SITE INFORMATION

	Report Ty	vpe: Work Pl	an 1RP-3	231 / N	014224	130004	P		
General Site In	formation:								
Site:		MCA 1-A Header Release							
Company:		ConocoPhillips			-	-			
	ship and Range		Sec. 30	T 17S	R 32 E				
Lease Number	7	Associated API	No. 30-025-061	15					
County:		Lea			1				
GPS:			32.806853°			-103.8	802790°		
Surface Owner		Federal							
Mineral Owner Directions:		Federal					Maljamar Road fo		
		lease road, and	4.62 miles. Turn right onto NM-529, and head west for 2.54 miles. Turn right onto lease road, and head north for 0.53 miles. Turn right and head east for 165 feet. Arrive at location.						
Date Released:		3/14/2012 Produced Water	/Oil						
Date Released: Type Release: Source of Conta	amination:	Produced Water Transite Product							
Date Released: Type Release: Source of Conta Fluid Released:	amination:	Produced Water Transite Product 47 bbls							
Release Data: Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovere	amination:	Produced Water Transite Product							
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovere	amination: : ed:	Produced Water Transite Product 47 bbls							
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovere Official Comm	amination: : ed:	Produced Water Transite Product 47 bbls			Christian M	. Llull			
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovere Official Comm Name:	amination: ed: unication:	Produced Water Transite Product 47 bbls 0 bbls			Christian M Tetra Tech	. Llull			
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovera Official Comm Name: Company:	amination: ed: unication: Marvin Soriwei	Produced Water Transite Product 47 bbls 0 bbls			Tetra Tech		Texas Highway		
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovera Official Comm Name: Company:	amination: ed: unication: Marvin Soriwei Conoco Phillips - I	Produced Water Transite Product 47 bbls 0 bbls			Tetra Tech	Capital of	Texas Highway		
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recoverd Official Comm Name: Company: Address:	amination: ed: unication: Marvin Soriwei Conoco Phillips - I 935 N. Eldridge P	Produced Water Transite Product 47 bbls 0 bbls			Tetra Tech 8911 North Building 2, S	Capital of Suite 2310			
Date Released: Type Release: Source of Conta Fluid Released: Fluids Recovere Official Comm Name: Company: Address: City:	amination: ed: unication: Marvin Soriwei Conoco Phillips - I 935 N. Eldridge P Houston, Texas 7	Produced Water Transite Product 47 bbls 0 bbls			Tetra Tech 8911 North Building 2, 9 Austin, Texa	Capital of Suite 2310 as			
Date Released: Type Release: Source of Conta Fluid Released:	amination: ed: unication: Marvin Soriwei Conoco Phillips - I 935 N. Eldridge P Houston, Texas 7	Produced Water Transite Product 47 bbls 0 bbls			Tetra Tech 8911 North Building 2, S	Capital of Suite 2310 as			

Site Characterization						
Shallowest Depth to Groundwater:	78' below surface					
Impact to groundwater or surface water:	No					
Extents within 300 feet of a watercourse:	No					
Extents within 200 feet of lakebed, sinkhole, or playa la	No					
Extents within 300 feet of an occupied structure:	No					
Extents within 500 horizontal feet of a private water well	No					
Extents within 1000 feet of any water well or spring:	No					
Extents within incorporated municipal well field:	No					
Extents within 300 feet of a wetland:	No					
Extents overlying a subsurface mine:	No					
Karst Potential:	Low					
Extents within a 100-year floodplain:	No					
Impact to areas not on a production site:	No					

Recommended Remedial Action Levels (RRALs)						
Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides		
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg		
- 5.5	5 5 5	,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		



November 24, 2020

District Supervisor Oil Conservation Division, District 1 1625 North French Drive Hobbs, New Mexico 88240

Re: Release Characterization and Remediation Work Plan ConocoPhillips MCA 1-A Header Release Unit Letter G, Section 30, Township 17 South, Range 32 East Lea County, New Mexico 1RP-3231 Incident ID# NTO1422438684

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from a 6" transite production line northeast of the Maljamar Cooperative Agreement (MCA) 1-A Header. The release footprint is located in Public Land Survey System (PLSS) Unit Letter G, Section 30, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.806853°, -103.802790°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on March 14, 2012. The release occurred as the result of a failed 6" transite production line and reportedly encompassed an area of 2,125 square feet. Approximately 30 barrels (bbls) of produced water and 17 bbls of oil were released, of which 0 bbls of fluid were reported recovered. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on August 12, 2014. The release was subsequently assigned the Remediation Permit (RP) number 1RP-3231. The incident ID for this release is NTO1422438684.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells located within an 800-meter (approximately ½-mile) radius of the release location. However, there are two water wells within a 3,000 meter radius with an average depth to groundwater at 78 feet below ground surface (bgs). The site characterization data is included in Appendix B.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action

Release Characterization and Remediation Work Plan November 24, 2020

ConocoPhillips

levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Constituent	RRAL
Chloride (0-4 ft bgs)	600 mg/kg
Chloride (>4 ft bgs)	10,000 mg/kg
ТРН	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Based on the site characterization, the RRALs for the Site are as follows:

PREVIOUS ASSESSMENTS AND REPORTING

The release was previously assessed by Diamondback Disposal Services, Inc. (Diamondback) in June and October 2012 and Rice Environmental Consulting & Safety (RECS) in June 2014. Based on the results of the above-mentioned site assessments, RECS submitted a Corrective Action Plan (CAP) to NMOCD and the Bureau of Land Management (BLM) on behalf of COP on August 13, 2014. The CAP was approved by the NMOCD and BLM via email on August 13, 2014. The CAP and approval emails are included in Appendix C. The analytical results associated with the sampling events conducted by Diamondback and RECS are summarized in Table 1. The sample locations are shown on Figure 3.

ADDITIONAL SITE ASSESSMENT

In order to confirm the results of the previous soil investigations performed by Diamondback and RECS, Tetra Tech personnel conducted an additional soil investigation on July 29 and August 13, 2020 on behalf of COP. A total of two (2) borings (BH-1 and BH-2) were installed within the release extent to depths of 27 and 30 ft. bgs using an air rotary drilling rig in July 2020. Additionally, in August 2020, six (6) borings (H 20-1 through H 20-6) were installed around the perimeter of the release extent to a depth of 4 ft. bgs to horizontally delineate the release using a hand auger. Figure 4 depicts the approximate release extent and both the July and August 2020 soil boring locations. Boring logs from the July and August 2020 assessment activities are included in Appendix D.

A total of forty (40) samples were collected from the eight (8) borings and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B.

SUMMARY OF SAMPLING RESULTS

Results from the July and August 2020 soil sampling event are summarized in Table 2. The analytical results associated with BH-1 and BH-2 sample locations confirmed the results of the previous soil investigations. The analytical results from the samples collected from these locations were over applicable RRALs for chloride and TPH near the surface within the release footprint. The results associated with perimeter sample locations H-20-1 through H-20-6 were below Site RRALs for chloride, TPH and BTEX. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

REMEDIATION WORK PLAN

in accordance with the approved CAP and based on the analytical results from the additional assessment, COP proposes to remove the impacted material within the release extent as shown in Figure 5. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 4 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the Site RRALs. The central portion of the release extent that contains steel surface lines will be hand-dug to a depth of 4 feet or the maximum extent practicable and heavy equipment will come no more than 3 ft from any pressurized lines.

Release Characterization and Remediation Work Plan November 24, 2020

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. In accordance with the previously approved 2014 CAP, a 20-mil reinforced poly liner will be installed and properly seated at the base of the excavation. Once analytical results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 535 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, COP proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Eight (8) confirmation floor samples and thirteen (13) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 3,600 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to Pace Laboratories for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0). Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade.

SITE RECLAMATION AND RESTORATION PLAN

Post-remediation, the backfilled areas will be seeded (in the next first favorable growing season) to aid in revegetation. Based on the soils at the site, the New Mexico State Land Office (NMSLO) Sandy (S) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a handheld broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix F. Final reclamation will create a landform that approximates and blends in with the surrounding landform, while controlling erosion.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 120 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 338-2861 or Greg at (432) 682-4559.

Sincerely, Tetra Tech, Inc.

Christian M. Llull, P.G. Project Manager

cc: Mr. Marvin Soriwei, RMR – ConocoPhillips Mr. Charles Beauvais, GPBU - ConocoPhillips

Greg W. Pope, P.G. Program Manager

Release Characterization and Remediation Work Plan November 24, 2020

ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 Overview Map
- Figure 2 Site Location/Topographic Map
- Figure 3 Approximate Release Extent and Previous Boring Locations Map
- Figure 4 Approximate Release Extent and Additional Assessment Map
- Figure 5 Proposed Remediation Extent
- Figure 6 Alternative Confirmation Sampling Plan

Tables:

Table 1 – Summary of Analytical Results – Initial Soil Assessment

Table 2 – Summary of Analytical Results – Additional Soil Assessment

Appendices:

Appendix A – C-141 Forms

Appendix B – Site Characterization Data

Appendix C - Corrective Action Plan and Agency Approvals

Appendix D – Soil Boring Logs

Appendix E – Laboratory Analytical Data

Appendix F – NMSLO Seed Mixture Details

FIGURES













TABLES

TABLE 1 SUMMARY OF ANALYTICAL RESULTS INITIAL SOIL ASSESSMENT 1RP-3231 / INCIDENT ID: NTO1422438684 CONOCOPHILLIPS MCA 1-A HEADER TRANSITE LINE RELEASE LEA COUNTY, NM

									BTEX	2						TPH	l ³	
		Sample Depth	Chlorid	e1	_									GRO)	DRO		Total TPH
Sample ID	Sample Date				Benzer	ne	Toluer	ie	Ethylben	tene	Total Xyl	enes	Total BTEX	C ₆ - C	C ₆ - C ₁₀		C ₂₈	(GRO+DRO)
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg Q	mg/kg	Q	mg/kg	Q	mg/kg
		SURFACE	32.0		2.93		82.0		93.8		148		327	971		11500		12471
HA-1	6/6/2012	9	240		< 0.050		< 0.050		0.077		0.224		0.301	< 10.0		358		358
		14	400		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		123		123
		SURFACE	32.0		2.42		43.4		46.8		69.0		162	2950		8830		11780
HA-2	6/6/2012	10	10100		< 0.500		0.761		1.48		3.31		5.55	12.9		179		192
		13	2680		< 0.050		0.058		0.154		0.383		0.595	11.6		290		302
		5	656		< 0.050		< 0.050		0.102		0.347		0.449	< 10.0		166		166
		10	5280		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		149		149
		15	112		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		< 10.0		-
		20	592		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		354		354
		25	112		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		95.1		95.1
		30	160		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		95.6		95.6
SS-1	10/16/2012	40	160		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		110		110
		50	96.0		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		69.8		69.8
		60	160		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		254		254
		70	96.0		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		74.4		74.4
		80	64.0		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		37.0		37.0
		90	96.0		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		92.0		92.0
		100	64.0		< 0.050		< 0.050		< 0.050		< 0.150		-	< 10.0		44.7		44.7
		5	128		< 0.050		0.339		0.537		1.30		2.18	19.8		206		226
		10	496		< 0.050		< 0.050		0.144		0.488		0.632	< 10.0		102		102
		15	704		< 0.050		0.246		0.499		1.22		1.97	35.6		326		362
SS-2	10/16/2012	20	1400		< 0.050		0.132		0.332		0.857		1.32	17.0		184		201
		25	944		< 0.050		0.052		0.148		0.340		0.540	12.0		490		502
		30	944		< 0.050		< 0.050		0.089		0.229		0.318	12.1		560		572
		40	784		< 0.050		< 0.050		0.086		0.352		0.438	15.2		579		594
		50	784		< 0.050		< 0.050		0.066		0.268		0.334	12.0		626		638
		55	432		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		340		340
SB-2	6/18/2014	65	1150		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		230		230
		75	352		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		236		236

NOTES:

Released to Imaging: 7/29/2022 1:59:59 PM

ft. Feet bgs Below ground surface Bold and italicized values indicate exceedance of proposed RRALs

1 Method SM4500Cl-B 2 Method 8021B

3

Method 8015M

mg/kg Milligrams per kilogram TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

TABLE 2 SUMMARY OF ANALYTICAL RESULTS ADDITIONAL SOIL ASSESSMENT 1RP-3231 / INCIDENT ID: NTO1422438684 CONOCOPHILLIPS MCA 1-A HEADER TRANSITE LINE RELEASE LEA COUNTY, NM

