WORLD-WIDE ENVIRONMENTAL SPECIALISTS

BBC INTERNATIONAL INCORPORATED

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DELINEATION WORKPLAN

COG – ADMIRAL FED COM 2H BATTERY
(Leak Date: 3/8/18)

RP # 2RP-4664
API # 30-015-42820

This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4664.

The following information includes:

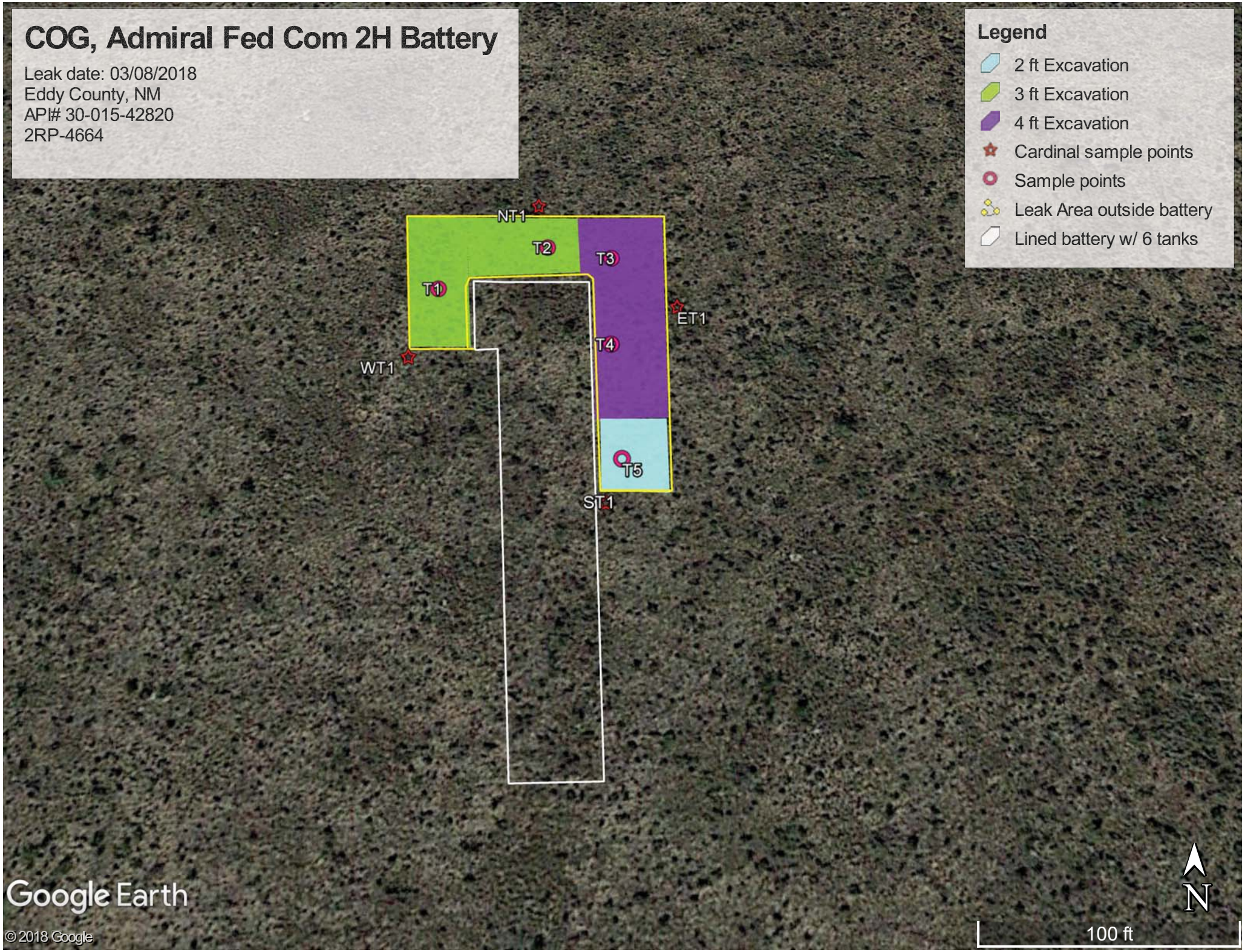
1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
2. GPS information for sample points and sample methodology
3. Depth to groundwater information (i.e., pdf of OSE search results and/or copy of Chevron groundwater trend map).
4. Laboratory analysis results summary table and original laboratory analysis reports
5. A copy of the initial C-141
6. Potentially other pertinent information as necessary for site specific purposes.

Based on the information included in this package and the NMOCD guidelines, the following remediation is proposed:

COG will excavate the spill area as depicted on the following site diagram. The leak area near T1 and T2 (green shade on diagram) will be excavated to a depth of 3 feet. The leak area near T3 and T4 (purple shade on diagram) will be excavated to a depth of 4 feet. The leak area near T5 (blue shade on diagram) will be excavated to a depth of 2 feet.

The entire site will then be backfilled with clean soil and revegetated (if warranted) to the standards of the appropriate regulatory agency or private surface owner.

All excavated materials will be disposed of at an NMOCD-approved disposal facility.


COG, Admiral Fed Com 2H Battery
Leak date: 03/08/2018
Eddy County, NM
API# 30-015-42820
2RP-4664
Legend
2 ft Excavation
3 ft Excavation
4 ft Excavation
Cardinal sample points
Sample points
Leak Area outside battery
Lined battery w/ 6 tanks
NT1
T1
T2
T3
T4
T5
ET1
WT1
ST1
Google Earth
© 2018 Google
N
100 ft

COG, Admiral Fed Com 2H Battery

Sample points

T1, N 32.09443 W-103.98690

T2, N 32.09450 W-103.98673

T3, N 32.09448 W-103.98663

T4, N 32.09435 W-103.98663

T5, N 32.09418 W-103.98661

NT1, N 32.09468 W-103.98671

WT1, N 32.09421 W-103.98708

ET1, N 32.09440 W-103.98641

ST1, N 32.09375 W-103.98676

COG, Admiral Fed Com 2H Battery

U/L O, Section 28, T25S, R29E

Groundwater: 125’-150’

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 595580 **Northing (Y):** 3551453 **Radius:** 1700

3/26/18 11:43 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Public Land Survey System (PLSS)

Q64: Q16: SW Q4: SE Sec: 28 Tws: 25S Rng: 29E

State Plane Coordinate System - NAD27

X: 0 ft Y: 0 ft Zone:

