

July 22, 2016

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

Re: THO State #1

30-015-34515

Sec. 34, T17S-R28E Eddy County, NM

Ms. Heather Patterson,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated January 5, 2016.

Background

The release was caused by a tank overflow during a storm that prevented accessibility to the location. Once roads were passable, vacuum trucks were dispatched to recover the standing fluid of which 18 barrels of the 20 barrels of oil released were recovered. The initial cleanup consisted of a 6" excavation within the unlined facility.

Groundwater

Base on the information obtained from of the Chevron-Texaco maps, the release area would be classified at a site ranking of **Zero** with depth to groundwater at greater than 100' (Sec. 34, T17-R28E).

Soil Assessment and Analytical Results

Sample points for the release area are denoted as an S on the attached site diagram and on the sample result summary table. The points chosen for sampling were based on the associated safety hazards within the facility and in the pasture. BTEX and TPH results are elevated at varying depths for all sample points and will be excavated as described in the work plan section. The analytical results are summarized on the attached site diagram. A copy of the analytical results is attached for your consideration.

Work Plan

COG Operating LLC proposes the following excavations for each sample point:

- **S1-** Excavate to a depth of 6'.
- S2- Excavate to a depth of 1.5'
- S3- Excavate to a depth of 3.5', depending on samples taken at time of excavation. The area will be further delineated during excavation and submitted to the NMOCD during closure of the release. If sample results prove to be high during excavation, the area will be excavated to the depth at which sample results fall within RRAL's for a site ranking of Zero.
- **S4-** The area will be excavated to a depth of 6" to remove any staining.
- S5- The area will be excavated to a depth of 1.5'. The area had been excavated to a depth of 6" during the initial scrape. This would bring the total excavation to a depth of 2'.
- S6- The area will be excavated to a depth of 1'. The area had been excavated to a depth of 6" during the initial scrape. This would bring the total excavation to a depth of 1.5'.

If there are no objections or further stipulations, COG Operating LLC would like to continue the remediation process based on approval of this work plan. Please feel free to contact me with any questions or concerns at (432) 683-7443.

Sincerely,

Robert Grubbs

Zex st

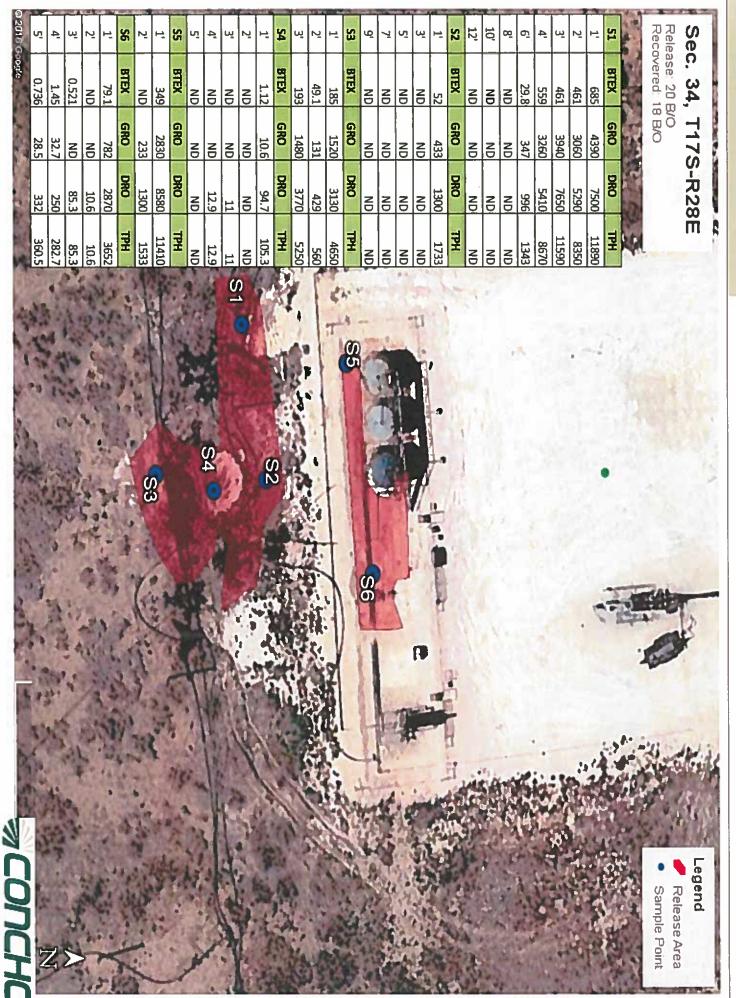
Senior Environmental Coordinator

Enclosure(s): Site Diagram

Sample Summary Table Analytical Results

C-141 Initial (Copy)