								BTEX ²						TPH ³								
		Sample Depth	Field Screen	ing Results	Chloride ¹									GRO ⁴ DRO ORO					Total TPH			
Sample ID	Sample Date	Interval	Chloride	PID			Benzene		Toluene		Ethylbenzene	8	Total Xylene	s	Total BTEX	C ₃ - C ₁₀ C ₁₀ - C ₂₈		C ₂₈ - C ₄₀		(GRO+DRO+ORO)		
		ft. bgs	pp	m	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
		0-1	998	0.0	611		< 0.00147		< 0.00733		< 0.00366		< 0.00952		-	< 0.123		2.13	J	3.94	ВJ	6.07
		2-3	-	0.0	467		< 0.00108		< 0.00541		< 0.00270		< 0.00703		-	< 0.104		< 4.16		0.807	ВJ	0.807
		6-7	626	0.0	334		< 0.00108		< 0.00538		< 0.00269		< 0.00700		-	0.0273	J	2.13	1	1.11	ΒJ	3.27
		9-10	-	0.0	165	J	< 0.00138		< 0.00691		< 0.00345		< 0.00898		-	< 0.108		1.98	1	1.25	J	3.23
		12-13	499	0.0	182	J	< 0.00110		< 0.00549		< 0.00275		< 0.00714		-	< 0.110		< 4.39		< 4.39		-
BH-1	7/29/2020	14-15	-	0.0	288		< 0.00109		< 0.00547		< 0.00274		< 0.00711		-	0.0247	J	< 4.34		< 4.34		0.0247
		17-18	-	0.0	715		< 0.00108		< 0.00542		< 0.00271		0.00133	1	0.00133	0.0410	J J3 J5	< 4.34		< 4.34		0.0410
		19-20	1820	0.0	1410		< 0.00109		< 0.00546		< 0.00273		< 0.00710		-	0.0300	J	< 4.37		< 4.37		0.0300
		22-23	-	0.0	3190		< 0.00123		< 0.00614		< 0.00307		< 0.00799		-	0.0484	J	< 4.46	13 J6	< 4.46		0.0484
		24-25	-	0.0	2780		< 0.00108		< 0.00540		< 0.00270		< 0.00702		-	< 0.108		1.93	1	0.316	1	2.25
		26-27	3730	0.0	2990		< 0.00108		< 0.00542		< 0.00271		< 0.00705	_	-	0.0269	J	< 4.34		< 4.34		0.0269
		29-30	3310	0.0	3090		< 0.00109		< 0.00546		< 0.00273		< 0.00710		-	< 0.109		< 4.37		< 4.37		-
		0-1	-	0.0	17.1	J	< 0.00130		< 0.00652		< 0.00326		0.00206	J	0.00206	109		1270		684		2063
		2-3	-	0.0	78.3	J	< 0.00125		< 0.00627		< 0.00314		< 0.00815		-	0.0318	ВJ	2.39	J	< 4.51		2.42
		6-7	-	0.0	58.8	J	< 0.00109		< 0.00543		< 0.00272		0.00139	1	0.00139	7.48		485		346		838
		9-10	-	0.0	393		< 0.00148		< 0.00738		< 0.00370		< 0.00959		-	< 0.123		2.11	J	0.658	J	2.77
BH-2	7/29/2020	11-12	-	0.0	289		< 0.00112		< 0.00558		< 0.00280		< 0.00725		-	< 0.111		< 4.42		< 4.42		-
		14-15	-	0.0	172		< 0.00108		< 0.00540		< 0.00270		< 0.00701	_	-	< 0.108		< 4.32		< 4.32		-
		17-18	-	0.0	315		< 0.00108		< 0.00539		< 0.00270		< 0.00701		-	< 0.108		< 4.32		1.78	ΒJ	1.78
		19-20	-	0.0	720		< 0.00110		< 0.00549		< 0.00274		< 0.00713	_	-	< 0.110		< 4.39		1.94	ВJ	1.94
		22-23	1670	0.0	1200		< 0.00125		< 0.00623		< 0.00311		0.00114	1	0.00114	< 0.112		< 4.49		0.696	ΒJ	0.696
		26-27	-	0.0	1180		< 0.00108		< 0.00542		< 0.00271		< 0.00705		-	0.0321	1	8.78		9.02	В	17.8
		0-1	12	0.0	< 20.2		< 0.00102		< 0.00511		< 0.00255		< 0.00664		-	< 0.101		7.09		6.60		13.7
H-20-1	8/13/2020	2-3	20	0.0	< 20.1		< 0.00145		< 0.00726		< 0.00363		< 0.00944		-	< 0.123		< 4.90		< 4.90		-
		3-4	-	-	22.2	J	< 0.00147		< 0.00735		< 0.00367		< 0.00955		-	< 0.124		< 4.94		< 4.94		-
		0-1	19	0.0	< 20.3		< 0.00103		< 0.00513		< 0.00256		< 0.00666		-	< 0.101		2.50	1	1.14	1	3.64
H-20-2	8/13/2020	2-3	11	0.0	18.0	J	< 0.00145		< 0.00726		< 0.00363		< 0.00944		-	< 0.123		< 4.90		< 4.90		-
		3-4	-	-	22.2		< 0.00147		< 0.00735		< 0.00367		< 0.00955		-	< 0.124		< 4.94		< 4.94		-
		0-1	-	-	10.6	1	< 0.00124	1	< 0.00620		< 0.00310		< 0.00807		-	< 0.113		< 4.48		< 4.48		-
H-20-3	8/13/2020	2-3	-	-	< 20.1		< 0.00101		< 0.00505		< 0.00253		< 0.00657		-	< 0.101		< 4.02		1.67	J	1.67
		3-4	-	-	17.4	J	< 0.00144		< 0.00719		< 0.00359		< 0.00934		-	< 0.122		< 4.87		< 4.87		-
		0-1	12	0.0	46.6		< 0.00143	1	< 0.00717		< 0.00358		< 0.00932		-	< 0.122		< 4.87		< 4.87		-
H-20-4	8/13/2020	2-3	9	0.0	20.3	J	< 0.00145		< 0.00725		< 0.00362		< 0.00942		-	< 0.124		< 4.90		< 4.90		-
		3-4	-	-	18.6	J	< 0.00144		< 0.00721		< 0.00361		< 0.00938			< 0.122		< 4.88		< 4.88		-
		0-1	8	0.0	25.8		< 0.00149	1	< 0.00743		< 0.00371	İ	< 0.00966			< 0.124	İ	< 4.97	1	< 4.97		
H-20-5	8/13/2020	2-3	12	0.0	58.7	-	< 0.00143	1	< 0.00743		< 0.00357	+	< 0.00900		-	< 0.124		< 4.85	1	< 4.85		-
		3-4	-	-	< 21.0		< 0.00110	1	< 0.00550		< 0.00275	1	< 0.00715			0.0520	ВJ	< 4.20	1	< 4.20		0.0520
			9					1				1					1		1			
H-20-6	8/13/2020	0-1 2-3	9 11	0.0	45.5 19.0	-	< 0.00144	-	< 0.00178		< 0.00359	\vdash	< 0.00933	+	-	< 0.122		< 4.87	-	3.64	1	3.64
11-20-0	0/13/2020	3-4		0.0	< 20.1		< 0.00143	-	< 0.00714		< 0.00357	+	< 0.00929	+	-	0.0536	ВJ	< 4.86	1	< 4.86	+	- 3.56
NOTES:		2-4			× 20.1		< 0.00101	1	× 0.00505		< 0.00251	I	< 0.00055	1	-	0.0550	10	5.51	1	× 4.01	1	5.50

NOTES: ft. Feet

Released to Imaging: 7/29/2022 1:59:59 PM

Bold and italicized values indicate exceedance of proposed RRALs

bgs Below ground surface

ppm Parts per million

- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics ORO Oil range organics
- 1
- EPA Method 300.0 EPA Method 8260B 2
- 3 EPA Method 8015
- 4 EPA Method 8015D/GRO

QUALIFIERS:

B The same analyte is found in the associated blank.

J The identification of the analyte is acceptable; the reported value is an estimate.

- J3 The associated batch QC was outside the established quality control range for precision.
- J5 The sample matrix interfered with the ability to make any accurate determination; spike is high.
- J6 The sample matrix interfered with the ability to make any accurate determination; spike is low.

•

APPENDIX A C-141 Forms

AUG 1 2 2014



- Ar

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Azteo, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resoun

Form C-141 Revised October 10, 2003

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

Release Notification and Corrective Action

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

		-			OPERATOR		🛛 İnitia	al Report	Final Repor
Name of Co	ompany C	onocoPhilli	ps Comp	any	Contact Jo	hn W. Gates			
Address 3	300 North	A St. Bldg	6, Midla	nd, TX 79705-54	106 Telephone 1	No. 505.391.31	158		
		1A Header				e Oil and Ga	S		
Surface Ow	ner Fede	ral		Mineral O	wner Federal		Lease h	No LC 029	9410B
				LOCA	TION OF RE	LEASE		30-02	5-06115-
Unit Letter	Section 30	Township 17	Range 32	Feet from the	North/South Line	Feet from the	East/West Line	County Lea	. 1

Latitude N32 48.387 Longitude W 103 48.200

NA	ATURE OF RELEASE				
Type of Release Crude Oll & Produced Water	Volume of Release 47bbl (17oil, 30water)		ne Recovered Owater)		
Source of Release 1A Header production line(6" transite)	Date and Hour of Occurrence 3/14/12 1403		nd Hour of Discovery 012 1530		
Nas Immediate Notice Given?	If YES, To Whom? NMOCD & BLM Were notified				
By Whom? Justin Wright	Date and Hour 3/14/12	10 ⁻			
Vas a Walercourse Reached?	If YES, Volume Impacting the Wate	rcourse.			
f a Watercourse was Impacted, Describe Fully.*		8	۰.		
A 25' X 85' X 24" deep area of pastureland located ~ spill site will be Delineated/Remediated in accordance I hereby certify that the information given above is true and con- regulations all operators are required to report and/or file certai public health or the environment. The acceptance of a C-141 re should their operations have failed to adequately investigate an or the environment. In addition, NMOCD acceptance of a C-14	with BLM & NMOCD guidelines implete to the best of my knowledge and un in release notifications and perform correct eport by the NMOCD marked as "Final Re d remediate contamination that pose a thre	derstand that p ive actions for port" does not at to ground w	oursuant to NMOCD rules and releases which may endanger relieve the operator of liability ater, surface water, human health		
Ederal, state, or local laws and/or regulations.			<u>IN DIVISION</u>		
Printed Name: John W. Gates	Approved by District Supergiso	Space la	4		
fille: HSER Lead	Approval Date: 8 - 12-14	Expirati	on Date: 10 - 19 - 14		
-mail Address: John.W.Gates@conocophillips.com	Conditions of Approval:		Attached		
Date: 3/19/12 Phone: 505,391,3158	Site Sap toring	Site Sap to - requel			
Attach Additional Sheets If Necessary	Satural Fire (C-) 10-14-14	41 3	180-3231 03-id 21781 NTO 1922 4386		

AUF 1 2 2014

. Released to Imaging: 7/29/2022 1:59:59 PM

Oil Conservation Division

	Page 18 of 21	11
ncident ID	nTO1422438684	
District RP	1RP-3231	
Facility ID		

pTO1422248834

Application ID

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>78</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

•

Page 3

2020 1:14:06 PM	laviao	Page 19 of 2				
		Incident ID	nTO1422438684			
Oil Conservation	Division	District RP	1RP-3231			
		Facility ID				
		Application ID	pTO1422248834			
e required to report and/or file certain ment. The acceptance of a C-141 re- gate and remediate contamination that of a C-141 report does not relieve the Soriwei	n release notifications and perform c port by the OCD does not relieve th at pose a threat to groundwater, surf e operator of responsibility for comp Title: Program Mar Date: 11/24/2020	orrective actions for rele e operator of liability sh ace water, human health oliance with any other fe nager, Risk Managem	eases which may endanger could their operations have a or the environment. In ederal, state, or local laws			
	Oil Conservation	e required to report and/or file certain release notifications and perform comment. The acceptance of a C-141 report by the OCD does not relieve the gate and remediate contamination that pose a threat to groundwater, surf of a C-141 report does not relieve the operator of responsibility for composition of a C-141 report does not relieve the operator of responsibility for composition of the	Oil Conservation Division District RP Facility ID Application ID ormation given above is true and complete to the best of my knowledge and understand that purse erequired to report and/or file certain release notifications and perform corrective actions for relevance of a C-141 report by the OCD does not relieve the operator of liability sh gate and remediate contamination that pose a threat to groundwater, surface water, human health of a C-141 report does not relieve the operator of responsibility for compliance with any other fee Soriwei Title: Program Manager, Risk Managem Date: 11/24/2020			

Received by OCD: 11/24/2020 1:14:06 PM State of New Mexico

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	nTO1422438684
District RP	1RP-3231
Facility ID	
Application ID	pTO1422248834

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points \boxtimes Estimated volume of material to be remediated \bowtie Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC \boxtimes Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. Title: Program Manager, Risk Management & Remediation Printed Name: Marvin Soriwei Date: 11/24/2020 Signature: email: marvin.soriwei@conocophillips.com Telephone: 8324862730 **OCD Only** Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Page 5

APPENDIX B Site Characterization Data



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 612085.678

Northing (Y): 3630508.914

Radius: 800

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



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a	(R=POD been rep) O=orpha C=the fil	laced, ned,		(qua	rter	s are	1=NW	/ 2=NE	3=SW 4=SF	E)				
water right file.)	closed)			(qua	rter	s are	smalle	est to lar	gest) (N	AD83 UTM in m	neters)	(In fe	et)	
		POD Sub-		-	Q	_									ater
POD Number	Code		County							Х	Y	DistanceDep	-	Water Col	lumn
<u>RA 12721 POD1</u>		RA	LE	3	2	3	28	17S	32E	614645	3630141 🌍	2587	125		
<u>RA 10175</u>		RA	LE		2	1	28	17S	32E	614814	3631005* 🌍	2773	158		
<u>RA 12020 POD1</u>		RA	LE	2	2	1	28	17S	32E	614828	3630954 🌍	2778	120	81	39
<u>RA 12042 POD1</u>		RA	LE	2	2	1	28	17S	32E	614891	3631181 🌍	2884	400		
<u>RA 12522 POD1</u>		RA	LE	3	3	4	21	17S	32E	614941	3631122 🌍	2919	100		
<u>RA 12522 POD2</u>		RA	LE	2	2	1	28	17S	32E	614949	3631098 🌍	2923	100		
<u>RA 12522 POD3</u>		RA	LE	4	4	3	28	17S	32E	614980	3631093 🌍	2953	100		
<u>RA 12721 POD2</u>		RA	LE	1	1	4	28	17S	32E	615055	3630407 🌍	2972	124	75	49
											Avera	ge Depth to Wate	er:	78 feet	t
												Minimum Dep	oth:	75 feet	t
												Maximum Dep	oth:	81 feet	t
Record Count: 8															
UTMNAD83 Radius	<u>Search (in</u>	<u>n meters</u>) <u>:</u>												
Easting (X): 612	084.557		North	ning	(Y)):	3630	515.15	58		Radius: 3000				
*UTM location was derived	from PLSS	- see Help	•												
The data is furnished by the N accuracy, completeness, reliab	MOSE/ISC ility, usabilit	and is acc y, or suita	cepted by the bility for an	ne re iy pa	cipie rticu	ent v ılar j	vith t purpo	he expr se of th	essed un e data.	derstanding tl	hat the OSE/ISC ma	ake no warranties,	expressed or imp	plied, concern	ing the