State Plane Coordinate System - NAD83

X: 0 ft Y: 0 ft Zone:

Degrees/Minutes/Seconds

Longitude (X): Degrees: 0 ° Minutes: 0 ' Seconds: 0 "

Latitude (Y): Degrees: 0 ° Minutes: 0 ' Seconds: 0 "

UTM - NAD27

Easting (X): 0 mtrs Northing (Y): 0 mtrs Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X): 595580.0 mtrs Northing (Y): 3551453.0 mtrs

~~ Please keep screen open to copy UTM values for Reports. ~~

Laboratory Analytical Results Summary
Admiral Fed Com 2H Battery

		Sample ID	T1 @ 6"	T1 @ 3'	T1 @ 5'
Analyte	**Method**	**Date**	3/16/18	3/16/18	3/16/18
			mg/kg	mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND	ND
Toluene	SW846-8021B		ND	ND	ND
Ethylbenzene	SW846-8021B		ND	ND	ND
m,p-Xylenes	SW846-8021B		ND	ND	ND
o-Xylenes	SW846-8021B		ND	ND	ND
Total Xylenes	SW846-8021B		ND	ND	ND
Total BTEX	SW846-8021B		ND	ND	ND
Chloride	E 300.1		**8580**	**840**	**209**
GRO	SW 8015M		ND	ND	ND
DRO	SW 8015M		ND	ND	ND
ORO	SW 8015M		ND	ND	ND
Total TPH	SW 8015M		ND	ND	ND

		Sample ID	T2 @ 6"	T2 @ 2'	T2 @ 3'
Analyte	**Method**	**Date**	3/16/18	3/16/18	4/2/18
			mg/kg	mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND	ND
Toluene	SW846-8021B		ND	ND	ND
Ethylbenzene	SW846-8021B		ND	ND	ND
m,p-Xylenes	SW846-8021B		ND	ND	ND
o-Xylenes	SW846-8021B		ND	ND	ND
Total Xylenes	SW846-8021B		ND	ND	ND
Total BTEX	SW846-8021B		ND	ND	ND
Chloride	E 300.1		**8960**	**822**	**250**
GRO	SW 8015M		ND	ND	ND
DRO	SW 8015M		ND	ND	ND
ORO	SW 8015M		ND	ND	ND
Total TPH	SW 8015M		ND	ND	ND

		Sample ID	T3 @ 6"	T3 @ 2'	T3 @ 4'	T3 @ 5'	T3 @ 6'
Analyte	**Method**	**Date**	3/16/18	3/16/18	3/16/18	3/16/18	3/16/18
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND	ND	ND	ND
Toluene	SW846-8021B		ND	ND	ND	ND	ND
Ethylbenzene	SW846-8021B		ND	ND	ND	ND	ND
m,p-Xylenes	SW846-8021B		ND	ND	ND	ND	ND
o-Xylenes	SW846-8021B		ND	ND	ND	ND	ND
Total Xylenes	SW846-8021B		ND	ND	ND	ND	ND
Total BTEX	SW846-8021B		ND	ND	ND	ND	ND
Chloride	E 300.1		**8700**	**6030**	**410**	**260**	**307**
GRO	SW 8015M		ND	**208**	ND	**28.4**	ND
DRO	SW 8015M		**64.1**	**2100**	**63.2**	**183**	**56**
ORO	SW 8015M		ND	ND	ND	**45.9**	ND
Total TPH	SW 8015M		**64.1**	**2310**	**63.2**	**258**	**56**

Laboratory Analytical Results Summary

Admiral Fed Com 2H Battery

		Sample ID	T4 @ 6"	T4 @ 2'	T4 @ 4'
Analyte	**Method**	**Date**	3/16/18	3/16/18	3/16/18
			mg/kg	mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND	ND
Toluene	SW846-8021B		ND	ND	ND
Ethylbenzene	SW846-8021B		ND	ND	ND
m,p-Xylenes	SW846-8021B		ND	ND	ND
o-Xylenes	SW846-8021B		ND	ND	ND
Total Xylenes	SW846-8021B		ND	ND	ND
Total BTEX	SW846-8021B		ND	ND	ND
Chloride	E 300.1		**6990**	**12400**	**507**
GRO	SW 8015M		ND	ND	ND
DRO	SW 8015M		ND	ND	ND
ORO	SW 8015M		ND	ND	ND
Total TPH	SW 8015M		ND	ND	ND

		Sample ID	WT1 @ 6"	WT1 @ 1'
Analyte	**Method**	**Date**	3/16/18	3/16/18
			mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND
Toluene	SW846-8021B		ND	ND
Ethylbenzene	SW846-8021B		ND	ND
m,p-Xylenes	SW846-8021B		ND	ND
o-Xylenes	SW846-8021B		ND	ND
Total Xylenes	SW846-8021B		ND	ND
Total BTEX	SW846-8021B		ND	ND
Chloride	E 300.1		**10.6**	**8.29**
GRO	SW 8015M		ND	ND
DRO	SW 8015M		ND	ND
ORO	SW 8015M		ND	ND
Total TPH	SW 8015M		ND	ND

		Sample ID	T5 @ 6"	T5 @ 2'
Analyte	**Method**	**Date**	3/16/18	3/16/18
			mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND
Toluene	SW846-8021B		ND	ND
Ethylbenzene	SW846-8021B		ND	ND
m,p-Xylenes	SW846-8021B		ND	ND
o-Xylenes	SW846-8021B		ND	ND
Total Xylenes	SW846-8021B		ND	ND
Total BTEX	SW846-8021B		ND	ND
Chloride	E 300.1		**5700**	**252**
GRO	SW 8015M		ND	ND
DRO	SW 8015M		ND	ND
ORO	SW 8015M		ND	ND
Total TPH	SW 8015M		ND	ND

		Sample ID	NT1 @ 6"	NT1 @ 1'
Analyte	**Method**	**Date**	3/16/18	3/16/18
			mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND
Toluene	SW846-8021B		ND	ND
Ethylbenzene	SW846-8021B		ND	ND
m,p-Xylenes	SW846-8021B		ND	ND
o-Xylenes	SW846-8021B		ND	ND
Total Xylenes	SW846-8021B		ND	ND
Total BTEX	SW846-8021B		ND	ND
Chloride	E 300.1		**11.8**	**16.1**
GRO	SW 8015M		ND	ND
DRO	SW 8015M		ND	ND
ORO	SW 8015M		ND	ND
Total TPH	SW 8015M		ND	ND