THO State #001





March 15, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: THO STATE OIL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 03/09/16 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg & Kune

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: S1 - 1' (H600513-01)

BTEX 8021B	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	53.4	2.00	03/11/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	299	2.00	03/11/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	133	2.00	03/11/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	199	6.00	03/11/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	685	12.0	03/11/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	105	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	4390	50.0	03/10/2016	ND	190	94.9	200	8.64	
DRO >C10-C28	7500	50.0	03/10/2016	ND	186	93.2	200	12.1	
Surrogate: 1-Chlorooctane	167	% 35-147	7						
Surrogate: 1-Chlorooctadecane	188	% 28-171	•						

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*=Accredited Analyte

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COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

02/1

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: \$1 - 2' (H600513-02)

BTEX 8021B	mg/l	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	28.8	2.00	03/11/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	195	2.00	03/11/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	94.3	2.00	03/11/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	144	6.00	03/11/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	461	12.0	03/11/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	106 %	6 73.6-14	0						
TPH 8015M	mg/l	kg	Anaiyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	3060	50.0	03/10/2016	ND	190	94.9	200	8.64	
DRO >C10-C28	5290	50.0	03/10/2016	ND	186	93.2	200	12.1	
Surrogate: 1-Chlorooctane	147 9	6 35-147							
Surrogate 1-Chlorooctadecane	1529	6 28-171	•						

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Carry thomas



COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: Reported: 03/09/2016

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1 - 3' (H600513-03)

BTEX 8021B	mg/	kg	Analyze	d By: CK				·····	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	22.9	2.00	03/11/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	193	2.00	03/11/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	100	2,00	03/11/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	145	6.00	03/11/2016	ND	4.99	83.2	6,00	9.98	
Total BTEX	461	12.0	03/11/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	105 %	á 73.6-14	0						
TPH 8015M	mg/	kg	Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	3940	50.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	7650	50.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate 1-Chlorooctane	165 %	6 35-147	,						
Surrogate: 1-Chlorooctadecane	1739	6 28-171	1						

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COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S1 - 4' (H600513-04)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	36.5	2.00	03/11/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	239	2.00	03/11/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	117	2.00	03/11/2016	ND	1.62	8.08	2.00	8.89	
Total Xylenes*	165	6,00	03/11/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	559	12.0	03/11/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	103 9	% 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	3260	50.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	5410	50.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate 1-Chlorooctane	147	% 35-147	,						
Surrogate: 1-Chlorooctadecane	154	% 28-171							

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COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

NOT GIVEN

Sample ID: S1 - 6' (H600513-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.355	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	7.99	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	7.98	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	13,5	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	29.8	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	135	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	347	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	996	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate: 1-Chlorooctane	111	% 35-14	7		7				
Surrogate: 1-Chlorooctadecane	105	% 28-171							

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Calley I trans



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name: Project Number: THO STATE OIL BATTERY

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1 - 8' (H600513-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	0.147	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	0.086	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	<0.150	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	<0.300	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	105 9	6 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate: 1-Chlorooctane	84.3	% 35-147	7						
Surrogate: 1-Chlorooctadecane	91.9	28-171	1						

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Carried Thomas



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

03/09/2016

Reported: Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S1 - 10' (H600513-07)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	<0.050	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	<0.050	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	<0.150	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	<0.300	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	104	73.6-14	10						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate: 1-Chlorooctane	90.3	% 35-14	7				=140=311		
Surrogate: 1-Chlorooctadecane	98.7	% 28-171							

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Cellen L. Arens



COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 03/09/2016

03/15/2016

Project Name: Project Number: THO STATE OIL BATTERY

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S1 - 12' (H600513-08)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	<0.050	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	<0.050	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	<0.150	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	<0.300	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 5	% 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate: 1-Chlorooctane	69.7	% 35-147							
Surrogate 1-Chlorooctadecane	74.8	% 28-171							

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COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S2 - 1' (H600513-09)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.860	0.200	03/11/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	13.7	0.200	03/11/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	19.8	0.200	03/11/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	17.6	0.600	03/11/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	52.0	1.20	03/11/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	116.9	73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	433	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	1300	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate 1-Chlorooctane	121 9	% 35-14	,						
Surrogate 1-Chlorooctadecane	107 9	% 28-17	1						