8/11/20 12:06 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



Received by OCD: 11/24/2020 1:14:06 PM

MCA 1-A Header Production Line Release (1RP-3231)



Verride 1 * CO2, New * Gas, Plugged · Injection, Temporarily Abandoned > Salt Water Injection, Active Vells - Large Scale * CO2, Plugged * Gas, Temporarily Abandoned • Oi, Active > Salt Water Injection, Cancelled * undefined * CO2, Temporarily Abandoned · Injection, Active • Oi, Cancelled > Salt Water Injection, New * Niscellaneous * Gas, Active · Injection, Cancelled • Oi, New > Salt Water Injection, New * CO2, Active * Gas, Active · Injection, New • Oi, Plugged > Salt Water Injection, Plugged * CO2, Active * Gas, Cancelled · Injection, New • Oi, Plugged > Salt Water Injection, Temporarily Abandoned * CO2, Active * Gas, New · Injection, New • Oi, Plugged > Salt Water Injection, Temporarily Abandoned * CO2, Active * Gas, New · Injection, Plugged • Oi, Temporarily Abandoned • Salt Water Injection, Temporarily Abandoned					
* undefined ★ CO2, Temporarily Abandoned ✓ Injection, Active • Oil, Cancelled ▲ Salt Water Injection, New • Miscellaneous ★ Gas, Active ✓ Injection, Cancelled • Oil, New ▲ Salt Water Injection, Plugged ★ CO2, Active ★ Gas, Cancelled ✓ Injection, New • Oil, Plugged ▲ Salt Water Injection, Temporarily Abandoned	Override 1	★ CO2, New	Gas, Plugged	¹⁰ Injection, Temporarily Abandoned	△ Salt Water Injection, Active
• Niscellaneous • Gas, Active • Gas, Cancelled • Oil, New • Oil, Plugged • Salt Water Injection, Plugged • Salt Water Injection, Temporarily Abandoned • Oil, New • Oil, Plugged •	Wells - Large Scale	✤ CO2, Plugged	* Gas, Temporarily Abandoned	• Oil, Active	△ Salt Water Injection, Cancelled
* CO2, Active * Gas, Cancelled Injection, New Oil, Plugged Active Salt Water Injection, Temporarily Abandoned	? undefined	st CO2, Temporarily Abandoned	Injection, Active	• Oil, Cancelled	Salt Water Injection, New
	Miscellaneous	🌣 Gas, Active	Injection, Cancelled	• Oil, New	Salt Water Injection, Plugged
🔆 CO2, Cancelled 🔅 Gas, New 🔎 Injection, Plugged * Oil, Temporarily Abandoned * Water, Active	KCO2, Active	🌣 Gas, Cancelled	🗸 Injection, New	• Oil, Plugged	Salt Water Injection, Temporarily Abandoned
	st CO2, Cancelled	🎋 Gas, New	√ Injection, Plugged	 Oil, Temporarily Abandoned 	• Water, Active

75 150 300 m

Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,

New Mexico Oil Conservation Division NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

0

APPENDIX C CAP and Agency Approvals





CONOCOPHILLIPS

P.O. Box 2197 Houston, TX 77252-2197 Phone 281.293.1000

MCA 1A Header 1RP-3231

Corrective Action Plan

API No. 30-025-06115

Release Date: March 14th, 2012

Unit Letter G, Section 30, Township 17S, Range 32E



PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

August 13th, 2014

Dr. Tomáš Oberding, PhD Environmental Specialist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240

RE: Corrective Action Plan ConocoPhillips MCA 1A Header (1RP-3231) UL/G sec. 30 T17S R32E API No. 30-025-06115

Dr. Oberding:

ConocoPhillips (CoP) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 4.1 miles southwest of Maljamar, New Mexico at UL/G sec. 30 T17S R32E. NM OSE and USGS records indicate that groundwater will likely be encountered at a depth of approximately 95 - 105 + - feet.

On March 14th, 2012, CoP discovered a release from a 6 inch transit production line. The line failed at the collar and released a total of 47 barrels of oil and produced water over approximately 4,476 square feet of pasture land. None of this fluid was recovered. NMOCD and BLM were notified of the release on March 14th, 2012, and an initial C-141 was sent to NMOCD for their approval (Appendix A).

Prior to RECS receiving the site from CoP, another company conducted sampling activities at the site. On June 6th, 2012, that company's personnel were on site to hand augur the release area (Figure 1). Two points within the release area were augured for depth, and all samples were taken to a commercial laboratory for analysis (Appendix B). On October 17th, 2012, two soil bores (SS-1 and SS-2) were installed to further delineate the vertical extent of contamination. All samples from both bores were taken to a commercial laboratory for analysis of SS-1 returned chloride values below regulatory standards beginning at 15 ft bgs. Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings returned values below regulatory standards beginning at 25 ft bgs. GRO, DRO and BTEX readings returned values below regulatory standards at all depths.

RECS received the site from CoP on October 31st, 2013 to continue remediation activities. On February 12th, 2014, a meeting was held with NMOCD and the initial sampling data was submitted for approval. NMOCD stated that the data for SS-1 was acceptable, but SS-2 had not achieved an acceptable decline in constituents. Therefore, NMOCD requested an additional soil bore be installed adjacent to SS-2.

RECS personnel were on site to conduct the additional soil bore on June 18th, 2014. SB-2 was installed adjacent to SS-2 to continue sampling activities with depth. The bore was sampled for lithology until 50 ft bgs and then soil samples were taken every 5 ft for field analysis (Appendix C). Representative samples from SB-2 were taken to a commercial laboratory for analysis (Appendix B). At 75 ft bgs, the laboratory chloride reading returned a value of 352 mg/kg, the DRO reading returned a value of 236 mg/kg, and the GRO and BTEX readings returned values of non-detect. Photo documentation from SB-2 can be found in Appendix D.

Corrective Action Plan

Based on the laboratory analysis of the site, the release area will be excavated to a depth of 4 ft bgs. At the base of excavation, a 20-mil reinforced poly liner will be installed and properly seated.

The excavated soil will be evaluated for use as backfill, and any soils that do not meet regulatory standards will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to replace any soils taken for disposal. The clean soil will be blended with the remaining excavated soil and used to backfill the site. A sample of the blended soil will be taken to a commercial laboratory to confirm that chloride, GRO and DRO readings are all below regulatory standards. Once the site is backfilled, the area will be contoured to the surrounding location. The site will then be seeded with a blend of native vegetation.

Once these activities have been completed, a report will be submitted to NMOCD and BLM requesting 'remediation termination' and site closure.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

ACW

Lara Weinheimer Project Scientist RECS (575) 441-0431

.

Attachments:

Figure 1 – Initial Sampling Data Appendix A – Initial C-141 Appendix B – Initial Sampling Labs Appendix C – Soil Bore Log Appendix D – Photo Documentation

Figures

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

Initial Sampling Data



Appendix A Initial C-141

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

Page 34 of 211

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

£8

OPERATOR ☐ Initial Report ☐ I Name of Company ConocoPhillips Company Contact John W. Gates Address 3300 North A St. Bidg 6, Midland, TX 79705-5406 Telephone No. 505.391.3158 Facility Name MCA 1A Header Facility Type Oil and Gas Surface Owner Federal Lease No LC 029410B LOCATION OF RELEASE Lease No LC 029410B Unit Letter Section 30 30 17 32 Feet from the North/South Line Volume Recovered 17 Lease Volume Recovered Could Water Volume of Release Crude Oil & Produced Water Volume of Release Crude Oil & Produceton line(6" transite) Date and Hour of Occurrence 314/2012 Mate of Release Date and Hour of Occurrence 314/2012 Attraction Recovered 17403 14/121403 Source Of Release Date and Hour of Occurrence 314/2012 Source Of Release Date and Hour of Discovery 314/121403 Sufficient Production line(6" transite) 314/121403	Final Repo				
Name of Company ConcoPhillips Company Contact John W. Gates Address 3300 North A St. Bldg 6, Midland, TX 79705-5406 Telephone No. 505.391.3158 Facility Name MCA 1A Header Facility Type Oil and Gas Surface Owner Federal Mineral Owner Federal Lease No LC 029410B Surface Owner Federal Mineral Owner Federal Lease No LC 029410B LOCATION OF RELEASE Location the St. Bldg 6, Midland, TX 79705-5406 Location the St. Bldg 6, Midland, TX 79705-5406 Unit Letter Section Township Range 32 Feet from the North/South Line Feet from the East/West Line County Lea Joint Letter Section Township Range 32 Feet from the North/South Line Feet from the East/West Line County Lea Latitude N32 48.387 Longitude W 103 48.200 Lea MATURE OF RELEASE Volume of Release Volume Recovered (0oil, 0water) (0oil, 0water) Type of Release Volume of Release Volume Recovered (0oil, 0water) (0oil, 0water) Source of Release Date and Hour of Occurrence Date and Hour of Discovery 3/14/12 1403 3/14/2012 1530					
Facility Name MCA 1A Header Facility Type Oil and Gas Surface Owner Federal Mineral Owner Federal Lease No LC 029410B Surface Owner Federal Mineral Owner Federal Lease No LC 029410B Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County 30 17 32 Feet from the North/South Line Feet from the Hast/West Line County Latitude N32 48.387 Longitude W 103 48.200 NATURE OF RELEASE Volume of Release Volume Recovered (00il, 0water) Type of Release Volume of Release Volume of Courrence Date and Hour of Discovery Source of Release Date and Hour of Discovery 3/14/12 1403 3/14/2012 1530	· · · · · · · · · · · · · · · · · · ·				
Surface Owner Federal Lease No LC 029410B Surface Owner Federal Lease No LC 029410B LOCATION OF RELEASE Location of Release Location of Release County Lea Unit Letter Section 30 Township 17 Range 32 Feet from the North/South Line Peet from the East/West Line County Lea Latitude N32 48.387 Longitude W 103 48.200 Nature of Release Volume of Release Volume Recovered (0oil, 0water) Type of Release Volume of Release Volume of Release Volume of Occurrence Date and Hour of Occurrence Date and Hour of Discovery 3/14/12 Date and Hour of Discovery 3/14/2012					
Index reference LOCATION OF RELEASE Unit Letter Section 30 Township 17 Range 32 Feet from the source North/South Line Feet from the Feet from the East/West Line County Lea Latitude N32 48.387 Longitude W 103 48.200 NATURE OF RELEASE Volume of Release Volume Recovered (00il, 0water) Volume Recovered (00il, 0water) Type of Release Volume of Release Volume of Release Volume Recovered (00il, 0water) Date and Hour of Occurrence Date and Hour of Discovery 3/14/12 Date and Hour of Discovery 3/14/12 Date and Hour of Discovery 3/14/2012 Date and Hour of Discovery	· · ·				
Unit Letter Section 30 Township 17 Range 32 Feet from the 32 North/South Line Feet from the Feet from the East/West Line County Lea Latitude N32 48.387 Longitude W 103 48.200 NATURE OF RELEASE Type of Release Volume of Release Volume Recovered (00il, 0water) Crude Oil & Produced Water Source of Release Volume of Occurrence 1A Header production line(6" transite) 3/14/12 1403 J14/2012 1530					
Unit Letter Section 30 Township 17 Range 32 Feet from the 32 North/South Line Feet from the East/West Line County Lea Latitude N32 48.387 Longitude W 103 48.200 NATURE OF RELEASE Type of Release Volume of Release Volume Recovered (00il, 0water) Crude Oil & Produced Water Volume of Release Volume of Release Source of Release Date and Hour of Occurrence Date and Hour of Discovery 3/14/12 Date and Hour of Discovery 3/14/2012 Date and Hour of Discovery 3/14/2012					
30 17 32 Lea Latitude N32 48.387 Longitude W 103 48.200 NATURE OF RELEASE Type of Release Volume of Release Volume Recovered Crude Oil & Produced Water 47bbl (17oil, 30water) Volume Recovered Source of Release Date and Hour of Occurrence Date and Hour of Discovery 1A Header production line(6" transite) 3/14/12 1403 3/14/2012 1530					
NATURE OF RELEASE Type of Release Volume of Release Volume Recovered Crude Oil & Produced Water 47bbl (17oil, 30water) (0oil, 0water) Source of Release Date and Hour of Occurrence Date and Hour of Discovery 1A Header production line(6" transite) 3/14/12 1403 3/14/2012 1530					
Type of ReleaseVolume of ReleaseVolume RecoveredCrude Oil & Produced Water47bbl (17oil, 30water)(0oil, 0water)Source of ReleaseDate and Hour of OccurrenceDate and Hour of Discovery1A Header production line(6" transite)3/14/12 14033/14/2012 1530					
Crude Oil & Produced Water47bbl (17oil, 30water)(0oil, 0water)Source of ReleaseDate and Hour of OccurrenceDate and Hour of Discovery1A Header production line(6" transite)3/14/12 14033/14/2012 1530					
Source of ReleaseDate and Hour of OccurrenceDate and Hour of Discovery1A Header production line(6" transite)3/14/12 14033/14/2012 1530					
1A Header production line(6" transite)3/14/12 1403Jate and Hour of Discovery3/14/2012 1530	•• ·• · · · · · · · · · · · · · · · · ·				
1 1 IED, 10 WHOMY					
□ Yes					
By Whom? Justin Wright Date and Hour 3/14/12	Date and Hour 3/14/12				
Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.					
□ Yes ⊠ No					
If a Watercourse was Impacted, Describe Fully.*					
	4 77				
Describe Cause of Problem and Remedial Action Taken.*					
A 6 inch transite production line at the MCA 1 A Header failed at the collar due to suspected age/fatigue					
Describe Area Affected and Cleanup Action Taken.*					
A 25' X 85' X 24" deep area of pastureland located ~350 yards north and east of the 1A header. No fluids could be recover	ed. The				
spill site will be Delineated/Remediated in accordance with BLM & NMOCD guidelines					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rule:					
community an operators are required to report and/or the certain release notifications and perform corrective actions for releases which were an t					
Judic include of the chynoline of a Ceptance of a Center by the NM() (1) marked as "Final Depart" does not relieve the environment.	1 1211				
hould their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human report does not relieve the operator of responsibility for compliance with any ot address total or level have a state	n health				
ederal, state, or local laws and/or regulations.	her				
	OIL CONSERVATION DIVISION				
ignature: John W. J.St.					
rinted Name: John W. Gates Approved by District Supervisor:					
itle: HSER Lead Approval Date: Expiration Date:					
-mail Address: John.W.Gates@conocophillips.com Conditions of Approval:					
-mail Address: John.W.Gates@conocophillips.com Conditions of Approval: Attached					

Appendix B Initial Sampling Labs

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967



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

June 14, 2012

JUSTIN ROBERTS DIAMONDBACK DISPOSAL SERVICE INC. P. O. BOX 2491 HOBBS, NM 88241

RE: MCA IA TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 06/08/12 10:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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.