		Sample ID	ST1 @ 6"	ST1 @ 1'
Analyte	**Method**	**Date**	3/16/18	3/16/18
			mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND
Toluene	SW846-8021B		ND	ND
Ethylbenzene	SW846-8021B		ND	ND
m,p-Xylenes	SW846-8021B		ND	ND
o-Xylenes	SW846-8021B		ND	ND
Total Xylenes	SW846-8021B		ND	ND
Total BTEX	SW846-8021B		ND	ND
Chloride	E 300.1		**38.5**	**33.4**
GRO	SW 8015M		ND	ND
DRO	SW 8015M		ND	ND
ORO	SW 8015M		ND	ND
Total TPH	SW 8015M		ND	ND

		Sample ID	ET1 @ 6"	ET1 @ 1'
Analyte	**Method**	**Date**	3/16/18	3/16/18
			mg/kg	mg/kg
Benzene	SW846-8021B		ND	ND
Toluene	SW846-8021B		ND	ND
Ethylbenzene	SW846-8021B		ND	ND
m,p-Xylenes	SW846-8021B		ND	ND
o-Xylenes	SW846-8021B		ND	ND
Total Xylenes	SW846-8021B		ND	ND
Total BTEX	SW846-8021B		ND	ND
Chloride	E 300.1		**55.2**	**53.1**
GRO	SW 8015M		ND	ND
DRO	SW 8015M		ND	ND
ORO	SW 8015M		ND	ND
Total TPH	SW 8015M		ND	ND

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Matt Green
2M Environmental Services, LLC.
1219 W. University Blvd.
Odessa, TEXAS 79764

Project: COG Admiral Fed Com 2H Battery
Project Number: [none]
Location: Eddy County, NM

Lab Order Number: 8C20021

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704516-17-8

Report Date: 03/27/18

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-5 @ 6"	8C20021-01	Soil	03/16/18 09:30	03-20-2018 15:10
T-5 @ 2'	8C20021-02	Soil	03/16/18 09:35	03-20-2018 15:10
T-4 @ 6"	8C20021-03	Soil	03/16/18 09:58	03-20-2018 15:10
T-4 @ 2'	8C20021-04	Soil	03/16/18 10:07	03-20-2018 15:10
T-4 @ 4'	8C20021-05	Soil	03/16/18 10:26	03-20-2018 15:10
T-3 @ 6"	8C20021-06	Soil	03/16/18 10:52	03-20-2018 15:10
T-3 @ 2'	8C20021-07	Soil	03/16/18 11:02	03-20-2018 15:10
T-3 @ 4'	8C20021-08	Soil	03/16/18 11:19	03-20-2018 15:10
T-3 @ 5'	8C20021-09	Soil	03/16/18 11:24	03-20-2018 15:10
T-3 @ 6'	8C20021-10	Soil	03/16/18 11:28	03-20-2018 15:10
T-2 @ 6"	8C20021-11	Soil	03/16/18 11:45	03-20-2018 15:10
T-2 @ 2'	8C20021-12	Soil	03/16/18 11:54	03-20-2018 15:10
T-1 @ 6"	8C20021-13	Soil	03/16/18 12:10	03-20-2018 15:10
T-1 @ 3'	8C20021-14	Soil	03/16/18 12:30	03-20-2018 15:10
T-1 @ 5'	8C20021-15	Soil	03/16/18 12:58	03-20-2018 15:10
ST-1 @ 6"	8C20021-16	Soil	03/16/18 12:59	03-20-2018 15:10
ST-1 @ 1'	8C20021-17	Soil	03/16/18 13:01	03-20-2018 15:10
WT-1 @ 6"	8C20021-18	Soil	03/16/18 13:22	03-20-2018 15:10
WT-1 @ 1'	8C20021-19	Soil	03/16/18 13:25	03-20-2018 15:10
NT-1 @ 6"	8C20021-20	Soil	03/16/18 13:38	03-20-2018 15:10
NT-1 @ 1'	8C20021-21	Soil	03/16/18 13:40	03-20-2018 15:10
ET- 1 @ 6"	8C20021-22	Soil	03/16/18 13:47	03-20-2018 15:10
ET- 1 @ 1'	8C20021-23	Soil	03/16/18 13:53	03-20-2018 15:10

T-5 @ 6"

8C20021-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0109	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00543	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0217	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0109	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*164 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*103 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**5700**	27.2	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P8C2108	03/21/18	03/22/18	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P8C2108	03/21/18	03/22/18	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P8C2108	03/21/18	03/22/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P8C2108*	*03/21/18*	*03/22/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*110 %*	*70-130*		*P8C2108*	*03/21/18*	*03/22/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	03/21/18	03/22/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-5 @ 2'

8C20021-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0105	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00526	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0211	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0105	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*83.0 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*125 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**252**	1.05	mg/kg dry	1	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.8 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-4 @ 6"

8C20021-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00556	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0222	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*136 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*114 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**6990**	27.8	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*110 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*122 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-4 @ 2'

8C20021-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00116	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0116	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00581	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0233	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0116	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*66.1 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*85.2 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**12400**	29.1	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.1	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.9 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-4 @ 4'

8C20021-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00114	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0114	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00568	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0227	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0114	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*101 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*69.9 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**507**	1.14	mg/kg dry	1	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*114 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-3 @ 6"

8C20021-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00549	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0220	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*124 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*90.2 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8700**	27.5	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	**64.1**	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.4 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**64.1**	27.5	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-3 @ 2'

8C20021-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00556	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0222	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0111	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*67.7 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**6030**	27.8	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**208**	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	**2100**	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2310**	27.8	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-3 @ 4'

8C20021-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00549	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0220	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0110	mg/kg dry	1	P8C2104	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*140 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*91.8 %*	*75-125*		*P8C2104*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**410**	11.0	mg/kg dry	10	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C12-C28	**63.2**	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P8C2603	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*123 %*	*70-130*		*P8C2603*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**63.2**	27.5	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-3 @ 5'

8C20021-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0106	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00532	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0213	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0106	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*158 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*91.9 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**260**	5.32	mg/kg dry	5	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**28.4**	26.6	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	**183**	26.6	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	**45.9**	26.6	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*135 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**258**	26.6	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-3 @ 6'

8C20021-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00526	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0211	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*144 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**307**	5.26	mg/kg dry	5	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	**56.0**	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*138 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**56.0**	26.3	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-2 @ 6"