Cardinal Laboratories

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COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

03/03/2010

Reported: Project Name: 03/15/2016

Project Number

THO STATE OIL BATTERY

Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S2 - 3' (H600513-10)

BTEX 80218	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	0.131	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	0.115	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	<0.150	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	<0.300	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	193	96.5	200	0.498	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	195	97.5	200	3.86	
Surrogate: 1-Chlorooctane	86.2	% 35-14	7						
Surrogate 1-Chlorooctadecane	93.9	% 28-171	1						

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Celen I trains



COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported: Project Name: 03/15/2016 THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2 - 5' (H600513-11)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2016	ND	1.75	87.7	2.00	10.6	
Toluene*	<0.050	0.050	03/10/2016	ND	1.79	89.7	2.00	7.59	
Ethylbenzene*	<0.050	0.050	03/10/2016	ND	1.62	80.8	2.00	8.89	
Total Xylenes*	<0.150	0.150	03/10/2016	ND	4.99	83.2	6.00	9.98	
Total BTEX	<0.300	0.300	03/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	106	% 73.6-14	0						
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	<10.0	10,0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	88.7	% 35-147	7						
Surrogate: 1-Chlorooctadecane	99.1	% 28-171	,						

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Calley I trina



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2 - 7' (H600513-12)

BTEX 80218	mg,	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99.9	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	alyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	86.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	94.8	% 28-171							

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Colony Z. treme -



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2 - 9' (H600513-13)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99.9	% 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	80.2	% 35-147							
Surrogate: 1-Chlorooctadecane	87.7	% 28-171							

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Carry I trong



COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name: Project Number: THO STATE OIL BATTERY

Project Location:

NONE GIVEN

Sampling Date:

03/04/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S3 - 1' (H600513-14)

BTEX 8021B	mg,	'kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Anatyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.52	1.00	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	65.7	1.00	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	47.2	1.00	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	68.3	3.00	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	185	6.00	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	d By: CK					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1520	50.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	3130	50.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	170	% 35-147	,						
Surrogate 1-Chlorooctadecane	134	% 28-171	•						

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Ceren I treens



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

Date: 03/04/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S3 - 2' (H600513-15)

BTEX 8021B	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.521	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	14.6	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	12.5	0.050	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	21.5	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	49.1	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	132 5	73.6-14	0						
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	131	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	429	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	99.3	% 35-14	,						
Surrogate: 1-Chlorooctadecane	101	% 28-17	1						

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Calley I trans-



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name: Project Number: THO STATE OIL BATTERY

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/04/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S3 - 3' (H600513-16)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.90	1.00	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	68.7	1.00	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	57.1	1,00	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	63,5	3.00	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	193	6.00	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104 9	% 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: CK					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1480	50.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	3770	50.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	175	% 35-14	7						
Surrogate 1-Chlorooctadecane	140 9	% 28-17 i	1						

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Ceren Z treens -



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

03/09/2016

Sampling Date:

03/07/2016

Reported:

03/15/2016

Sampling Type:

Soil

Project Name:

THO STATE OIL BATTERY

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sample ID: S4 - 1' (H600513-17)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	0.295	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	0.215	0.050	03/14/2016	ND	1.70	85.0	2,00	3.65	
Total Xylenes*	0.614	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	1.12	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101 9	6 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	10.6	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	94.7	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	92.5	% 35-147	,						
Surrogate: 1-Chlorooctadecane	102 %	6 28-17	1						

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Cellen L. Armen



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

e: 03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact Jodi Henson

Sample Received By:

Sample ID: S4 - 2' (H600513-18)

BTEX 8021B	mg/kg		Analyze	Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2,00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99,9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	93.6	% 35-147	7				51191.00		
Surrogate: 1-Chlorooctadecane	105	% 28-17	1						

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COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported: Project Name: 03/15/2016 THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S4 - 3' (H600513-19)

BTEX 8021B	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	98.7	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	11.0	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	88.1	% 35-147	,						
Surrogate: 1-Chlorooctadecane	95,9	% 28-171	1						

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COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

Sampling Date:

03/07/2016

Reported:

03/15/2016

Sampling Type:

Soil

Project Name:

THO STATE OIL BATTERY

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: S4 - 4' (H600513-20)

BTEX 8021B	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	< 0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	99.2	% 73.6-14	0						
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	12.9	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate 1-Chlorooctane	92,3	% 35-147	,						
Surrogate 1-Chlorooctadecane	94.9	% 28-171	•						

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COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