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. Keine

Celey D. Keene Lab Director/Quality Manager

Page 1 of 9


Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	06/08/2012	Sampling Date:	06/06/2012
Reported:	06/14/2012	Sampling Type:	Soil
Project Name:	MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: HA 1 SURFACE (H201294-01)

BTEX 8021B	mg/l	kg	Analyze	d By: ZZZ					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.93	1.00	06/13/2012	ND	2.10	105	2.00	4,88	
Toluene*	82.0	1.00	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	93.8	1.00	06/13/2012	ND	2,21	111	2.00	1.77	
Total Xylenes*	148	3.00	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	168 %	6 89.4-12	6						
Chloride SM4500CL-R	ma/l	10	Analyza	d By: AD					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/12/2012	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS		_		1	S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	971	100	06/12/2012	ND	176	88.0	200	4.28	
DR0 >C10-C28	11500	100	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	210	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	405	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

REASE NOTE: Liability and Damages. Cardinal's labelity and demits exclusive remedy for any daim arising, whether based in contract or tart, shall be limited to the amount paid by dient for analyses. All daims, including these for negligence and any other cases whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after campletism of the applicable service. In no event shall be liable for incidential or consequential damages, inducing, without limitation, business interruptions, loss of use, or loss of profils incurred by client, its subdifications, effiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daim is based upon any of the substitute or otherwise. Results relate with the services hereunder to consequential laborations.

Celeg D Keine

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 9



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	06/08/2012	Sampling Date:	06/06/2012
Reported:	06/14/2012	Sampling Type:	Soil
Project Name:	MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: HA 1 9' BGS (H201294-02)

BTEX 8021B	mg,	/kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	<0.050	0.050	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	0.077	0.050	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	0.224	0.150	06/13/2012	ND	6.85	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	111	6 89.4-12	6						
Chloride SM4500CI-B	100	lka	Analuza	d By: AD					

		-							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/12/2012	ND	432	108	400	0.00	
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	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	358	10.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	95.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	115	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Demages, Cardinal's liability and client's exclusive remedy for any plain ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including these for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential durages, including, whole limitation, busines interruptions, loss of use, or less of profils incurred by client, its substituers, and indices, affiliates or successors arising out of or related to the performance of the services freeunder by Cardinal, regardless of whether such clients based upon any of the above stated reasons or otherwise. Results relate while and the sample element and the sample element and not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 9



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	06/08/2012	Sampling Date:	06/06/2012
Reported:	06/14/2012	Sampling Type:	Soil
Project Name:	MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: HA 1 14' BGS (H201294-03)

BTEX 8021B	mg,	/kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	<0.050	0.050	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	<0.050	0.050	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	<0.150	0.150	06/13/2012	ND	6.86	114	6.00	0.457	

Surrogate: 4-Bromofluorobenzene (PIL 103 % 89.4-126

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	06/12/2012	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS			1.1	1.	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	123	10.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	94.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	110	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEXE NOTE: Labelity and Demages. Cardinal's liabelity and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever that be deemed walved unless made in writing and received by Cardinal within thinty (30) days after completion of the lapplicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of uses of profils incurred by client, his substituties, aritiliates or successions arising out of or related to the performance of the services hereander by Cardinal, regerdings of whether such climit is based upon any of the allower stated reasons or otherwas. Results relate rule and substitutes ariticated abover. This report shall not encryoticate except in full writin service approval of cardinal laboratives.

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 9





Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	06/08/2012	Sampling Date:	06/06/2012
Reported:	06/14/2012	Sampling Type:	Soil
Project Name:	MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: HA 2 SURFACE (H201294-04)

BTEX 8021B	mg	/kg	Analyze	d By: ZZZ					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.42	0.500	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	43.4	0.500	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	46.8	0.500	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	69.0	1.50	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	178	% 89.4-12	6						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/12/2012	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS				1.2	S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2950	100	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	8830	100	06/12/2012	ND	172	86.2	200	7.49	

Surrogate: 1-Chlorooctadecane

269 %

281 %

65.2-140

63.6-154

Surrogate: 1-Chlorooctane

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or torr, avail be limited to the amount paid by client for analyzes. All claims, including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and rocoved by Cardinal within thin'ry (20) days after completion of the applicable service. In no event shall be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of uses of profits incurred by Client, its automates, affiliates or successors anising out of or rebated to the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples element and not provided all borstories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 9



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	06/08/2012	Sampling Date:	06/06/2012
Reported:	06/14/2012	Sampling Type:	Soil
Project Name:	MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: HA 2 10' BGS (H201294-05)

BTEX 8021B	mg/	kg	Analyze	d By: ZZZ	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.500	0.500	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	0.761	0.500	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	1.48	0.500	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	3.31	1.50	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	112 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10100	16.0	06/12/2012	ND	432	108	400	0.00	
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	12.9	10.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	179	10.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	93.0 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	109 9	6 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

REACE NOTE: Liability and Demages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidential or consequential damages, including, without limitation, business liternaptons, loss of use, or loss of profils incurred by client, its autoenties, atlantes or successors arising out of or related to the performance of the services hereander by Cardinal, regardless of whether such chains based upon any of the store stated reasons or thereives. Reals relate related to the sample steaded cardinal ubert. This report shall not be importabled accept in full with writing approval of Cardinal Laboratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 9



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

06/08/2012	Sampling Date:	06/06/2012
06/14/2012	Sampling Type:	Soil
MCA IA TRUNKLINE	Sampling Condition:	Cool & Intact
NONE GIVEN	Sample Received By:	Jodi Henson
MALJAMAR, NEW MEXICO		
	06/14/2012 MCA IA TRUNKLINE NONE GIVEN	06/14/2012Sampling Type:MCA IA TRUNKLINESampling Condition:NONE GIVENSample Received By:

Sample ID: HA 2 13' BGS (H201294-06)

BTEX 8021B	mg/kg		Analyzed By: ZZZ				_		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	0.058	0.050	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	0.154	0.050	06/13/2012	ND	2.21	111	2,00	1.77	
Total Xylenes*	0.383	0.150	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	120 %	89.4-12	6						
Chloride, SM4500CI-B	mg/l	kg	Analyze	d By: AP					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2680	16.0	06/12/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS					-	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	11.6	10.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	290	10.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	90.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	116	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Demages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidence in contract, shall be limited to the performance of the services hereander by Cardinal incidence in a substance, which are an any other shall be limited to the performance of the services hereander by Cardinal, regardless of whether such claim is based upon any of the show statied reasons or otherwise. Results relate only to the sample demonded except in full with writem approval of Cardinal Laboratives.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 7 of 9

Received by OCD: 11/24/2020 1:14:06 PM



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

Notes and Definitions

5-06	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.
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.
-1.	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remisely for any daim artsing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including these for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thinty (30) days after completion of the applicable service. In no event shall Cardinal be limited to the interview of the services including, whork limitation, business interruptions, loas of use, or loas of profiles incurred by client, its subditaines, affiliates or successors antaing out of or related to the performance of the services hereunider by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 8 of 9



.....

*** * m

Released to

Imaging: 7/29/2022 1:59:59 PM

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	101 East Marland, Hobbs, NM 88 (575) 393-2326 FAX (575) 393-247	6															
Company Name: DiAmond bACK Disposit		BILL TO					ANA	ANALYSIS REQUEST									
Project Manage	"Justin Roberts			P.O. #:											TT		
Address: P.U.	Box 2491			Co	mpany:												
City: 170665 State: NM Zip: 88240		At	tn:														
Phone #: 57	5-392-9996 Fax #: 5	15-	392-9374	Ad	Idress:												
Project #: NA Project Owner: COPC		Ci	ty:							1 1							
	MLA IA TRUNKLIN					Zip:											1
	m: MALJAMAN		-	1	ione #:									1			
Sampler Name:				1	x #:												
FOR LAB USE ONLY		Π	MATRIX		PRESERV.	SAMPL	ING	4	1						11		
Lab I.D. H201294	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	OTHER .		DATE	TIME	197	875	10							
1	HAI SUNTALE	GI		-1	1	6-6-12	Contraction Contraction	X	K	Y.						_	_
2	HA 2 9'BGS	9		+			12:01	X	X	×				-+			
3	HA 2 14'BGS	9				-+	12:22	1	X	×					-		
- 4	HA 2 SURFACE	17					12:26	5	Y-	7-							
	HA 2 10' B65 HA 2 13' B65	96		+		4	12:47	4	¥	Ý						_	
				1													-

PLEASE NOTE: Libbility and Damages. Cardinal's lability and client's exclusive remedy for any claim anising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whathoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable

emigrate in some whether the strategy end to be a strategy on the strategy and the strategy

Relinquished By:	Gate 2 12 Received By: Time: 15 John Mendon.	Phone Result: Yes No Fax Result: Yes No REMARKS:	Add'l Phone #: Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Time: Sample Condition CHECKED BY: Cool Intact (Initials) Cool No No		

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Page 9 of 9

44 of 211

Page



October 31, 2012

JUSTIN ROBERTS DIAMONDBACK DISPOSAL SERVICE INC. P. O. BOX 2491 HOBBS, NM 88241

RE: MCA 1A TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 10/17/12 13:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is 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.

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. Keine

Celey D. Keene Lab Director/Quality Manager

Page 1 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 5' BGS (H202535-01)

BTEX 8021B	mg/	kg	Analyze	d By: AP	_				_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2,09	104	2.00	11.7	
Toluene*	<0.050	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.102	0.050	10/18/2012	ND	1.95	97.5	2.00	8,19	
Total Xylenes*	0.347	0,150	10/18/2012	ND	5.35	89.2	6.00	14.9	
Surrogate: 4-Bromofluorobenzene (PIL	115 9	89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: HM		_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	10/23/2012	ND	400	100	400	3.92	
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	10/18/2012	ND	192	95.9	200	5.10	
DRO >C10-C28	166	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	80.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	84.0	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

REASE NOTE: Liability and Damages. Curdinal's liability and client's exclusive remedy for any daim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including trose for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. All claims, including trose for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. All claims, including trose for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. Including trose for negligence and any other cause whatsoever shall be limited to the septicable service. In no event shall Cardinal be liable to incidential or consequential damoges, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors anising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwase. Results related above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

10/17/2012	Sampling Date:	10/16/2012
10/31/2012	Sampling Type:	Soil
MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
NONE GIVEN	Sample Received By:	Jodi Henson
MALJAMAR, NEW MEXICO		
	10/31/2012 MCA 1A TRUNKLINE NONE GIVEN	10/31/2012Sampling Type:MCA 1A TRUNKLINESampling Condition:NONE GIVENSample Received By:

Sample ID: SS 1 - 10' BGS (H202535-02)

mg/	/kg	Analyzed By: AP						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
<0.050	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
<0.050	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
<0.150	0.150	10/18/2012	ND	5.35	89.2	6.00	14.9	
	Result <0.050 <0.050 <0.050	<0.050 0.050 <0.050 0.050 <0.050 0.050	Result Reporting Limit Analyzed <0.050	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

Surrogate: 4-Bromofluorobenzene (PIL 108 % 89.4-126

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M mg/kg		Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/18/2012	ND	192	95.9	200	5.10	
DR0 >C10-C28	149	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooclane	79.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	86.5	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and cleint's exclusive remesty for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All claims, including those for megagence and any other cause whetpower shall be deemed valved unless, made in writing and received by Candinal's Mittin thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental consequential damages, including, which estimates instamptions, loss of use, or loss of ports incurred by cleint is subsidiaries, airliliates or successors anality or of or related to the performance of the services hereunder by Cardinal, regardless of whither such claim is based upon any of the indocesting that we listed to the interview laboration.

Celey D Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 15' BGS (H202535-03)

BTEX 8021B mg/kg Analyzed By: AP Analyte Result **Reporting Limit** Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Benzene* < 0.050 0.050 10/18/2012 ND 2,09 104 2.00 11.7 Toluene* 0.050 10/18/2012 < 0.050 ND 2.04 102 2.00 4.75 Ethylbenzene* < 0.050 0.050 10/18/2012 ND 1.95 97.5 2.00 8.19 Total Xylenes* <0.150 0.150 10/18/2012 ND 5.35 89.2 5.00 14.9 Surrogate: 4-Bromofluorobenzene (PIL 113 % 89.4-126 Chloride, SM4500CI-B mg/kg Analyzed By: HM Analyte **Reporting Limit** Result Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 112 16.0 10/23/2012 ND 400 100 400 3.92 **TPH 8015M** mg/kg Analyzed By: MS Analyte **Reporting Limit** Analyzed Result Method Blank BS True Value QC RPD % Recovery Qualifier GRO C6-C10 <10.0 10.0 10/18/2012 ND 192 95.9 200 5.10 DRO >C10-C28 10/18/2012 <10.0 10.0 ND 189 94.7 200 8.47 Surrogate: 1-Chlorooctane 74.9% 65.2-140 Surrogate: 1-Chlorooctadecane 80.4 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whateover shall be deemed valved unless made in writing and reserved by Contrain within thirty (30) days after completion of the applicable service. In no event shall Cretinal be liable fiv incidental or corsequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of portio incurred by client, its studiotanes, atfiliates or successors atilising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such client is based upon any of the above stated reasons or close, or close, or close, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss, or loss of portio incurred by client, its studiotanes, attifiates or successors atising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such client is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report thall not be reproduced except in hill with writes isoproval of Cardinal tabonitories.