8C20021-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0109	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00543	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0217	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0109	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*91.1 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*130 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8960**	27.2	mg/kg dry	25	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*130 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-2 @ 2'

8C20021-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00114	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0114	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00568	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0227	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0114	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*65.0 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*97.0 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**822**	1.14	mg/kg dry	1	P8C2607	03/26/18	03/26/18	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*116 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*134 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-1 @ 6"

8C20021-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0111	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00556	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0222	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0111	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*93.2 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*173 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8580**	55.6	mg/kg dry	50	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*134 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-1 @ 3'

8C20021-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0108	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00538	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0215	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0108	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*88.2 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*138 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**840**	10.8	mg/kg dry	10	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*117 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*133 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

T-1 @ 5'

8C20021-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00526	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0211	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0105	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*108 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*74.9 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**209**	1.05	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*127 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ST-1 @ 6''

8C20021-16 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0208	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*71.8 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*91.0 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**38.5**	1.04	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*131 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ST-1 @ 1'

8C20021-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0208	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0104	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*77.4 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*112 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**33.4**	1.04	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*132 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

WT-1 @ 6"

8C20021-18 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0206	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*71.3 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*71.4 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**10.6**	1.03	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*128 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

WT-1 @ 1'

8C20021-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0206	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*138 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*93.7 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8.29**	1.03	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*117 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*135 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

NT-1 @ 6''

8C20021-20 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00101	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0101	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0202	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0101	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*89.8 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*69.4 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**11.8**	1.01	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	25.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*125 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.3	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

NT-1 @ 1'

8C20021-21 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0102	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00510	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0204	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0102	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*72.2 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*98.7 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**16.1**	1.02	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P8C2603	03/23/18	03/24/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.1 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*114 %*	*70-130*		*P8C2603*	*03/23/18*	*03/24/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/23/18	03/24/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ET- 1 @ 6"

8C20021-22 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Toluene	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (p/m)	ND	0.0206	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Xylene (o)	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/22/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*105 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*133 %*	*75-125*		*P8C2105*	*03/21/18*	*03/22/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**55.2**	1.03	mg/kg dry	1	P8C2608	03/26/18	03/26/18	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.0 %*	*70-130*		*P8C2602*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P8C2602*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ET- 1 @ 1'

8C20021-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P8C2105	03/21/18	03/23/18	EPA 8021B	
Toluene	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/23/18	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P8C2105	03/21/18	03/23/18	EPA 8021B	
Xylene (p/m)	ND	0.0206	mg/kg dry	1	P8C2105	03/21/18	03/23/18	EPA 8021B	
Xylene (o)	ND	0.0103	mg/kg dry	1	P8C2105	03/21/18	03/23/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*108 %*	*75-125*		*P8C2105*	*03/21/18*	*03/23/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*86.8 %*	*75-125*		*P8C2105*	*03/21/18*	*03/23/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**53.1**	1.03	mg/kg dry	1	P8C2608	03/26/18	03/27/18	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P8C2307	03/23/18	03/23/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P8C2602	03/23/18	03/23/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		*P8C2602*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P8C2602*	*03/23/18*	*03/23/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/23/18	03/23/18	calc	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2104 - General Preparation (GC)										
Blank (P8C2104-BLK1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 1,4-Difluorobenzene	*0.0394*		*"*	*0.0600*		*65.7*	*75-125*			*S-GC*
Surrogate: 4-Bromofluorobenzene	*0.0553*		*"*	*0.0600*		*92.2*	*75-125*			
LCS (P8C2104-BS1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0916	0.00100	mg/kg wet	0.100		91.6	70-130			
Toluene	0.0922	0.0100	"	0.100		92.2	70-130			
Ethylbenzene	0.115	0.00500	"	0.100		115	70-130			
Xylene (p/m)	0.207	0.0200	"				70-130			
Xylene (o)	ND	0.0100	"				70-130			
Surrogate: 1,4-Difluorobenzene	*0.0608*		*"*	*0.0600*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0673*		*"*	*0.0600*		*112*	*75-125*			
LCS Dup (P8C2104-BSD1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0859	0.00100	mg/kg wet	0.100		85.9	70-130	6.44	20	
Toluene	0.0903	0.0100	"	0.100		90.3	70-130	2.02	20	
Ethylbenzene	0.113	0.00500	"	0.100		113	70-130	1.44	20	
Xylene (p/m)	0.199	0.0200	"				70-130		20	
Xylene (o)	ND	0.0100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	*0.0559*		*"*	*0.0600*		*93.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0629*		*"*	*0.0600*		*105*	*75-125*			
Matrix Spike (P8C2104-MS1)		**Source: 8C20021-08**		Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0728	0.00110	mg/kg dry	0.110	ND	66.3	80-120			
Toluene	0.0579	0.0110	"	0.110	ND	52.7	80-120			
Ethylbenzene	0.0634	0.00549	"	0.110	ND	57.7	80-120			
Xylene (p/m)	0.0476	0.0220	"		ND		80-120			
Xylene (o)	ND	0.0110	"		ND		80-120			
Surrogate: 4-Bromofluorobenzene	*0.0869*		*"*	*0.0659*		*132*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0724*		*"*	*0.0659*		*110*	*75-125*			

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2104 - General Preparation (GC)										
Matrix Spike Dup (P8C2104-MSD1)	**Source: 8C20021-08**			Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0812	0.00110	mg/kg dry	0.110	ND	73.9	80-120	10.9	20	
Toluene	0.0750	0.0110	"	0.110	ND	68.2	80-120	25.7	20	
Ethylbenzene	0.0900	0.00549	"	0.110	ND	81.9	80-120	34.7	20	
Xylene (p/m)	0.0844	0.0220	"		ND		80-120		20	
Xylene (o)	ND	0.0110	"		ND		80-120		20	
Surrogate: 4-Bromofluorobenzene	*0.0814*		*"*	*0.0659*		*123*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0695*		*"*	*0.0659*		*105*	*75-125*			
Batch P8C2105 - General Preparation (GC)										
Blank (P8C2105-BLK1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 4-Bromofluorobenzene	*0.0953*		*"*	*0.0600*		*159*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.0677*		*"*	*0.0600*		*113*	*75-125*			
LCS (P8C2105-BS1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0844	0.00100	mg/kg wet	0.100		84.4	70-130			
Toluene	0.0826	0.0100	"	0.100		82.6	70-130			
Ethylbenzene	0.112	0.00500	"	0.100		112	70-130			
Xylene (p/m)	0.199	0.0200	"				70-130			
Xylene (o)	ND	0.0100	"				70-130			
Surrogate: 4-Bromofluorobenzene	*0.0828*		*"*	*0.0600*		*138*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.0543*		*"*	*0.0600*		*90.4*	*75-125*			