03/09/20

Reported: Project Name: 03/15/2016

Project Number:

THO STATE OIL BATTERY

Project Location:

NONE GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S4 - 5' (H600513-21)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.050	0.050	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.70	85.0	2,00	3.65	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	100	% 73.6-14	0			-			
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	<10.0	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	93.4	% 35-147	,						
Surrogate: 1-Chlorooctadecane	106	% 28-17 i	1						

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DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S5 - 1' (H600513-22)

BTEX 8021B	mg,	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	4.83	2.00	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	112	2.00	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	89.1	2.00	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	142	6.00	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	349	12.0	03/14/2016	NĐ					
Surrogate: 4-Bromofluorobenzene (PIE	103	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	d By: CK					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2830	100	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	8580	100	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	172	% 35-14	7						
Surrogate: 1-Chlorooctadecane	196	% 28-171	,						

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Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S5 - 2' (H600513-23)

BTEX 8021B	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	03/14/2016	ND	1.92	96.1	2.00	3.74	
Toluene*	<0.200	0.200	03/14/2016	ND	1.87	93.7	2.00	3.94	
Ethylbenzene*	0.319	0.200	03/14/2016	ND	1.70	85.0	2.00	3.65	
Total Xylenes*	<0.600	0.600	03/14/2016	ND	5.30	88.4	6.00	4.18	
Total BTEX	<1.20	1.20	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	98.8	% 73.6-14	0						
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	233	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	1300	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	120	% 35-14	,						
Surrogate: 1-Chlorooctadecane	1145	% 28-17.	1						

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COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact Jodi Henson

Sample Received By:

Sample ID: S6 - 1' (H600513-24)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	03/14/2016	ND	2.03	101	2.00	2.02	
Toluene*	18.2	0.500	03/14/2016	ND	1.98	99.0	2.00	2.28	
Ethylbenzene*	21.8	0.500	03/14/2016	ND	1.82	91.0	2.00	1.48	
Total Xylenes*	39.1	1.50	03/14/2016	ND	5.59	93.2	6.00	2.13	
Total BTEX	79.1	3.00	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	1099	6 73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: CK					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	782	50.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	2870	50.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	156 9	6 35-147	7						
Surrogate: 1-Chlorooctadecane	138 9	6 28-171	1						

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COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

03/09/2016

Sampling Date:

03/07/2016

Reported:

03/15/2016

Sampling Type:

Soil

Project Name:

THO STATE OIL BATTERY

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: S6 - 2' (H600513-25)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	03/14/2016	ND	2.03	101	2.00	2.02	
Toluene*	< 0.050	0.050	03/14/2016	ND	1.98	99.0	2.00	2.28	
Ethylbenzene*	<0.050	0.050	03/14/2016	ND	1.82	91.0	2.00	1,48	
Total Xylenes*	<0.150	0.150	03/14/2016	ND	5.59	93.2	6.00	2.13	
Total BTEX	<0.300	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	99.3	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	10.6	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate 1-Chlorooctane	99.4	% 35-147	,			-17 -174-1	10-10-10-10-10-10-10-10-10-10-10-10-10-1		
Surrogate: 1-Chlorooctadecane	109	% 28-171	1						

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COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 03/09/2016

03/15/2016

Project Name: Project Number: THO STATE OIL BATTERY

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

By: Jodi Henson

Sample ID: S6 - 3' (H600513-26)

BTEX 8021B	mg,	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	2.03	101	2.00	2.02	
Toluene*	<0.050	0.050	03/14/2016	ND	1.98	99.0	2.00	2.28	
Ethylbenzene*	0.131	0.050	03/14/2016	ND	1.82	91.0	2.00	1,48	
Total Xylenes*	0.391	0.150	03/14/2016	ND	5.59	93.2	6.00	2.13	
Total BTEX	0.521	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101	% 73.6-14	0						
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	85.3	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	101	% 35-14	,			٥			
Surrogate 1-Chlorooctadecane	112	% 28-17	1						

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COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

03/09/2016

Reported: Project Name: 03/15/2016

Project Number:

THO STATE OIL BATTERY

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: S6 - 4' (H600513-27)

mg/	kg	Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.050	0.050	03/14/2016	ND	2.03	101	2.00	2.02	
< 0.050	0.050	03/14/2016	ND	1.98	99.0	2.00	2.28	
0.249	0.050	03/14/2016	ND	1.82	91.0	2.00	1.48	
1.20	0.150	03/14/2016	ND	5.59	93.2	6.00	2.13	
1.45	0.300	03/14/2016	ND					
106 9	% 73.6-14	0						
mg/	'kg	Analyze	d By: CK					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
32.7	10.0	03/11/2016	ND	179	89.3	200	1.13	
250	10.0	03/11/2016	ND	182	90.8	200	2.59	
105 5	% 35-147	,						
108 5	% 28-171							
	Result <0.050	<0.050 0.050 <0.050 0.050 0.249 0.050 1.20 0.150 1.45 0.300 106 % 73.6-14 mg/kg Result Reporting Limit 32.7 10.0 250 10.0	Result Reporting Limit Analyzed <0.050 0.050 03/14/2016 <0.050 0.050 03/14/2016 0.249 0.050 03/14/2016 1.20 0.150 03/14/2016 1.45 0.300 03/14/2016 106 % 73.6-140 mg/ky Analyzed Result Reporting Limit Analyzed 32.7 10.0 03/11/2016 250 10.0 03/11/2016	Result Reporting Limit Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank BS <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

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Received:

03/09/2016

Reported:

03/15/2016

Project Name:

THO STATE OIL BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/07/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S6 - 5' (H600513-28)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2016	ND	2.03	101	2.00	2.02	
Toluene*	<0.050	0.050	03/14/2016	ND	1.98	99.0	2.00	2.28	
Ethylbenzene*	0.165	0.050	03/14/2016	ND	1.82	91.0	2.00	1.48	
Total Xylenes*	0.571	0.150	03/14/2016	ND	5.59	93.2	6.00	2.13	
Total BTEX	0.736	0.300	03/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103 :	% 73.6-14	0						
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	28.5	10.0	03/11/2016	ND	179	89.3	200	1.13	
DRO >C10-C28	332	10.0	03/11/2016	ND	182	90.8	200	2.59	
Surrogate: 1-Chlorooctane	90.5	% 35-14	7						
Surrogate: 1-Chlorooctadecane	104	% 28-171	1						

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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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
ü	Chloride by SM4500CI-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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101 East Marland, Hobbs, NM 88240

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atrujillo@concho.com

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

	(3/3) 353-2320 FMA (3/3) 353-24/0				- 1	
Company Name:	COG Operating LLC		BILL TO		ANALYSIS KEW	XII CORVI
Project Manager:	Dakota Neel		P.O. #:			
Address: 2208 V	2208 West Main		Company: COG Operating LLC	ling LLC		
City: Artesia	State: NM	Zip 88210	Attn: Robert McNeill	e		
Phone #:	(575) 748-6930 Fax #:		Address: 600 W Illinois	nois		w.t
Project #:	Project Owner:		City: Midland			
Project Name: Th	THO State Oil Battery		State: TX Zip: 79701			
Project Location:			Phone #: (432) 221-0388			
Sampler Name:	Dakota Neel					
Lab I.D.	Sample I.D.	DINTAINERS DUNDWATER STEWATER L RIN	HER: D/BASE / COOL HER: COOL	EX H	NATURE NA	
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Relinquished By: DAKC	d By: DakOTA NEEL Time:	Received By:		Phone Result:	□ No Add'l Fax #:	
Relinquished By:	Date: 38	Received By:	any teller	dneel2@concho com		
A A THE PROPERTY OF PERSONS ASSESSED.						

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lcarrasco@concho.com atrujillo@concho.com

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101 East Marland, Hobbs, NM 88240

	Relinquished By:	V 7	analyses All claims including service. In no event shall Card affligion or successors are all	PLEASE NOTE: Labbly and C		AV					\ <u>-</u>			Lab I.D.		FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name: THO State Oil Battery	Project #:	Phone #: (City: Artesia	Address: 2208 W	Project Manager:	Company Name:	(1)
			prolyses. All claims including three for negligence and any other cause entablished that be occurred to recommend that is utilistatives service. In no event shall Cardinal be liable for including to consequential damages, including whole limitation, business entemptores, based upon any of the above stated reasons or otherwise. In no event shall Cardinal be liable for reclaims to the performance of services horsunder by Cardinal reparties of whether such claim a based upon any of the above stated reasons or otherwise. Phone Result:	PLEASE NOTE: Labely and Danhages Cardmal's labely and clark's actions in smell by the claim to the property of any tiam arrang whether based in contract or but, shall be smelled to the amount paid by the claim to the property and received by Cardmal within 30 days after completion of the significant paid in the property of the property of the significant paid in the property of the property of the significant paid in the signi					20-2	53-2	S3-1			Sample I.D.			Dakota Neel		O State Oil Battery		(575) 748-6930		2208 West Main	Dakota Neel	COG Operating LLC	(575) 393-2326 FAX (575) 393-2476
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Project Manager:	Dakota Neel			P.O. #:							_		_
Address: 2208	2208 West Main			Company:	COG Operating LLC	ling LLC							
5	State: NM	Zip	88210	Attn:	Robert McNeill	eill							
Phone #:	(575) 748-6930 Fax #:			Address:	600 W Illinois	POIS						_	
Project #:	Project Owner:	••		City:	Midland								
ame:	THO State Oil Battery		1	State: TX	Zip: 79701	_							
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FOR LAB USE ONLY	:		MATRIX	PRESERV.	SAN	SAMPLING							
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roject #:	Project Owner:	••			City:		Midland							- 0					
ame:	THO State Oil Battery				State: TX		Zip: 79701	22					-						
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FOR LAB USE DIKLY				MATRIX	7	PRESERV	MAG	DAMPLING					-	2					
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101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