Celey Di Keen

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

10/17/2012	Sampling Date:	10/16/2012
10/31/2012	Sampling Type:	Soil
MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
NONE GIVEN	Sample Received By:	Jodi Henson
MALJAMAR, NEW MEXICO		
	10/31/2012 MCA 1A TRUNKLINE NONE GIVEN	10/31/2012Sampling Type:MCA 1A TRUNKLINESampling Condition:NONE GIVENSample Received By:

Sample ID: SS 1 - 20' BGS (H202535-04)

<10.0

354

82.1%

90.4 %

10.0

10.0

65.2-140

63.6-154

BTEX 8021B	mg/	/kg	Analyze	d By: AP				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	<0.050	0.050	10/18/2012	ND	2.04	102	2,00	4,75	
Ethylbenzene*	<0.050	0.050	10/18/2012	ND	1,95	97.5	2.00	8.19	
Total Xylenes*	<0.150	0.150	10/18/2012	ND	5,35	89,2	6.00	14.9	
Surrogate: 4-Bromofluorobenzene (PIL	1169	89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS	_	_			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

192

189

95.9

94.7

ND

ND

200

200

5.10

8.47

10/18/2012

10/18/2012

Cardinal Laboratories

GRO C6-C10

DR0 >C10-C28

Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane

*=Accredited Analyte

PLEASE NOTE: Liability and Demaipes, Cardinal's liability and cleam's exclusive remety for any dam anising, whether based in contract or tart, shall be limited to the ansunce paid by ritent for analyses. All claims, including those for megligence and any other cause whatever shall be deemed valued unless made in writing and received by Cardinal within thiny (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential alamapes, including, without limitation, business interruptions, loss of use, or loss of use or loss of profile another asuch calmines such admit a successors are up of the above strated reasons or otherwise. Results related or or any other successors are up of Cardinal laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 25' BGS (H202535-05)

BTEX 8021B	mg/l	g	Analyze	d By: AP				-	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2,09	104	2,00	11.7	
Toluene*	<0.050	0.050	10/18/2012	ND	2.04	102	2,00	4.75	
Ethylbenzene*	<0.050	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
Total Xylenes*	<0.150	0.150	10/18/2012	ND	5.35	89.2	6.00	14,9	
Surrogate: 4-Bromofluorobenzene (PIL	114 %	89.4-12	6						
Chloride, SM4500Cl-B	mg/l	g	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/l	g	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	10/18/2012	ND	192	95.9	200	5.10	
DRO >C10-C28	95.1	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	78.2 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	83.1 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Clinitical's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including times for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. All claims, including times for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. All claims, including times for negligence and any other cause whatsoever shall be limited to the amount paid by client for analyses. All claims, including times for negligence and any other cause whatsoever shall be limited to the spelicable service. In no event shall Cardinal be liable for incluental consequential tamages, including, without limitation, business interuptivits, iosa of use, or loss of profits incurred by client, its subidiaries, affiliates or successors ansing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full web written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 30' BGS (H202535-06)

BTEX 8021B	mg/	kg	Analyze	d By: AP				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2.25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2.49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6,00	17.3	
Surrogate: 4-Bromofluorobenzene (PIL	108 %	89.4-12	6						
Chloride, SM4500Cl-B	mg/l	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/l	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	10/18/2012	ND	192	95.9	200	5.10	
DRO >C10-C28	95.6	10.0	10/18/2012	ND	189	94,7	200	8.47	
Surrogate: 1-Chlorooctane	73.8.9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	79.4 9	6 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NUTE: Liability and Damages. Cardinal's liability and client's exclusive remody for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, inclusing those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event thall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or lass of profits incidental by client, its subvidiaries, atfiliates or successors ensing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 7 of 26





Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 40' BGS (H202535-07)

BTEX 8021B	mg/l	g	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2.25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2.49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6.00	17.3	
Surrogate: 4-Bromofluorobenzene (PIL	106 %	89.4-12	6						
Chloride, SM4500Cl-B	mg/l	g	Analyze	d By: HM					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/l	g	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	10/19/2012	ND	179	89,5	200	1.14	
DRO >C10-C28	110	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	72.2 %	65.2-14	9						
Surrogate: 1-Chlorooctadecane	76.1 %	6 63.6-15	1						

Cardinal Laboratories

*=Accredited Analyte

REASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remody for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysies. All claims, including those for negligence and any other cause whatbacever shall be deemed walved unless made in wetting and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable to incontent or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiares, affliates or successors ansing out of br related to the performance of the services hervander by Cardinal, regardless of whether such claim is tozed upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laborazonies.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 8 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P, O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

/17/2012	Sampling Date:	10/16/2012
/31/2012	Sampling Type:	Soil
CA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
ONE GIVEN	Sample Received By:	Jodi Henson
LIAMAR, NEW MEXICO		
	/31/2012 CA 1A TRUNKLINE DNE GIVEN	/31/2012 Sampling Type: CA 1A TRUNKLINE Sampling Condition: DNE GIVEN Sample Received By:

Sample ID: SS 1 - 50' BGS (H202535-08)

BTEX 80218	mg/l	g	Analyze	d By: AP	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	10/30/2012	ND	2,25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2,49	124	2.00	17,3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7,46	124	6.00	17.3	
Surrogate: 4-Bromofluorobenzene (PIL	108 %	89.4-12	6						
Chloride, SM4500CI-B	mg/l	g	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	96.0	16.0	10/24/2012	ND	400	100	400	3,92	
TPH 8015M	mg/l	g	Analyze	d By: MS	-			_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	<10.0	10.0	10/19/2012	ND	179	89.5	200	1,14	
DRO >C10-C28	69.8	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	74.5 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	77.8 9	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Ourdinat's liability and client's enclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the ansunt paid by client for analyses. All claims, including those for negligence and any other cause wholsoever shall be deemed valved unless made in writing and neceled by Cardinal within thirty (30) days, after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential taimages, including, without limitation, business interunders, loss of use, or loss of profits incurred by client, is subsidiaries, antilistes or successors unling out of or related to the performance of the services linerunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 9 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 60' BGS (H202535-09)

BTEX 8021B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2,25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2.49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0,150	10/30/2012	ND	7.46	124	6.00	17.3	

Surrogate: 4-Bromofluorobenzene (PIL 111 % 89.4-126

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/24/2012	ND	400	100	400	3.92	
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	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	254	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	78.4	% 65.2-14	0.						
Surrogate: 1-Chlorooctadecane	84.5	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

RLASE NOTE: Liability and Damages. Curdinal's liability and client's exclusive remedy for any claim aniong, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsdever shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsdever shall be deened waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, whose for negligence and incident, within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profiles incurred by client, its subalitieries, affiltees or successors anising out of or related to the performance of the service interview. Results relate pay to the sameles identified above. This report shall not be reproduced except in hall with written approval of Cardinal Laboratories.

Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager

Page 10 of 26





Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 70' BGS (H202535-10)

BTEX 8021B	mg/l	g	Analyze	d By: AP					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2,25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2,49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6.00	17.3	
Surrogate: 4-Bromofluorobenzene (PIL	106 %	89.4-120	5						
Chloride, SM4500Cl-B	mg/l	g	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	96.0	16,0	10/24/2012	ND	400	100	400	3.92	
TPH 8015M	mg/k	g	Analyze	d By: MS	-				_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GR0 C6-C10	<10.0	10.0	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	74.4	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	81.1%	6 65.2-140)						
Surrogate: 1-Chlorooctadecane	86.6 %	6 63.6-154	L.						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any client ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause wheteover shall be deemed waked unless made in writing and received by Contral within thrifty (20) days after completion of the applicable service. In no event shall be liable for incidential cardinal, regordlass of use, or loss of profile incurred by client, its substationes, atfliates or aucceases shall be invited to the performance of the services hereunder by Cardinal, regordlass of whether such client is based upon any of the shore stated reasons or etherwise. Results relate vite only to the ample stated reasons or etherwise.

Celeg Di Keine

Celey D. Keene, Lab Director/Quality Manager

Page 11 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 80' BGS (H202535-11)

BTEX 80218	mg/kg		Analyzed By: AP		_			-	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2.25	113	2,00	16.1	
Toluene*	<0,050	0.050	10/30/2012	ND	2,49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6.00	17.3	

Surrogate: 4-Bromofluorobenzene (PIL 106 % 89.4-126

Chloride, SM4500Cl-B	mg/kg		Analyze	d By: HM				100	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/24/2012	ND	400	100	400	3.92	
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	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	37.0	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	83.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	88.6	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Damages. Durdinal's liability and client's exclusive remody for any claim artsing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All datims, including those for negligence and any other cause whatsoever shall be limited to the applicable service. In no event shall Cardinal be liable for incidental or consequential isoanges, including, whost limitation, business Marruptons, loss of use, or loss of profits incurred by client, its subsidiaries, artiliates or successors arising cut of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwase. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey & Keine

Celey D. Keene, Lab Director/Quality Manager

Page 12 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 1 - 90' BGS (H202535-12)

BTEX 8021B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2.25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2.49	124	2.00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6,00	17.3	

Surrogate: 4-Bromofluorobenzene (PIL 107 % 89.4-126

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/24/2012	ND	400	100	400	3,92	
TPH 8015M	mg/	lkg	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	10/19/2012	ND	179	89.5	200	1,14	
DR0 >C10-C28	92.0	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	75.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	81.6	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEXE NOTE Lability and Damages. Dardinal's lability and client's exclusive remety for any claim arising, whether based in coxbract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other case whatsorver shall be deared waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including those limits and received by Cardinal, regardess of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in hill with writen approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 13 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

10/17/2012	Sampling Date:	10/16/2012
10/31/2012	Sampling Type:	Soil
MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
NONE GIVEN	Sample Received By:	Jodi Henson
MALJAMAR, NEW MEXICO		
	10/31/2012 MCA 1A TRUNKLINE NONE GIVEN	10/31/2012Sampling Type:MCA 1A TRUNKLINESampling Condition:NONE GIVENSample Received By:

Sample ID: SS 1 - 100' BGS (H202535-13)

BTEX 8021B	mg/kg		Analyzed By: AP					_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2012	ND	2.25	113	2.00	16.1	
Toluene*	<0.050	0.050	10/30/2012	ND	2.49	124	2,00	17.3	
Ethylbenzene*	<0.050	0.050	10/30/2012	ND	2.48	124	2.00	17.4	
Total Xylenes*	<0.150	0.150	10/30/2012	ND	7.46	124	6.00	17.3	
Surrogate: 4-Bromofluorobenzene (PIL	108 9	% 89.4-12	6						
Chloride, SM4500CI-B	ma	ka	Analyze	d By: HM					

Chioride, SM4500CI-B	mg,	/xg	Analyze	а ву; нм					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/24/2012	ND	400	100	400	3.92	
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	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	44.7	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	76.0	% 65.2-14	0	1					
Surrogate: 1-Chlorooctadecane	81.9	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PEAGE NOTE: Liability and Damages. Continat's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyzes. All claims, induding lines for negligence and any often cause whatsoever shall be deemed waved unless made in writing and necelved by Cardinal within thinty (30) days after completion of the applicable service. In no event shall Cardinal be linible for incidental or consequential damages, induding, without limitations, business interruptions, loss of use, or loss of profits Vicured by client, its subsidiaries, afflights or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such client is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall net be reproduced except in full with written apprival of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 14 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 5' BGS (H202535-14)

BTEX 8021B	mg/	mg/kg		Analyzed By: AP				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	0.339	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.537	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
Total Xylenes*	1.30	0.150	10/18/2012	ND	5.35	89.2	6.00	14.9	

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM			_			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	10/23/2012	ND	400	100	400	3.92	
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	19.8	10.0	10/18/2012	ND	192	95.9	200	5.10	
DRO >C10-C28	206	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	78.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	84.1	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Lability and Damages. Candinal's lability and clearts exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the aneusit paid by cleart, for analyses, All claims, including those for negligence and ALCHORE MULTE: Laborative and buildings. Laborates a subset and senses are commer to any device and any other subset of uses or everyone, we label the terms, including and received by Cardinal without limitation, business interruptions, loss of use, or loss of profile incurred by Cardinal, stabilizations, attillables or successors amaing out of or related to the performance of the services hereunder by Cardinal, without limitation, business interruptions, loss of use, or loss of profile incurred by Cardinal, stabilizations, attillables or successors amaing out of or related to the performance of the services hereunder by Cardinal, without limitation of use, or loss of profile incurred by client, its substabilities or successors amaing out of or related to the performance of the services hereunder by Cardinal, regardless of whether succ claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval or Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 15 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Sample ID: SS 2 - 10' BGS (H202535-15)

BTEX 8021B	mg/l	g	Analyze	d By: AP	_				S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	<0.050	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.144	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
Total Xylenes*	0,488	0,150	10/18/2012	ND	5.35	89.2	6.00	14.9	
Surrogate: 4-Bromofluorobenzene (PIL	129 %	89.4-12	6						
Chloride, SM4500Cl-B	mg/l	g	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/k	g	Analyze	d By: MS			2.2	_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/18/2012	ND	192	95,9	200	5.10	
DRO >C10-C28	102	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	77.9 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	81.9%	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim aniang, whether based in contract or tort, shall be liabled to the annount paid by client for analyses. All claims, inducing troose for negligence and any other case whistoever shall be deemed waiwed unless made in writing and recoved by Cardinal which thirty (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, inducing, without immunor, load or related to the performance of the services instrumed by Cardinal, regardless of whether such claims to any other above statist resources or otherwise. Results relate value claims to be angle above the full with written approval of Cardinal Liboratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 16 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 15' BGS (H202535-16)

BTEX 8021B	mg/l	g	Analyze	d By: AP				_	S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	0.246	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.499	0.050	10/18/2012	ND	1.95	97.5	2.00	8,19	
Total Xylenes*	1.22	0.150	10/18/2012	ND	5.35	89.2	6.00	14.9	
Surrogate: 4-Bromofluorobenzene (PIL	135 %	89.4-12	6						
Chloride, SM4500Cl-B	mg/l	g	Analyze	d By: HM		_			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	10/23/2012	ND	400	100	400	3,92	
TPH 8015M	mg/s	g	Analyze	d By: MS	_			-	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	35.6	10.0	10/18/2012	ND	192	95.9	200	5.10	
DRO >C10-C28	326	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	83.9 9	65.2-14	0						
Surrogate: I-Chlorooctadecane	87.19	63.6-15-	1						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Demages. Cardinal's liability and clerct's exclusive remedy for any claim ansing, whether based in coveract or tort, shall be limited to the annount paid by clerct for mellioping those for megligence and any other cause whatsoever shall be deemed valved unless made in writing and received by Cardinal within thinty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequenceal caunages, including, whost limitation, business interruptions, loss of use, or loss of prefits incurred by clerct, its substanties, anilitates of successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwase.

