115	73.8-125			
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	0.0538		mg/kg	0.0500		108	73.6-140			

**LCS Dup (6081701-BSD1)**

Prepared &amp; Analyzed: 17-Aug-16

Benzene	2.35	0.050	mg/kg	2.00		117	82.6-122	1.22	8.23	
Toluene	2.41	0.050	mg/kg	2.00		120	72.9-122	1.57	8.71	
Ethylbenzene	2.33	0.050	mg/kg	2.00		116	65.4-131	1.73	9.46	
Total Xylenes	7.00	0.150	mg/kg	6.00		117	73.8-125	1.52	8.66	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	0.0530		mg/kg	0.0500		106	73.6-140			

**Batch 6082001 - Volatiles**
**Blank (6082001-BLK1)**

Prepared &amp; Analyzed: 20-Aug-16

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	0.0535		mg/kg	0.0500		107	73.6-140			

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6082001 - Volatiles**
**LCS (6082001-BS1)**

Prepared &amp; Analyzed: 20-Aug-16

Benzene	2.34	0.050	mg/kg	2.00		117	82.6-122			
Toluene	2.38	0.050	mg/kg	2.00		119	72.9-122			
Ethylbenzene	2.27	0.050	mg/kg	2.00		113	65.4-131			
Total Xylenes	6.88	0.150	mg/kg	6.00		115	73.8-125			
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0534</i>		mg/kg	<i>0.0500</i>		<i>107</i>	<i>73.6-140</i>			

**LCS Dup (6082001-BSD1)**

Prepared &amp; Analyzed: 20-Aug-16

Benzene	2.32	0.050	mg/kg	2.00		116	82.6-122	0.544	8.23	
Toluene	2.36	0.050	mg/kg	2.00		118	72.9-122	0.515	8.71	
Ethylbenzene	2.26	0.050	mg/kg	2.00		113	65.4-131	0.249	9.46	
Total Xylenes	6.87	0.150	mg/kg	6.00		114	73.8-125	0.246	8.66	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0536</i>		mg/kg	<i>0.0500</i>		<i>107</i>	<i>73.6-140</i>			

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

**Analytical Results For:**

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

 Project: AIRBUS 12 FED #2H  
 Project Number: NONE GIVEN  
 Project Manager: DAKOTA NEEL  
 Fax To: NONE

 Reported:  
 23-Aug-16 10:54

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6081608 - General Prep - Organics**
**Blank (6081608-BLK1)**

Prepared &amp; Analyzed: 16-Aug-16

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
<i>Surrogate: 1-Chlorooctane</i>	51.6		mg/kg	50.0		103	35-147			
<i>Surrogate: 1-Chlorooctadecane</i>	57.9		mg/kg	50.0		116	28-171			

**LCS (6081608-BS1)**

Prepared &amp; Analyzed: 16-Aug-16

GRO C6-C10	201	10.0	mg/kg	200		101	76.7-115			
DRO >C10-C28	203	10.0	mg/kg	200		102	78.3-122			
Total TPH C6-C28	404	10.0	mg/kg	400		101	79.8-117			
<i>Surrogate: 1-Chlorooctane</i>	52.9		mg/kg	50.0		106	35-147			
<i>Surrogate: 1-Chlorooctadecane</i>	50.3		mg/kg	50.0		101	28-171			

**LCS Dup (6081608-BSD1)**

Prepared &amp; Analyzed: 16-Aug-16

GRO C6-C10	212	10.0	mg/kg	200		106	76.7-115	5.19	9.42	
DRO >C10-C28	211	10.0	mg/kg	200		105	78.3-122	3.72	13.2	
Total TPH C6-C28	423	10.0	mg/kg	400		106	79.8-117	4.46	10.7	
<i>Surrogate: 1-Chlorooctane</i>	55.9		mg/kg	50.0		112	35-147			
<i>Surrogate: 1-Chlorooctadecane</i>	51.2		mg/kg	50.0		102	28-171			

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

**Notes and Definitions**

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- 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

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: **HOOD1831**

PROJECT NO.: **006**

SITE MANAGER: **Adrian Garcia**

PROJECT NAME: **006 - Airbus 12 Fed #22H**

SAMPLE IDENTIFICATION: **Eddy Co. NM**

LAB I.D. NUMBER

DATE TIME

MATRIX COMP. GRAB

NUMBER OF CONTAINERS FILTERED (Y/N)

HCL HNO3 ICE NONE

BTX 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC.MS Vol. 8240/8260/624

GC.MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

LAB I.D. NUMBER	DATE TIME	MATRIX	COMP.	GRAB	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTX 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS		
1	8/16	S	X		1	N			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