(575) 393-2326 FAX (575) 393-2476	5				- 1
Company Name: COG Operating LLC		BILL TO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	ANALYSIS REQUEST
Project Manager: Dakota Neel		P.O. #:			
Address: 2208 West Main		Company: COG Operating LLC	ling LLC		
된	Zip 88210	Attn: Robert McNeill	ė		
(i)		Address: 600 W Illinois	Stoui		
45		City: Midland	k		
Project Name: THO State Oil Battery		State: TX Zip: 79701			
Project Location:		Phone #: (432) 221-0388			
Sampler Name: Dakota Neel					
	MATRIX	PRESERV. SAN	SAMPLING		
I.D. Sample I.D.	G)RAB OR (C)OMF CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE ICE / COOL OTHER: DATE	BTEX	TPH Chloride	
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District 1
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rto Brazos Road, Aztee, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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

			Rele	ase Notifica	ation	and Co	rrective A	ction				
					(OPERAT	OR		■ Initia	l Report		Final Report
	трапу: СОС						pert McNeill					
	0 West Illinoi			1 TX 79701	_	_	lo. 432-230-007	77				
Facility Nar	ne: THOST	AIE #00	ı			acility Typ	e: Battery					
Surface Ow	ner: Fee			Mineral O	wner: S	tate			API No.	30-015-3	4515	
<i></i>						OF REL		,				
Unit Letter E	Section To	ownship 17S	Range 28E	Feet from the 2310		South Line Jorth	Feet from the 990		Vest Line Vest		Count Eddy	-
				1	Latitud	e Longitud	e					
				NAT	URE (OF RELI	EASE					
Type of Rele	ase:					Volume of			Volume R			
Oil Source of Re	losco:					20 bbls Oil	our of Occurrence	49.	Date and I	lour of Dis	CUNCEN	
Tank Over fl						1/5/2016 2:			1/5/2016			
Was Immedi	ate Notice Give		Yes 🔲	No 🛛 Not Re	quired	If YES, To	Whom?					
By Whom?						Date and H	our:					
Was a Water	course Reached		V [S]	No		If YES, Vo	lume Impacting t	the Wate	rcourse.			
			Yes 🗵									
If a Watercoo	irse was Impac	ted, Descri	be Fully.*									
												12
Describe Cau	se of Problem	and Remed	lial Action	Taken.*						N. A. V.	70	
	_	a tank ove	rflowed di	iring a storm that	caused o	accessibility (to be limited. Vac	cuum tru	icks were di	ispatched to	recove	rell
standing fluid.												
Describe Area Affected and Cleanup Action Taken *												
Describe Area Affected and Cleanup Action Taken.*												
Describe Area Affected and Cleanup Action Taken.* This release occurred within the earthen containment. Concho will have the spill site sampled to delineate any possible of we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.										amination t	from the	release and
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											ules and	
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger											idanger	
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											other	
federal, state, or local laws and/or regulations.											1	
OIL CONSERVATION DIVISION												
Signature:	Polosk	6 h	ben	ė,								
Date of No.						Approved by	Environmental S	Specialis	t:			
Frinted Nam	e: Robert McN	<u>veill</u>										
Title: Enviro	nmental Manag	ger			- 4	Approval Da	(c:		Expiration	Date:		
E-mail Addr	ess: rmcneill@	concho.cor	n			Conditions o	f Approval			Attached	: 🗆	
Date: Janua	ry 19, 2016	Phone	: 432-23(0-0077			201 DECEMBER -					