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager

Page 17 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

10/17/2012	Sampling Date:	10/16/2012
10/31/2012	Sampling Type:	Soil
MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
NONE GIVEN	Sample Received By:	Jodi Henson
MALJAMAR, NEW MEXICO		
	10/31/2012 MCA 1A TRUNKLINE NONE GIVEN	10/31/2012Sampling Type:MCA 1A TRUNKLINESampling Condition:NONE GIVENSample Received By:

Sample ID: SS 2 - 20' BGS (H202535-17)

BTEX 8021B	mg/kg		Analyzed By: AP				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2,00	11.7	
Toluene*	0.132	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.332	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
Total Xylenes*	0.857	0.150	10/18/2012	ND	5.35	89.2	5.00	14.9	

Surrogate: 4-Bromofluorobenzene (PIL 136 % 89.4-126

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1400	16.0	10/23/2012	ND	400	100	400	3.92	
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	17.0	10.0	10/18/2012	ND	192	95.9	200	5.10	
DR0 >C10-C28	184	10.0	10/18/2012	ND	189	94.7	200	8.47	
Surrogate: 1-Chlorooctane	82.1	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	83.6	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Curdinal's liability and dient's exclusive remedy for any daim aming, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deened waived unless imade in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or transequential damages, including, without limitation, business interruptions, loss of use, or has of profits incurred by client, its aubidiaries, atfiliates or successors anising out of br related to the performance of the services hereunder by Cardinal, regardless of whicher such claim is based upon any of the alaxy stated vissors or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D Keine

Celey D. Keene, Lab Director/Quality Manager

Page 18 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 25' BGS (H202535-18)

BTEX 8021B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	0.052	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.148	0.050	10/18/2012	ND	1.95	97.5	2.00	8.19	
Total Xylenes*	0.340	0.150	10/18/2012	ND	5.35	89.2	6.00	14.9	

Surrogate: 4-Bromofluorobenzene (PIL 122 % 89.4-126

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By; HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	12.0	10.0	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	490	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	75.1	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	82.8	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whotsoever shall be deemed waived inters male in writing and recovered by Cardinal within thiny (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or tomaques, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the tamples identified above. This report shall not be reproduced except in full with writen approval of Cardinal Laborateries.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 19 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 30' BGS (H202535-19)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2012	ND	2.09	104	2.00	11.7	
Toluene*	<0.050	0.050	10/18/2012	ND	2.04	102	2.00	4.75	
Ethylbenzene*	0.089	0.050	10/18/2012	ND	1,95	97.5	2.00	8.19	
Total Xylenes*	0.229	0.150	10/18/2012	ND	5,35	89.2	6.00	14.9	
Surrogate: 4-Bromofluorobenzene (PIL	118 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	10/23/2012	ND	400	100	400	3.92	
TPH 8015M	mg/l	kg	Analyze	d By: MS	11				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	12.1	10.0	10/19/2012	ND	179	89.5	200	1.14	
	560	10.0	10/19/2012	ND	176	87.9	200	0.0370	

Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

*=Accredited Analyte

REASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any dalin arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, indualing linose for negligence and any other cause whatsoever shall be deemed volved unless made in writing and received by Cardinal web's thirty (30) days after completion of the applicable service. In no event shall cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or inducted to the performance of the services hereinder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or othewses. Results relate only to the amples identified above. This report shall not be reproduced except in hull weth verifient approval of Cardinal Laboratories.

Celeg Di Keine

88.7 %

63.6-154

Celey D. Keene, Lab Director/Quality Manager

Page 20 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 40' BGS (H202535-20)

BTEX 8021B	mg/l	g	Analyze	d By: MS		-		_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2012	ND	1.98	99.0	2.00	2.23	
Toluene*	<0.050	0.050	10/22/2012	ND	2.15	108	2.00	2.85	
Ethylbenzene*	0.086	0.050	10/22/2012	ND	2.16	108	2.00	2.30	
Total Xylenes*	0.352	0.150	10/22/2012	ND	6.54	109	6.00	2.75	
Surrogate: 4-Bromofluorobenzene (PIL	125 %	89.4-12	6						
Chloride, SM4500Cl-8	mg/l	cg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	10/24/2012	ND	400	100	400	0.00	
TPH 8015M	mg/l	g	Analyze	d By: MS		-			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15.2	10.0	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	579	10.0	10/19/2012	ND	176	87.9	200	0.0370	
Surrogate: 1-Chlorooctane	83.5 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	92.9 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

REASE NOTE: Liability and Damages, Cardinal's liability and clients exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyzes. All claims, including those for negligence and any other cause whetboever shall be deemed valved unless made in writing and received by Cardinal within thirty (30) days, after completion of the applicable service. In no event shall be claims, including, whether based in consequential damages, including, without limitations, business interruptions, loss of use, or loss of use, or loss of profile incurred by Cardinal, regardless of whether such daims based upon any of the above stated reasons or otherwise. Researcher by Cardinal, regardless of whether such daims based upon any of the above stated reasons or otherwise. Researcher by the samples identified above. This report shall not be reproduced occept in NII with written sporwal of Cardinal laboretrates.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 21 of 26



Analytical Results For:

DIAMONDBACK DISPOSAL SERVICE INC. JUSTIN ROBERTS P. O. BOX 2491 HOBBS NM, 88241 Fax To: (575) 392-9376

Received:	10/17/2012	Sampling Date:	10/16/2012
Reported:	10/31/2012	Sampling Type:	Soil
Project Name:	MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NEW MEXICO		

Sample ID: SS 2 - 50' BGS (H202535-21)

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	10/22/2012	ND	1.98	99.0	2.00	2.23	
Toluene*	<0.050	0.050	10/22/2012	ND	2.15	108	2.00	2.85	
Ethylbenzene*	0.066	0.050	10/22/2012	ND	2.16	108	2.00	2.30	
Total Xylenes*	0.268	0.150	10/22/2012	ND	6,54	109	6.00	2.75	
Surrogate: 4-Bromofluorobenzene (PIL	125 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	(g	Analyze	d By: HM	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	10/24/2012	ND	400	100	400	0.00	

				d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	12.0	10.0	10/19/2012	ND	179	89.5	200	1.14	
DRO >C10-C28	626	10.0	10/19/2012	ND	176	87.9	200	0.0370	

Surrogate: 1-Chlorooctadecane 86.2 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be finited to the amount paid by client for analyses. All claims, including trace for anglegroce and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable to incorrect and consequential damages, including, without imitation, business interruptions, loss of axee, or loss of profits incurred by client, its subsidiaries, affiniates or successors anising out of or related to the performance of the services hereunder by Cardinal, regardless of which are expressed except in full with written approval of Cardinal Laboratories.

Celey & Keine

Celey D. Keene, Lab Director/Quality Manager

Page 22 of 26



Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Curdinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profils incurred by client, its subsidiaries, afflictes or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 23 of 26

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ect Manager: Justin RubErts		BI	LL TO		ANALYSIS REQUEST									
roject Manager: Justin RubERTS	P.	O. #:						T	1	1				
ddress: P.O. Box 2491	Co	mpany:												
state: AM zip: 88241	At	tn:										10 - 3		
ione #: 575-312-4996 Fax #: 575-312-13 74	Ac	Idress:									1.12			
oject #: NA Project Owner: COPC oject Name: MCA ZA TRUNK INE	Ci	ty:												
oject Name: MCA LA IRVNA INE	St	ato:	Zip:	1								19.0		
oject Location: MAIJAMAA	Ph	one #:												
		x #:												
MATR	IX	PRESERV.	SAMPLING	-	×									
S ER				I	12									
Tap I'D Samble I'D Samble I'D 1 2012232 1 2012232 1 22212 2 2 1 2 2 2 2 1 2 2 2 2 1 2 2 2 2 1 2 2 2 2 1 2 2 2 2 1 2 2 3 3		4 -		A	K	1								
C SND AB C SND	3 2	BAS COO		IL	8	V	- 1							
207535 1000 NAS	SLUDGE OTHER.	ACIDIBASE ICE / COOI OTHER :	DATE TIME						1					
1 551 - 5'B65 61 X			10-16-12 9:30	X	x	X			+					
2551-10'BGS 111 ×			11 9:40	XX	XX	XX			+	1			-	
		1.000	" 9:46	Y	×	Y			-	-				
USS1-20'B45			" 9:52	X	Y	Y	11		1-		11			
3 551- 15' B65 4 551- 20' B65 5 551- 25' B65 4 551- 30' B65 4 551- 40' B65 4 551- 50' B65 4			11 9:53	X	¥	¥								
6 551- 30, 363			1 9:56	X	¥	Y				_				
7 551- 40 865			1 4:59	X	×	V		1						
0 551-50 (567)			1) 10:04	X	×	Y		-		_				
10 161 - 20' AGE			1 10:14	X	¥	X								
SE NOTE: Lisbley and Discourse Cardinally Withfly and an all a schuber remove for one risks or should be and all and	e/(2:: -):	Sautelineat	11 10:24	1Y	X	Y		_	_					
es. All chanse subvieg trace for regigence and any obes cauto unobserver total in decrementationed astress mana over e. Taino event shall Cardoof te with the mediental or comparatal subseque, and shap or the or whether war was return	ing and pace pacing conditions	waley Calenatia Novel philatezilian	from X-days and cound its and closh counter by the total designs	the spation	de .									
inquished By; Pate 17/11 Beceived By:	Carth Ing	24 - 20 - 20 - 20 - 20 - 20	Phone R	esult:	T. Ye	5 1	No Ar	Id'l Phor	0 #	D Ball (D Ball				
hetal time poli	All	6 11 A	Fax Res	ult:	TJ Ye			id'l Fax i						
IN LING LINN	JU	eng	ON REMAIN	10.										
fiquished By: Date: Received By:														
Time:														
elivered By: (Circle One) Sample Co Cool / Int		CHECK (Init												
impler - UPS - Bus - Other:		(Inter	TAN											
No.	No	21												

Page 68 of 211

Received by OCD: 11/24/2020 1:14:06 PM

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476							
Company Name: DiAmondback Dispusal SAV. INC Project Manager: Justin RubErts	BILL TO ANALYSIS REQUEST						
Project Manager: Justin RubErts	P.O. #:						
Address: P.O. Box 2491	Company:						
City: 1706/15 State: NM Zip: 8824/	Attn:						
Phone #: 575-312-1991 Fax #: 575-312-9374	Address:						
Project #: N/A Project Owner: COPC Project Name: MCA JA TRUNA LINE	City:						
Project Name: MCA IA IRUNA INE	State: Zip:						
Project Location: MAJJAMAR Sampler Name: Justin RebEnts	Phone #:						
	Fax #:						
HIGH AND AND AND AND AND AND AND AND AND AND	PRESERV. SAMPLING	TX IIIIII					
C (C)OMP FRS FR		- 4					
	8 5	520					
STEV	SILIDOR OTHER: AGIDIAASE AGIDIAASE AGIDIAASE AGIDIAASE AGIDIAASE AGIDIAASE						
Lab I.D. Sample I.D. MONITORS AND ADDRESS	SILIDOR OTHER: AGIDIBAN AGIDIBAN AGIDIBAN AGIDIBAN						
11 551- 80 BGS GI X	X 10-12 10:36	XXX					
12 551-90 BG7	¥ '' 10:52	XXX					
13 551 - 100' B45 14 552 - 5' B45	¥ 1 11:01						
15 552 - 10 BGS	¥ 1' 11:13	Y Y E					
16552 - 15 R65	y ' 11:20 y n 11:25	XXXX					
17 552-20 365	× 1. 11:28	X X X					
18552-25'B65 111 X	¥ 11:34						
19 552-30'B65	1 11 11:36						
223552-40'BGS NV X	1 1 11:39	XXX					
n LEASE MOTE: LOOPly and Demission Constant's Handly and Stand's underson entropy for any or include the second analysis. All initias, including that, for negligi ence and any other cases and manimum relation as well include in under anylose. In sevent shall Cantool for Soldy for incidental in terraspondal demogram. All any or draws, including		- gha 20 dimit ciphie					
All are an according to the second of the second se	the brace spectrum of the party of the process is a second	er 9. 18					
behal Billio Ind.	Phone Resultion Fax Result	It: TI Yes T. No Add'I Fax #:					
Nym - my: 25 Wall	ALLADDA REMARK	5					
Relinquished By: Date: Recoived By:							
Time:							
Delivered By: (Circle One) Sample Co.							
Sampler - UPS - Bus - Other:	Yes CAR						

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL Laboratories

Page 69 of 211

Page 25 of 26

CARDINAL

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ompany Name: Dramoudback Disposal Sov. INC.	BILL TO ANALYSIS REQUEST		
roject Manager: Justin RubErts	P.O. #:		
ddress: P.D. Box 2491	Company:		
ty: 1tubhs State: NM Zip: 88241	Attn:		
none #: 575-392-9994 Fax #: 575-392-9374	Address:		
oject #: N/A Project Owner: LUPL	City:		
oject Name: MLA IA TRUNKLINE	State: Zip:		
oject Location: MAJJAMAR	Phone #:		
oject Location: MAJJAMAR mpler Name: Justin RubERts	Fax #:		
DR LAB USE OWLY MATRIX	PRESERV. SAMPLING		
CW IN			
C(C)O		AV	
Lab I.D. Sample I.D. Sample I.D. Sample I.D. Sample	or se		
TOT2322	OTHER: ACIDIAASE ACIDIAASE ACIDIAASE ACIDIAASE ACIDIAASE ACIDIAASE ACIDIAASE		
LD1535			
21552-50 B65 G1 X	× 10-16-12 11:44	* * *	
n and a second sec			
	-		
	+ 1		
11.00 Fz = 10.000 mm			
ISE NOTE: Lobbly and Demogres. Cardinal's labely and chords exclusive tensory for only real har an equivative names in an environ- test. All claims including those for negligence and any other cases tanabased shall be deemonical verticates or as it average of	 Test stall by taking the second pair by the electron rate year of Care not white XI days after could day be to 		
as, in second shall Cardinal be liable for incidental or represented drivinges, actually ordered, protects, but represented or second protects are extended on a second protect or second protects of which are actually represented to the participation of second protects for exact actual or a Actual or actual or ac	which we at late of math, included by direct, down and a final state of the state o		
linguished By: Date: 191, PReceived By:	Phone Res		
hkml Time 25 101	VAA MAY REMARKS		
inquished By: Date: Received By:			
Time:			
elivered By: (Circle One) Sample Conditi	OUFOVED BY		
i d Cool Intact	(solio tale)		
ampler - UPS - Bus - Other:	600		



June 24, 2014

KYLE NORMAN RICE ENVIRONMENTAL CONSULTING & SAFETY LLC 419 W. CAIN HOBBS, NM 88240

RE: COP MCA 1A TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 06/19/14 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/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.