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2105 - General Preparation (GC)										
LCS Dup (P8C2105-BSD1)				Prepared: 03/21/18 Analyzed: 03/22/18						
Benzene	0.0838	0.00100	mg/kg wet	0.100		83.8	70-130	0.737	20	
Toluene	0.0950	0.0100	"	0.100		95.0	70-130	13.9	20	
Ethylbenzene	0.119	0.00500	"	0.100		119	70-130	5.55	20	
Xylene (p/m)	0.214	0.0200	"				70-130		20	
Xylene (o)	ND	0.0100	"				70-130		20	
Surrogate: 4-Bromofluorobenzene	*0.0854*		*"*	*0.0600*		*142*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.0688*		*"*	*0.0600*		*115*	*75-125*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2307 - * DEFAULT PREP *** **										
Blank (P8C2307-BLK1)				Prepared & Analyzed: 03/23/18						
% Moisture	ND	0.1	%							
Duplicate (P8C2307-DUP1)		**Source: 8C20021-06**		Prepared & Analyzed: 03/23/18						
% Moisture	9.0	0.1	%		9.0			0.00	20	
Duplicate (P8C2307-DUP2)		**Source: 8C22004-01**		Prepared & Analyzed: 03/23/18						
% Moisture	11.0	0.1	%		11.0			0.00	20	
Batch P8C2607 - * DEFAULT PREP *** **										
Blank (P8C2607-BLK1)				Prepared & Analyzed: 03/26/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8C2607-BS1)				Prepared & Analyzed: 03/26/18						
Chloride	414	1.00	mg/kg wet	400		103	80-120			
LCS Dup (P8C2607-BSD1)				Prepared & Analyzed: 03/26/18						
Chloride	410	1.00	mg/kg wet	400		103	80-120	0.903	20	
Duplicate (P8C2607-DUP1)		**Source: 8C23003-01**		Prepared & Analyzed: 03/26/18						
Chloride	507	1.09	mg/kg dry		503			0.657	20	
Duplicate (P8C2607-DUP2)		**Source: 8C20021-03**		Prepared & Analyzed: 03/26/18						
Chloride	7010	27.8	mg/kg dry		6990			0.309	20	
Matrix Spike (P8C2607-MS1)		**Source: 8C23003-01**		Prepared & Analyzed: 03/26/18						
Chloride	1600	1.09	mg/kg dry	1090	503	101	80-120			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2608 - * DEFAULT PREP *** **										
Blank (P8C2608-BLK1)				Prepared & Analyzed: 03/26/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8C2608-BS1)				Prepared & Analyzed: 03/26/18						
Chloride	414	1.00	mg/kg wet	400		104	80-120			
LCS Dup (P8C2608-BSD1)				Prepared & Analyzed: 03/26/18						
Chloride	410	1.00	mg/kg wet	400		103	80-120	0.972	20	
Duplicate (P8C2608-DUP1)		**Source: 8C20021-13**		Prepared & Analyzed: 03/26/18						
Chloride	8670	55.6	mg/kg dry		8580			1.01	20	
Duplicate (P8C2608-DUP2)		**Source: 8C20021-23**		Prepared: 03/26/18 Analyzed: 03/27/18						
Chloride	52.8	1.03	mg/kg dry		53.1			0.409	20	
Matrix Spike (P8C2608-MS1)		**Source: 8C20021-13**		Prepared & Analyzed: 03/26/18						
Chloride	14400	55.6	mg/kg dry	5560	8580	105	80-120			

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2108 - General Preparation (GC)										
Blank (P8C2108-BLK1)				Prepared: 03/21/18 Analyzed: 03/22/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*121*		*"*	*100*		*121*	*70-130*			
Surrogate: o-Terphenyl	*63.5*		*"*	*50.0*		*127*	*70-130*			
LCS (P8C2108-BS1)				Prepared: 03/21/18 Analyzed: 03/22/18						
C6-C12	1200	25.0	mg/kg wet	1000		120	75-125			
>C12-C28	1200	25.0	"	1000		120	75-125			
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*62.4*		*"*	*50.0*		*125*	*70-130*			
LCS Dup (P8C2108-BSD1)				Prepared: 03/21/18 Analyzed: 03/22/18						
C6-C12	1170	25.0	mg/kg wet	1000		117	75-125	2.45	20	
>C12-C28	1180	25.0	"	1000		118	75-125	1.79	20	
Surrogate: 1-Chlorooctane	*113*		*"*	*100*		*113*	*70-130*			
Surrogate: o-Terphenyl	*58.2*		*"*	*50.0*		*116*	*70-130*			
Matrix Spike (P8C2108-MS1)	**Source: 8C20021-01**			Prepared: 03/21/18 Analyzed: 03/22/18						
C6-C12	852	27.2	mg/kg dry	1090	12.2	77.3	75-125			
>C12-C28	851	27.2	"	1090	ND	78.3	75-125			
Surrogate: 1-Chlorooctane	*107*		*"*	*109*		*98.8*	*70-130*			
Surrogate: o-Terphenyl	*43.8*		*"*	*54.3*		*80.6*	*70-130*			
Matrix Spike Dup (P8C2108-MSD1)	**Source: 8C20021-01**			Prepared: 03/21/18 Analyzed: 03/22/18						
C6-C12	843	27.2	mg/kg dry	1090	12.2	76.5	75-125	1.07	20	
>C12-C28	845	27.2	"	1090	ND	77.8	75-125	0.701	20	
Surrogate: 1-Chlorooctane	*107*		*"*	*109*		*98.8*	*70-130*			
Surrogate: o-Terphenyl	*47.1*		*"*	*54.3*		*86.7*	*70-130*			