RELINQUISHED BY: (Signature) **Adrian Garcia** Date: **8/16/16** Time: **9:16 AM**

RECEIVED BY: (Signature) **Adrian Garcia** Date: **8/16/16** Time: **9:16 AM**

RECEIVED BY: (Signature) **Adrian Garcia** Date: **8/16/16** Time: **9:16 AM**

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RECEIVED BY: (Signature) **Adrian Garcia** Date: **8/16/16** Time: **9:16 AM**

# Analysis Request of Chain of Custody Record



**TETRA TECH**

1910 N. Big Spring St.  
Midland, Texas 79705  
(432) 682-4559 • Fax (432) 682-3946

**#160D1831**

CLIENT NAME: **COX**

SITE MANAGER: **Adrian Garcia**

PROJECT NO.: **Old-Md-0005**

PROJECT NAME: **COX - Airbus 12 Fed #2H**

**Eddy Co. No**

NUMBER OF CONTAINERS  
FILTERED (Y/N)  
HCL  
HNO3  
ICE  
NONE

PRESERVATIVE METHOD

**BTEX-8021B**  
**TPH 8015 MOD. TX1005 (Ext. to C35)**  
PAH 8270  
RCRA Metals Ag As Ba Cd Cr Pb Hg Se  
TCLP Metals Ag As Ba Cd Vr Pd Hg Se  
TCLP Volatiles  
TCLP Semi Volatiles  
RCI  
GC.MS Vol. 8240/8260/624  
GC.MS Semi. Vol. 8270/625  
PCB's 8080/608  
Pest. 808/608  
**Chloride**  
Gamma Spec.  
Alpha Beta (Air)  
PLM (Asbestos)  
Major Anions/Cations, pH, TDS

PAGE: **2** OF: **2**  
ANALYSIS REQUEST  
(Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE
11	8/16		S	X		AA 2 (5'-5.5')	1	N			X	
12	8/16		S	X		(6'-6.5')	1	N			X	

RELINQUISHED BY: (Signature) **Adrian Garcia** Date: **8/16/11**  
 RELINQUISHED BY: (Signature) **Adrian Garcia** Date: **8/16/11**  
 RECEIVED BY: (Signature) **Adrian Garcia** Date: **8/16/11**  
 RECEIVED BY: (Signature) **Adrian Garcia** Date: **8/16/11**

RECEIVING LABORATORY: **Adrian Garcia**  
 ADDRESS: **Adrian Garcia**  
 CITY: **Adrian Garcia** STATE: **Adrian Garcia** ZIP: **Adrian Garcia**  
 PHONE: **Adrian Garcia** DATE: **Adrian Garcia** TIME: **Adrian Garcia**

REMARKS: **3.50**  
**#75**  
 SAMPLE CONDITION WHEN RECEIVED: **3.50**  
 RUSH Charges Authorized: **No**

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.



# Analysis Request of Chain of Custody Record



**TETRA TECH**  
 1910 N. Big Spring St.  
 Midland, Texas 79705  
 (432) 682-4559 • Fax (432) 682-3946

FL00D1531

CLIENT NAME: *CC*

SITE MANAGER: *Adrian Garcia*

PROJECT NO.: *06-Mid-0605*

PROJECT NAME: *CC - Airbus 19 Fed H 2H*

LAB I.D. NUMBER

DATE

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

BTX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC.MS Vol. 8240/8260/624

GC.MS Semi. Vol. 8270/625

PCB's 8080/808

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/808	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS		
11	3/11/06		S	X		All 2 (5-5.5)	1	N																							
12	3/11/06		S	X		(6:6.5)	1	N																							

REINQUISHED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00* RECEIVED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00*

REINQUISHED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00* RECEIVED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00*

REINQUISHED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00* RECEIVED BY: (Signature) *[Signature]* Date: *3/11/06* Time: *11:00*

RECEIVING LABORATORY: *CC* ADDRESS: *1910 N. Big Spring St. Midland, TX 79705* CITY: *Midland* STATE: *TX* PHONE: *682-4559* ZIP: *79705*

SAMPLE CONDITION WHEN RECEIVED: *950* REMARKS: *#75 Run deeper if total BTEX exceeds 5000 mg/L or Benzene exceeds 1000 mg/L*

RECEIVED BY: (Signature) *[Signature]* DATE: *3/11/06* TIME: *11:00*

SAMPLE SHIPPED BY: (Circle)  FEDX  BUS  UPS

TETRA TECH CONTACT PERSON: *Elaine*

RESULTS BY: *[Signature]*

RESULTS CHARGES AUTHORIZED:  Yes  No

ANALYSIS REQUEST  
 (Circle or Specify Method No.)

PAGE: *1* OF: *2*

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.