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY KYLE NORMAN 419 W. CAIN HOBBS NM, 88240 Fax To: (575) 397-1471

Received:	06/19/2014	Sampling Date:	06/18/2014
Reported:	06/24/2014	Sampling Type:	Soil
Project Name:	COP MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SB2@ 55FT (H401850-01)

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	06/20/2014	ND	2.03	101	2.00	2.64	
Toluene*	<0.050	0.050	06/20/2014	ND	2.18	109	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/20/2014	ND	1.99	99.3	2.00	3.07	
Total Xylenes*	<0.150	0.150	06/20/2014	ND	6.23	104	6.00	2.85	
Total BTEX	<0.300	0.300	06/20/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	06/20/2014	ND	400	100	400	3.92	
TPH 8015M	mg/kg A		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	06/23/2014	ND	181	90.3	200	3.55	
DRO >C10-C28	340	10.0	06/23/2014	ND	197	98.3	200	6.86	
Surrogate: 1-Chlorooctane	85.3 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.2 9	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager


Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY KYLE NORMAN 419 W. CAIN HOBBS NM, 88240 Fax To: (575) 397-1471

Received:	06/19/2014	Sampling Date:	06/18/2014
Reported:	06/24/2014	Sampling Type:	Soil
Project Name:	COP MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SB2@ 65FT (H401850-02)

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	06/20/2014	ND	2.03	101	2.00	2.64	
Toluene*	<0.050	0.050	06/20/2014	ND	2.18	109	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/20/2014	ND	1.99	99.3	2.00	3.07	
Total Xylenes*	<0.150	0.150	06/20/2014	ND	6.23	104	6.00	2.85	
Total BTEX	<0.300	0.300	06/20/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	06/20/2014	ND	400	100	400	3.92	
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	06/23/2014	ND	181	90.3	200	3.55	
DRO >C10-C28	230	10.0	06/23/2014	ND	197	98.3	200	6.86	
Surrogate: 1-Chlorooctane	78.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	84.5	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

RICE ENVIRONMENTAL CONSULTING & SAFETY KYLE NORMAN 419 W. CAIN HOBBS NM, 88240 Fax To: (575) 397-1471

Received:	06/19/2014	Sampling Date:	06/18/2014
Reported:	06/24/2014	Sampling Type:	Soil
Project Name:	COP MCA 1A TRUNKLINE	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SB2@ 75FT (H401850-03)

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	06/20/2014	ND	2.03	101	2.00	2.64	
Toluene*	<0.050	0.050	06/20/2014	ND	2.18	109	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/20/2014	ND	1.99	99.3	2.00	3.07	
Total Xylenes*	<0.150	0.150	06/20/2014	ND	6.23	104	6.00	2.85	
Total BTEX	<0.300	0.300	06/20/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	06/20/2014	ND	400	100	400	3.92	
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	06/23/2014	ND	181	90.3	200	3.55	
DRO >C10-C28	236	10.0	06/23/2014	ND	197	98.3	200	6.86	
Surrogate: 1-Chlorooctane	78.1	65.2-14	0						
Surrogate: 1-Chlorooctadecane	88.1	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose shall be instrumed by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 X (FOF) 202 2476 (225) 672 7001 EAX (325)673-7020

Company Name	(505) 393-2326 FAX (505) 393-24	-		-			All a		B	11 70	tel del est				1	ANAL	YSIS	REQUES	т	-	_
	KyleNorman				-		P.	0. #													
Address:	MICHANG						c	omp	any:					1.0		SL					
City: Hobbs	State: NM	Zip	: 88	240			A	tn:								Cations/Anions					
Phone #:	Fax #:						A	ddre	SS:				_			An					
Project #:	Project Owne	r:					c	ty:				S	TPH 8015 M		I	S/					
	opmcA 1A Trunkline						s	ate:		Zlp:		Chlorides	15	×	Texas TPH	lor	0				
Project Location							P	hone	#:			i.	80	BTEX	3S	at	TDS				
Sampler Name:	Amber Groves		_		_	_	F	ax #:				Ĕ	I	m.	Xe						
FOR LAB USE ONLY					MA	TRIX	-	PR	ESER	. SAMPL	ING	0	1		μ	ete					
Lab I.D.	Sample I.D. SB2@55ft SB2@15ft	CIG)RAB OR (C)OMP.	1	GROUNDWATER	< < SOIL		SLUDGE	ACID/BASE:	ICE / COOL	DATE	TIME	V	V	~		Complete					
	582@15H	50	i		1		+	-		10-18-14	10:20	V	1	1						-	+
		1											-			-		-	-		+
-							-			-	-	-	-	-	-	-				-	-
				\vdash	-		+	+	+		-	+	-	-	-	-					
-		+	+	+	+		+	+	++		-	1		-	1	1					
		+	+	+	+	-	-	+	+												
analyses. All claims inclu service. In no event shall affiliate or successors at Relinquished f Relinquished f Relinquished f	Y GNOVES TIMES IS	ing with y Cardin	ece	Ived E	whethe	er such o	nditie	s of US	e, or loss		Phone R Fax Res REMARI email knorr	vise. vi	ults price ner@	e-ecs price	-ecs. om; s	Add'	; kjone	#: Drice-ecs es@rices Drice-ecs	Wa.com	m;	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

$\underset{\text{Soil Bore Log}}{\text{Appendix }} C$

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

•

Logger: Driller:		Amber Gro White Drill		SB-SS-2		RIC	R	ECS	TAL
Drilling N	lethod:	Air Rotar	у	HA 2	Pre	oject Name	:	V	Vell ID:
Start Date	e:	6/18/201	4	ee 1		- CoP MCA 1		eader	SB-2
End Date	:	6/18/201	4	SS 1	Pre	oject Consi	ulta	nt: RECS	
Comme	nts: All sam	nples were	taken	from cuttings.		cation: U	/L G	3 Sec 30 '-S R-32-E	
			AFTED E	SY: C. Uršanić		t: 32°48'24.9	926	"N	County:Lea
Depth	TD = Chloride			GW = 95' - 105'	Lo	ng: 103°48'1 I	10.0 I		State:NM
(feet)	field test		PID	Description		Lithology		Well Co	onstruction
SS 5 ft 10 ft									
15 ft 20 ft				RED SAND					Bentonite Seal
25 ft									
30 ft									
35 ft									
									V

•

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
40 ft						
45 ft				COARSE RED SAND		
50 ft						
55 ft	452 в т	CI- 432 GRO	6.9			
	<0.05 <0.05 E X <0.05 <0.15	<10 DRO 340		RED SAND		Bentonite
60 ft	618		7.1			Seal
65 ft	1024	CI- 1150	5.6			
	B T <0.05 <0.05 E X <0.05 <0.15	GRO <10 DRO 230				
70 ft	803		6.4	RED SAND/CLAY		
75 ft	369 B T <0.05 <0.05	CI- 352 GRO <10	5.4			
	E X <0.05 <0.15	DRO 236)



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NI SB-2 WELL OWN CONOCO F WELL OWN HC 60, BC WELL LOCATIO (FROM GP DESCRIPTION MCA 1 Tru	ER NAM Phillip ER MAII DX 66 NN S) N RELATII	IE(S) S LING A LATIT LONG NG WEL	DDRESS DEGREES UDE 32 ITUDE 103	48 48 T ADDRESS AND COMM	24.85 10.00	N W	* DATUM RE	IONAL) I V REQUIRED: ONE TEN QUIRED: WGS 84		ZIP O
n,	WD-1456			lohn W. White					White Drilling C	Company, Inc.	_
	DRILLING S 06/18/20			drilling ended /18/2014	DEPTH OF COMPLET	ED WELL (FT)	BORE HOI 75.0	LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOUNTERED (FT)	
7	COMPLETED	WELL	is: C	ARTESIAN	• DRY HOLE	SHALLOW (UNC	CONFINED)		STATIC WATER LEV	EL IN COMPLETED WE	ELL (FT)
TIOI	DRILLING FI	LUID:	(AIR	C MUD	ADDITIVES – SP	ECIFY:				
RM	DRILLING M	ETHOD:	(ROTARY	C HAMMER C	CABLE TOOL	C) OTHE	R – SPECIFY:			
G INFO	DEPTH FROM	(feet bg TC		BORE HOLE DIAM	CASING MATE GRA	ADE		ASING VECTION	CASING INSIDE DIAM.	CASING WALL THICKNESS	SLOT SIZE
2. DRILLING & CASING INFORMATION				(inches)	(include each ca note section	s of screen)	T	YPE	(inches)	(inches)	(inches)
2. DRILLI											
	DEPTH (feet bg	1)	BORE HOLE	LIST AN	NULAR SEAL M	ATERIAL A	ND	AMOUNT	METHO	DOF
AL	FROM	TC		DIAM. (inches)		ACK SIZE-RANC			(cubic feet)	PLACEN	AENT
ANNULAR MATERIAL	0.0	75.0		6.0	Type 2 Portlan	d Cement w/5	% Benton	ite	14.7225	Pump Mix v	w/tremnai
AM 3	_	-	_								
ILAI									ing		
INNI									and the second		
3.										1. C	
FOD	ORE DITED							11/10 (2)		- LOC (N 06/0	0/2012)
	OSE INTERI	YAL U	36			POD NUMBER	ł		0 WELL RECORD &	x LOG (version 06/0	0/2012)
LOC	ATION									PAGE	1 OF 2

Appendix D Photo Documentation

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

ConocoPhillips MCA 1A Header Unit Letter G, Section 30, T17S, R32E



Drilling SB-2, facing southeast

6/18/14



Completed SB-2, facing southeast



Plugging SB-2 in total with bentonite, facing east 6/18/14



Completed SB-2, facing northwest

6/18/14

Received by OCD: 11/24/2020 1:14:06 PM

From:	Hughes, Solomon
To:	Kyle Norman
Cc:	Justin Wright (PAC); Hack Conder; Lara Weinheimer; Laura Flores; Catherine Ursanic
Subject:	Re: COP MCA 1A Header
Date:	Wednesday, August 13, 2014 12:43:41 PM

Kyle,

Approved as written.

Sol

<u>Sol Hughes</u> Environmental Protection Division Bureau of Land Management

620 E. Greene St Carlsbad, NM

Office: 575.234.5951 Cell: 575.499.3378

On Wed, Aug 13, 2014 at 10:05 AM, Kyle Norman <<u>knorman@rice-ecs.com</u>> wrote:

Sol, attached is the Corrective Action Plan for the CoP MCA 1A Header. If you have any questions, please let us know. Otherwise, we await your approval.

Thanks!

Kyle Norman

Project Lead

419 W. Cain

Hobbs NM 88240

Cell # (575)942-8542

Fax # (575)393-0293



From:	Oberding, Tomas, EMNRD
То:	Kyle Norman
Cc:	<u>"Hack Conder"; Justin.Wright@conocophillips.com; "Lara Weinheimer"; "Laura Flores"; "Catherine Ursanic"</u>
Subject:	RE: COP MCA 1A Header
Date:	Wednesday, August 13, 2014 8:51:22 AM

Aloha Kyle,

Second mail of the morning-

Thank you for sending in this plan again.

I appreciate you stopping by to explain the proposals for this event

Based on the documentation and our discussion OCD approves the scope of work (please consider this the official 'signing off').

If you have any questions, please contact me, else please keep me informed as the situation warrants.

Mahalo

Tomáš 'Doc' Oberding, PhD Environmental Specialist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240 (O): (575) 393-6161 ext 111 (C): 575-370-3180 (F): (575) 393-0720 E-Mail: tomas.oberding@state.nm.us Website: http://www.emnrd.state.nm.us/ocd/

From: Kyle Norman [mailto:knorman@rice-ecs.com]
Sent: Wednesday, August 13, 2014 8:04 AM
To: Oberding, Tomas, EMNRD
Cc: 'Hack Conder'; Justin.Wright@conocophillips.com; 'Lara Weinheimer'; 'Laura Flores'; 'Catherine Ursanic'
Subject: COP MCA 1A Header

Tomas,

I have attached the COP MCA 1A Header CAP plan for the meeting this morning at 8:30 AM. Thanks

Kyle Norman Project Lead 419 W. Cain Hobbs NM 88240 Cell # (575)942-8542 Fax # (575)393-0293



.