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2602 - TX 1005										
Blank (P8C2602-BLK1)				Prepared & Analyzed: 03/23/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*54.3*		*"*	*50.0*		*109*	*70-130*			
LCS (P8C2602-BS1)				Prepared & Analyzed: 03/23/18						
C6-C12	1090	25.0	mg/kg wet	1000		109	75-125			
>C12-C28	1070	25.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	*121*		*"*	*100*		*121*	*70-130*			
Surrogate: o-Terphenyl	*61.4*		*"*	*50.0*		*123*	*70-130*			
LCS Dup (P8C2602-BSD1)				Prepared & Analyzed: 03/23/18						
C6-C12	1130	25.0	mg/kg wet	1000		113	75-125	3.97	20	
>C12-C28	1110	25.0	"	1000		111	75-125	4.00	20	
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*61.1*		*"*	*50.0*		*122*	*70-130*			
Duplicate (P8C2602-DUP1)	**Source: 8C22001-01**			Prepared: 03/23/18 Analyzed: 03/24/18						
C6-C12	11.6	26.0	mg/kg dry		11.8			2.05	20	
>C12-C28	791	26.0	"		568			32.8	20	
Surrogate: 1-Chlorooctane	*97.9*		*"*	*104*		*94.0*	*70-130*			
Surrogate: o-Terphenyl	*55.2*		*"*	*52.1*		*106*	*70-130*			
Batch P8C2603 - TX 1005										
Blank (P8C2603-BLK1)				Prepared & Analyzed: 03/23/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*97.9*		*"*	*100*		*97.9*	*70-130*			
Surrogate: o-Terphenyl	*54.4*		*"*	*50.0*		*109*	*70-130*			

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8C2603 - TX 1005										
LCS (P8C2603-BS1)				Prepared & Analyzed: 03/23/18						
C6-C12	930	25.0	mg/kg wet	1000		93.0	75-125			
>C12-C28	1050	25.0	"	1000		105	75-125			
Surrogate: 1-Chlorooctane	*123*		*"*	*100*		*123*	*70-130*			
Surrogate: o-Terphenyl	*62.6*		*"*	*50.0*		*125*	*70-130*			
LCS Dup (P8C2603-BSD1)				Prepared & Analyzed: 03/23/18						
C6-C12	961	25.0	mg/kg wet	1000		96.1	75-125	3.37	20	
>C12-C28	1090	25.0	"	1000		109	75-125	4.00	20	
Surrogate: 1-Chlorooctane	*127*		*"*	*100*		*127*	*70-130*			
Surrogate: o-Terphenyl	*62.2*		*"*	*50.0*		*124*	*70-130*			
Duplicate (P8C2603-DUP1)	**Source: 8C20021-21**			Prepared: 03/23/18 Analyzed: 03/24/18						
C6-C12	15.2	25.5	mg/kg dry		23.5			42.7	20	
>C12-C28	ND	25.5	"		ND				20	
Surrogate: 1-Chlorooctane	*84.3*		*"*	*102*		*82.7*	*70-130*			
Surrogate: o-Terphenyl	*49.8*		*"*	*51.0*		*97.6*	*70-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:  Date: 3/27/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Matt Green

Company Name: 2M Environmental Services, LLC.

Company Address: 1219 W. University Blvd.

City/State/Zip: Odessa, Texas 79764

Telephone No: (432)230-3763 Fax No:

Sampler Signature: Matthew Green e-mail: mgreen@2m-environmental.com

Project Name: COG Admiral Fed Com 2H Battery

Project #:

Project Loc: Eddy County, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 8C20021

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 Ext TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	T-5 @ 6"			3/16/2018	930		1	x								S	X								X			X				X
02	T-5 @ 2'			3/16/2018	935		1	x								S	X								X			X				X
03	T-4 @ 6"			3/16/2018	958		1	x								S	X								X			X				X
04	T-4 @ 2'			3/16/2018	1007		1	x								S	X								X			X				X
05	T-4 @ 4'			3/16/2018	1026		1	x								S	X								X			X				X
06	T-3 @ 6"			3/16/2018	1052		1	x								S	X								X			X				X
07	T-3 @ 2'			3/16/2018	1102		1	x								S	X								X			X				X
08	T-3 @ 4'			3/16/2018	1119		1	x								S	X								X			X				X
09	T-3 @ 5'			3/16/2018	1124		1	x								S	X								X			X				X
10	T-3 @ 6'			3/16/2018	1128		1	x								S	X								X			X				X

Special Instructions:

	Date	Time		Date	Time
Relinquished by: Matthew Green	3-20-18	14:11	Received by:	3/20/18	14:11
Relinquished by:	3/20/18	15:10	Received by:		
Relinquished by:	Date	Time	Received by PBEL:	3/20	15:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 4.1+0.4 °C
Adjusted: °C Factor 4.5

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Matt Green

Company Name: 2M Environmental Services, LLC.

Company Address: 1219 W. University Blvd.

City/State/Zip: Odessa, Texas 79764

Telephone No: (432)230-3763 Fax No:

Sampler Signature: Matthew Green e-mail: mgreen@2m-environmental.com

Project Name: COG Admiral Fed Com 2H Battery

Project #:

Project Loc: Eddy County, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 8020021

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TOTAL: TPH: TX 1005 Ext TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8280	RCI	N.O.R.M.	Chlorides E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	T-2 @ 6"			3/16/2018	1145		1	x									S		X								X			X				X
2	T-2 @ 2'			3/16/2018	1154		1	x									S		X								X			X				X
3	T-1 @ 6"			3/16/2018	1210		1	x									S		X								X			X				X
4	T-1 @ 3'			3/16/2018	1230		1	x									S		X								X			X				X
5	T-1 @ 5'			3/16/2018	1258		1	x									S		X								X			X				X
6	ST-1 @ 6"			3/16/2018	1259		1	x									S		X								X			X				X
7	ST-1 @ 1'			3/16/2018	1301		1	x									S		X								X			X				X
8	WT-1 @ 6'			3/16/2018	1322		1	x									S		X								X			X				X
9	WT-1 @ 1'			3/16/2018	1325		1	x									S		X								X			X				X
10	NT-1 @ 6"			3/16/2018	1338		1	x									S		X								X			X				X

Special Instructions:

	Date	Time		Date	Time
Relinquished by: Matthew Green	3-20-18	14:11	Received by:	3/20/18	14:11
Relinquished by:	3/20/18		Received by:		
Relinquished by:	Date	Time	Received by PBEL:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: °C
Adjusted: °C Factor

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Matt Green

Company Name: 2M Environmental Services, LLC.

Company Address: 1219 W. University Blvd.

City/State/Zip: Odessa, Texas 79764

Telephone No: (432)230-3763 Fax No:

Sampler Signature: Matthew Green e-mail: mgreen@2m-environmental.com

Project Name: COG Admiral Fed Com 2H Battery

Project #:

Project Loc: Eddy County, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 8C20021

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 Ext TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
21	NT-1 @ 1'			3/16/2018	1340		1	x								S	X							X			X				X
22	ET-1 @ 6"			3/16/2018	1347		1	x								S	X							X			X				X
23	ET-1 @ 1'			3/16/2018	1353		1	x								S	X							X			X				X

Special Instructions:

Relinquished by: Matthew Green	Date 3-20-18	Time 14:11	Received by:	Date 3/20/18	Time 14:11
Relinquished by:	Date 3/20/18	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: °C
Adjusted: °C Factor

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Matt Green
2M Environmental Services, LLC.
1219 W. University Blvd.
Odessa, TEXAS 79764

Project: COG Admiral Fed Com 2H Battery
Project Number: [none]
Location: Eddy County, NM

Lab Order Number: 8D02016

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704516-17-8

Report Date: 04/10/18

2M Environmental Services, LLC.	Project: COG Admiral Fed Com 2H Battery	Fax:
1219 W. University Blvd.	Project Number: [none]	
Odessa TEXAS, 79764	Project Manager: Matt Green	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-2 @ 3'	8D02016-01	Soil	04/02/18 14:00	04-02-2018 14:00

T-2 @ 3'

8D02016-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00112	mg/kg dry	1	P8D0307	04/03/18	04/04/18	EPA 8021B	
Toluene	ND	0.0112	mg/kg dry	1	P8D0307	04/03/18	04/04/18	EPA 8021B	
Ethylbenzene	ND	0.00562	mg/kg dry	1	P8D0307	04/03/18	04/04/18	EPA 8021B	
Xylene (p/m)	ND	0.0225	mg/kg dry	1	P8D0307	04/03/18	04/04/18	EPA 8021B	
Xylene (o)	ND	0.0112	mg/kg dry	1	P8D0307	04/03/18	04/04/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*108 %*	*75-125*		*P8D0307*	*04/03/18*	*04/04/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*91.8 %*	*75-125*		*P8D0307*	*04/03/18*	*04/04/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**250**	1.12	mg/kg dry	1	P8D0502	04/05/18	04/05/18	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P8D0503	04/05/18	04/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.1	mg/kg dry	1	P8D0308	04/03/18	04/03/18	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P8D0308	04/03/18	04/03/18	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P8D0308	04/03/18	04/03/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*81.0 %*	*70-130*		*P8D0308*	*04/03/18*	*04/03/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*83.6 %*	*70-130*		*P8D0308*	*04/03/18*	*04/03/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	04/03/18	04/03/18	calc	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8D0307 - General Preparation (GC)										
Blank (P8D0307-BLK1)				Prepared: 04/03/18 Analyzed: 04/04/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 4-Bromofluorobenzene	*0.0659*		*"*	*0.0600*		*110*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0495*		*"*	*0.0600*		*82.6*	*75-125*			
LCS (P8D0307-BS1)				Prepared: 04/03/18 Analyzed: 04/04/18						
Benzene	0.0952	0.00100	mg/kg wet	0.100		95.2	70-130			
Toluene	0.0989	0.0100	"	0.100		98.9	70-130			
Ethylbenzene	0.119	0.00500	"	0.100		119	70-130			
Xylene (p/m)	0.200	0.0200	"				70-130			
Xylene (o)	0.117	0.0100	"				70-130			
Surrogate: 1,4-Difluorobenzene	*0.0571*		*"*	*0.0600*		*95.1*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0707*		*"*	*0.0600*		*118*	*75-125*			
LCS Dup (P8D0307-BSD1)				Prepared: 04/03/18 Analyzed: 04/04/18						
Benzene	0.0967	0.00100	mg/kg wet	0.100		96.7	70-130	1.59	20	
Toluene	0.104	0.0100	"	0.100		104	70-130	4.75	20	
Ethylbenzene	0.115	0.00500	"	0.100		115	70-130	3.13	20	
Xylene (p/m)	0.201	0.0200	"				70-130		20	
Xylene (o)	0.109	0.0100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	*0.0599*		*"*	*0.0600*		*99.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0651*		*"*	*0.0600*		*108*	*75-125*			
Matrix Spike (P8D0307-MS1)		**Source: 8D02018-01**		Prepared: 04/03/18 Analyzed: 04/04/18						
Benzene	0.0682	0.00110	mg/kg dry	0.110	ND	62.0	80-120			QM-05
Toluene	0.0739	0.0110	"	0.110	ND	67.3	80-120			QM-05
Ethylbenzene	0.0972	0.00549	"	0.110	ND	88.5	80-120			
Xylene (p/m)	0.183	0.0220	"		ND		80-120			
Xylene (o)	0.0977	0.0110	"		ND		80-120			
Surrogate: 1,4-Difluorobenzene	*0.0698*		*"*	*0.0659*		*106*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0726*		*"*	*0.0659*		*110*	*75-125*			

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8D0307 - General Preparation (GC)										
Matrix Spike Dup (P8D0307-MSD1)	**Source: 8D02018-01**			Prepared: 04/03/18 Analyzed: 04/04/18						
Benzene	0.0685	0.00110	mg/kg dry	0.110	ND	62.3	80-120	0.466	20	QM-05
Toluene	0.0761	0.0110	"	0.110	ND	69.2	80-120	2.84	20	QM-05
Ethylbenzene	0.104	0.00549	"	0.110	ND	94.5	80-120	6.57	20	
Xylene (p/m)	0.205	0.0220	"		ND		80-120		20	
Xylene (o)	0.107	0.0110	"		ND		80-120		20	
Surrogate: 4-Bromofluorobenzene	*0.0893*		*"*	*0.0659*		*135*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.0743*		*"*	*0.0659*		*113*	*75-125*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8D0502 - * DEFAULT PREP *** **										
Blank (P8D0502-BLK1)				Prepared & Analyzed: 04/05/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8D0502-BS1)				Prepared & Analyzed: 04/05/18						
Chloride	409	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P8D0502-BSD1)				Prepared & Analyzed: 04/05/18						
Chloride	409	1.00	mg/kg wet	400		102	80-120	0.00245	20	
Duplicate (P8D0502-DUP1)		**Source: 8D04012-01**		Prepared & Analyzed: 04/05/18						
Chloride	638	1.04	mg/kg dry		628			1.49	20	
Duplicate (P8D0502-DUP2)		**Source: 8D02017-04**		Prepared & Analyzed: 04/05/18						
Chloride	285	1.14	mg/kg dry		291			2.00	20	
Matrix Spike (P8D0502-MS1)		**Source: 8D04012-01**		Prepared & Analyzed: 04/05/18						
Chloride	1910	1.04	mg/kg dry	1040	628	123	80-120			
Batch P8D0503 - * DEFAULT PREP *** **										
Blank (P8D0503-BLK1)				Prepared & Analyzed: 04/05/18						
% Moisture	ND	0.1	%							
Duplicate (P8D0503-DUP1)		**Source: 8D03002-03**		Prepared & Analyzed: 04/05/18						
% Moisture	8.0	0.1	%		7.0			13.3	20	
Duplicate (P8D0503-DUP2)		**Source: 8D04008-01**		Prepared & Analyzed: 04/05/18						
% Moisture	8.0	0.1	%		9.0			11.8	20	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P8D0308 - General Preparation (GC)										
Blank (P8D0308-BLK1)				Prepared & Analyzed: 04/03/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*69.2*		*"*	*50.0*		*138*	*70-130*			*S-GC*
LCS (P8D0308-BS1)				Prepared & Analyzed: 04/03/18						
C6-C12	941	25.0	mg/kg wet	1000		94.1	75-125			
>C12-C28	969	25.0	"	1000		96.9	75-125			
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*63.3*		*"*	*50.0*		*127*	*70-130*			
LCS Dup (P8D0308-BSD1)				Prepared & Analyzed: 04/03/18						
C6-C12	981	25.0	mg/kg wet	1000		98.1	75-125	4.17	20	
>C12-C28	1000	25.0	"	1000		100	75-125	3.45	20	
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*57.8*		*"*	*50.0*		*116*	*70-130*			
Duplicate (P8D0308-DUP1)	**Source: 8D02017-17**			Prepared: 04/03/18 Analyzed: 04/04/18						
C6-C12	14.9	26.6	mg/kg dry		11.6			24.5	20	QM-03
>C12-C28	ND	26.6	"		ND				20	
Surrogate: 1-Chlorooctane	*72.2*		*"*	*106*		*67.8*	*70-130*			*S-GC*
Surrogate: o-Terphenyl	*38.9*		*"*	*53.2*		*73.2*	*70-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-03	Multiple analyses indicate the percent recovery exceeds the Quality Control acceptance criteria due to a matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 4/10/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Matt Green
Company Name: 2M Environmental Services, LLC.
Company Address: 1219 W. University Blvd.
City/State/Zip: Odessa, Texas 79764
Telephone No: (432)230-3763 Fax No:
Sampler Signature: e-mail: mgreen@2m-environmental.com

Project Name: COG Admiral Fed COM #2H
Project #:
Project Loc: Eddy County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 8D02016

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW= Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TOTAL: TPH: 8015M	TPH: TX 1005 Ext	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	T-2 @ 3'						1	x								S	X										X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Matt Green	4-2-18	2:00pm	Tori Mishler	4-2-18	2
Tori Mishler	4-2-18	250			
			Received by PBEL: CK	4/2/18	1400

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 6.1 °C
Adjusted: 6.5 °C Factor 1.1

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 April 3, 2017

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

Release Notification and Corrective Action

nAB1807829722

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC OGRID #229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: **Admiral Federal Com #002H**	Facility Type: Tank Battery

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42820

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	28	25S	29E	190	South	1,980	East	Eddy

Latitude 32.0940460962434 **Longitude** -103.9871068537 NAD83

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 80 bbl.	Volume Recovered: 18 bbl
Source of Release: Flowline	Date and Hour of Occurrence March 8, 2018 9:00am	Date and Hour of Discovery March 8, 2018 9:00am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Crystal Weaver – NMOCD; Mike Bratcher – NMOCD; Shelley Tucker – BLM	
By Whom? Dakota Neel	Date and Hour: March 8, 2018 11:41am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was due to a broken nipple on the water discharge transducer. The nipple was replaced.

Describe Area Affected and Cleanup Action Taken.*

The release remained on location. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area evaluated for any possible impact from the release and will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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: DeAnn Grant	OIL CONSERVATION DIVISION
Printed Name: DeAnn Grant	Approved by Environmental Specialist:
Title: HSE Administrative Assistant	Approval Date: 3/19/18 Expiration Date: N/A
E-mail Address: agrant@concho.com	Conditions of Approval: see attached Attached
Date: March 12, 2018 Phone: 432-253-4513	

* Attach Additional Sheets If Necessary

3/19/18 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **3/13/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4604 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 4/13/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: DeAnn Grant <agrant@concho.com>
Sent: Tuesday, March 13, 2018 9:27 AM
To: Weaver, Crystal, EMNRD; stucker@blm.gov
Cc: Sheldon Hitchcock; Dakota Neel; Rebecca Haskell; DeAnn Grant; Bratcher, Mike, EMNRD; jamos@blm.gov
Subject: (C-141 Initial) Admiral Federal Com #002H Battery 3-8-18 (30-015-42820)
Attachments: (C-141 Initial) Admiral Federal Com #002H Battery 3-8-18 (30-015-42820).pdf

Ms. Weaver/Ms. Tucker,

Please find the attached Initial C-141 for your consideration. If you have any questions or concerns please contact me.

Thank you,

DeAnn Grant
HSE Administrative Assistant
agrant@concho.com
COG Operating LLC
600 W Illinois Avenue | Midland, TX 79701
Direct: 432-688-4513 | Main: 432.683.7443
CONCHO

Bratcher, Mike, EMNRD

From:	Dakota Neel <DNeel2@concho.com>
Sent:	Thursday, March 8, 2018 11:41 AM
To:	Weaver, Crystal, EMNRD; stucker@blm.gov; Bratcher, Mike, EMNRD
Cc:	James_Amos@blm.gov; Robert McNeill; Rebecca Haskell; Sheldon Hitchcock; DeAnn Grant
Subject:	(Notification) Admiral Federal Com #002H 3-8-2018 (30-015-42820)

Ms. Weaver/Ms. Tucker,

COG Operating, LLC (OGRID # 229137) is reporting a release at the ADMIRAL FEDERAL COM #002H (30-015-42820)

Release Location: Unit O, Section 28, Township 25S, Range 29E Lat/Long: 32.0940460962434,-103.9871068537

This release occurred on March 8, 2018.

Volume Released: >25bbls of produced water.
Volume Recovered: Ongoing

This release remained on location. This area is being evaluated and a C-141 will be submitted. If you have any questions please contact me.

Thank you,

Dakota Neel
HSE Coordinator
COG Operating LLC
Cell: 432-215-2783
dneel2@concho.com

2407 Pecos Ave.
Artesia , NM 88210