APPENDIX D Soil Boring Logs

212	C-M	D-0	2251	Т	ЪT	ETRA	TEC	н				LOG OF BORING BH-2		Page 1 of
Proje	ect N	am	e: MCA	4 1-A H	lead	er R	elea	se			I			
Borel	hole	Loc	ation: (GPS: 32	.8068	814°, -′	103.80)2761°	•			Surface Elevation: 3913 ft		
3orel	hole	Nu	mber: E	3H-2						В	oreho iame	ble Date Started: 7/29/2020 Date Finis	hed:	7/29/2020
			a Ê	(-	۲ (%)	IT (%)			X			WATER LEVEL OBSERVATIONSWhile Drilling $\underline{\nabla}$ DRY ftUpon Completion of Drilling $\underline{\Psi}$	DRY	′_ft
DEPTH (ft)	OPERATION TYPE	SAMPLE	XI CHLORIDE FIELD SCREENING (ppm)	UNC FIELD	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	Remarks: MATERIAL DESCRIPTION		REMARKS
												-SM- SILTY SAND; Brown, loose, dry, with no odor, with no staining.	вн	-2 (0'-1')
												-SM- SILTY SAND; Brown, loose, dry, with moderate odor, with high staining		-2 (2'-3')
5													вн	-2 (4'-5')
												-	BH	-2 (6'-7')
													вн	-2 (9'-10')
													вн	-2 (12'-13')
												moderate gravel, with low odor, with no staining.		-2 (14'-15')
												-SM- SILTY SAND; Light tan, very dense, dry, with moderate gravel, with no odor, with no staining.	вн	-2 (17'-18')
 20													вн	-2 (19'-20')
			1670										ВН	-2 (22'-23')
 														-2 (24'-25')
												Bottom of borehole at 27.0 feet.	BH	-2 (26'-27')
Samp Type:	pler s:		Split Spoon Shelby Bulk Sample Grab Sample				r T		Muc Rota	tinuous nt Auge sh	ser	Hand Auger Notes: Air Rotary Direct Push Core Barrel	s" colu	ımn.

Logger: Joe Tyler Drilling Equipment: Direct Push Driller: HCI Drilling Released to Imaging: 7/29/20/22/1:59:59 PM

211

212	C-N	1D-(02251	Т	ĿТ	ETRA	TEC	н				LOG OF BORING BH-1	Page 1 of 2
Proje	ect N	lam	ne: MCA	A 1-A H	lead	er R	elea	se				· · · · · · ·	
Bore	hole	e Lo	cation:	GPS: 32	.8069	54°, -′	103.80)2792°	,			Surface Elevation: 3911 ft	
Bore	hole	Nu	umber: E	3H-1						B	oreh	ole Date Started: 7/29/2020 Date Finished:	7/29/2020
						(WATER LEVEL OBSERVATIONS While Drilling ♀ DRY ft Upon Completion of Drilling ♀ DF	OV #
			a C	(r	۲ (%)	IT (%)			X				<u> </u>
	ЪЕ		udd) (udd) (VER	NTEN	(pcf)	_⊢	INDE	(%)		Remarks:	
DEPTH (ft)	OPERATION TYPE	SAMPLE	AIT CHLORIDE FIELD SCREENING (ppm)	UNC FIELD	SAMPLE RECOVERY (%)	MOISTURE CONTENT	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION (문) 문 문 문 문 문 문 문 문 문 문 문 문 문 문 문 문 문 문	REMARKS
			998										3H-1 (0'-1')
_													3H-1 (2'-3')
5													3H-1 (4'-5')
_			626										BH-1 (6'-7')
_			020										58-1 (0-7)
10_													3H-1 (9'-10')
_													
-			499										3H-1 (12'-13')
15_												F	BH-1 (14'-15')
_													
_ _													3H-1 (17'-18')
20			1820									21	3H-1 (19'-20')
_												-SM- SILTY SAND; Light tan, very dense, dry, highly cemented, with moderate gravel, with no odor, with no staining.	3H-1 (22'-23')
25_													3H-1 (24'-25')
_			3730									_	3H-1 (26'-27')
_													(_v _r)
30			3310									Bottom of borehole at 30.0 feet.	3H-1 (29'-29')
Sam Type	pler s:		Split Spoon Shelby Bulk Sample	∎ [] v		e Line Shear nia	r T	2pera ypes	Muc Rot	d ary htinuous ht Auge		Hand Auger Notes: Air Rotary Direct Push Direct Push	olumn.
			Grab Sample		est P	it		11111111 1111	Wa Rot	sh		Core Barrel	
oqo	ler.	Joe	e Tyler				l r	Drillin	a Eai	uinme	nt• Di	rect Push Driller: HCI Drilling	

MCA 1-A HEADER RELEAASE OF 1: 40.15-20; TT AUSTIN GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT'`

.

11

212C-N	/ID-02	2251	Т	ĿΤ	ETRA	TEC	H				LOG OF BORING H-20-1	ge f 1
Project N	Name	e: MC	A 1-A ⊢	lead	er R	eleas	se					
Borehole	e Loc	ation:	GPS: 32	.8070)80°, -	103.80)2752°	5			Surface Elevation: 3911 ft	
Borehole	e Nur	mber:	H-20-1						B	oreho	le cr (in.): 2 Date Started: 8/12/2020 Date Finished: 8/12/20	20
		0		(%)	T (%)			×			WATER LEVEL OBSERVATIONS While Drilling $\underline{\nabla}$ DRY ft Upon Completion of Drilling $\underline{\Psi}$ DRY ft	
DEPTH (ft) OPERATION TYPE	SAMPLE	HIT SCREENING (ppm)	UNC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	Remarks: MATERIAL DESCRIPTION	RKS
		12	0								-SM- SILTY SAND; Brown, loose, dry, with no odor, with no staining.)
_ ₽	6 M	20	0								AH-1 (2'-3')
	m										Bottom of borehole at 4.0 feet.	
Sampler Types:		Split Spoon Shelby Shelby Grab Sample Sample				r T		Muc Rota	tinuous nt Auge sh	s s	Hand Auger Notes: Air Rotary Direct Push Direct Push Core Barrel	

212C-	-MD	02251	T	ΕT	ETRA	ATEC	H				LOG OF BORING H-20-2	Page 1 of 1
Project	t Nai	ne: MC	A 1-A ⊢	lead	ier R	elea	se					
Boreho	ole L	ocation:	GPS: 32	2.8069	€44°, -	103.80)2647	•			Surface Elevation: 3912 ft	
Boreho	ole N	umber:	H-20-2						E	oreho	ble 2 Date Started: 8/12/2020 Date Finis	shed: 8/12/2020
				(%)	(%)						WATER LEVEL OBSERVATIONS	DRY_ft
ų	ш	(mdd)	(mqq	ERY (TENT	ct)		NDEX	(%		Remarks:	
DEPTH (ft)	OPERATION TYPE SAMPLE	EXCREENING (ppm)	U VOC FIELD	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	E E REMARKS
	m	19	0								-SM- SILTY SAND; Brown, loose, dry, with no odor, with no staining.	AH-2 (0'-1')
	2	11	0									AH-2 (2'-3')
	M	2									4	AH-2 (3'-4')
											Bottom of borehole at 4.0 feet.	
Sample Types:	er	Split Spoon Shelby Bulk Sample		/ane S		r C		Muc Rota	itinuou ht Auge sh	s er	Hand Auger Notes: Air Rotary Direct Push Core Barrel Core Barrel	s" column.
Sample Types:	er	Shelby		/ane \$	Shear mia	r T		Muc Rota	itinuou ht Auge sh		Air Rotary Analytical samples are shown in the "Remark Surface elevation is an estimated value.	s" column.

anglet Name: MCA 1.4 Header Release Surface Elevation: 3913 ft crembe Location: cres: 32.80570; -103.802897 Surface Elevation: 3913 ft crembe Numer: H-20-3 Bornhele (n,), 2 Date Stated: 0/12/2020 Date Finished: 8/12/2020 using the problem of Drilling greentee (n,), 2 Date Stated: 0/12/2020 Date Finished: 8/12/2020 using the problem of Drilling greentee (n,), 2 Date Stated: 0/02 DRY ft Upon Completion of Drilling greentee (n,), 2 using the problem of Drilling greentee (n,), 2 DRY ft Upon Completion of Drilling greentee (n,), 2 using the problem of Drilling greentee (n,), 2 DRY ft Upon Completion of Drilling greentee (n,), 2 greentee (n,), 2 greentee (n,), 2 greentee (n,), 2 Greentee (n,), 2 AH-3 (7-1) greentee (n,), 2 greentee (n,), 2 greentee (n,), 2 Greentee (n,), 2 AH-3 (7-1) greentee (n,), 2 greentee (n,), 2 greentee (n,), 2 Greentee (n,), 2 Greentee (n,), 2		C-N	D-02	251	T	e) T	ETRA	TEC	н				I	OG OF BORING H-20	-3		Page 1 of 1
ampler y de generation Number: H-20-3	Proje	ect N	lame	: MCA	. 1-A H	ead	er R	elea	se								
ampler years a status Antise Liner years Operation Typeration Image of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the	Bore	hole	Loca	ation: G	GPS: 32	.8067	780°, -	103.80)2659°	,			Surface Elevation	n: 3913 ft			
ampler years a status Antise Liner years Operation Typeration Image of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the antise time of the	Bore	hole	Nun	nber: H	I-20-3						E	Boreho Diame	ole ter (in.): 2	Date Started: 8/12/2020	Date F	inishe	d: 8/12/2020
amplor ppest Statu Pit				ppm)	(mdc	ERY (%)	ENT (%)	if)		IDEX			While Drilling			<u>¥</u> [DRY_ft
ampler Statu Actate Lifer Operation Image: Control of the set o	DEPTH (ft)	OPERATION TYP	SAMPLE			SAMPLE RECOVE	MOISTURE CONT	DRY DENSITY (po			MINUS NO. 200 (%	GRAPHIC LOG	MAT	ERIAL DESCRIPTION		DEPTH (ft)	REMARKS
empler Spece Acetate Liner Spece Spece Acetate Liner Spece Acetate Li	_												-SM- SILTY odor, with no	SAND; Brown, loose, dry, wit staining.	h no	_	
ampler ypes: Spon Shetby Vana Shear Shetby Shetby Shetby Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby California Shetby Shetby Shetby Shetby California Shetby Shet			m													4	
Shelby Image: Wane Shear Surface elevation is an estimated value. Image: Wane Shear				·									В	ottom of borehole at 4.0 feet.			
Shelby Image: Wane Shear Surface elevation is an estimated value. Image: Wane Shear																	
Sample H rest Fit E Rotary																	
	Sam Type	pler s:		Shelby Bulk Sample		ane S alifor	Shear mia	r C		Muc Rota Con Fligi	tinuou nt Auge sh	ser	Air Rotary A Direct Push	nalytical samples are shown i	n the "Rema ed value.	arks"	column.

MCA 1-A HEADER RELEAASE GP1 / 10 15 20 TO AUSTIN COTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT' `

	VID-0	2251	J	ΕT	ETRA	TEC	H				LOG OF BORING H-2	20-4		Page 1 of 1
Project	Nam	e: MC	A 1-A H	lead	er R	eleas	se							
Borehol	e Lo	cation:	GPS: 32	.8067	712°, -	103.80	2790				face Elevation: 3913 ft			
Borehol	e Nu	mber:	H-20-4						B	oreho iame	in). 2 Date Started: 8/12/2020	Date F	inishe	ed: 8/12/2020
				(%)	(%)						WATER LEVEL OBSERV nile Drilling <u>♀ DRY</u> ft Upon Completi		<u>¥</u> [DRY_ft
ų	.	(mdd)	(mqq	ERY	TENT	cf)		NDEX	(%		marks:			1
DEPTH (ft) OPERATION TYPE	SAMPLE	SCREENING (ppm)	U VOC FIELD	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		DLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION		DEPTH (ft)	REMARKS
	m	12	0								SM- SILTY SAND; Brown, loose, dry, v dor, with no staining.	with no		AH-4 (0'-1')
											dor, with no stanning.		-	
	M	9	0										F	AH-4 (2'-3')
	m												4	AH-4 (3'-4')
	1-1										Bottom of borehole at 4.0 fee	et.	4	
Sampler Types:	11/14	Split Spoon Shelby Bulk Sample				r C	0.pera ypes	Muc Rota	tinuous nt Auge sh	s er	and Auger ir Rotary irect Push ore Barrel	n in the "Rema ated value.	arks"	column.

		02251		ΕŢ	ETRA	TEC	H				LOG OF BORING H-20-5 Page 1 of 1
Project	Nan	ne: MC	A 1-A H	lead	er R	eleas	se				
Boreho	le Lo	ocation:	GPS: 32	.8068	67°, -	103.80	2895	5			Surface Elevation: 3910 ft
Boreho	le Nu	umber:	H-20-5						B	oreho	ole Date Started: 8/12/2020 Date Finished: 8/12/2020
				(%)	۲ (%)			×			WATER LEVEL OBSERVATIONSWhile Drilling $\overline{\underline{\nabla} DRY}$ ftUpon Completion of Drilling $\overline{\underline{\Psi} DRY}$ ft
DEPTH (ft)			UNC FIELD	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	Remarks: MATERIAL DESCRIPTION E H -SM- SILTY SAND; Brown, loose, dry, with no
		8	0								odor, with no staining.
_		+	0								AH-5 (2'-3')
	M.	2									Bottom of borehole at 4.0 feet.
Sample Types:		Split Spoon Shelby Bulk Sample Grab Sample				r C		Muc Rota	tinuous nt Auge sh	s Fr	Hand Auger Notes: Air Rotary Direct Push Direct Push Core Barrel

212	2C-N	1D-0	2251	T	ĿΤ	ETRA	TEC	H				LOG OF BORING H-20-6	Page 1 of 1
Proj	ect N	lam	e: MCA	1-A H	ead	er R	eleas	se			I		
Bore	ehole	e Loo	cation: (GPS: 32.	.8069	184°, -	103.80	2881	5		:	Surface Elevation: 3910 ft	
Bore	ehole	e Nu	mber: H	1-20-6						B	oreho	le 2 Date Started: 8/12/2020 Date Finishe	ed: 8/12/2020
				(۲	(%)	T (%)			X			WATER LEVEL OBSERVATIONS While Drilling $\underline{\nabla}$ DRY ft Upon Completion of Drilling $\underline{\nabla}$ E	DRY_ft
DEPTH (ft)	OPERATION TYPE	SAMPLE	HLORIDE FIELD SCREENING (ppm)	UOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)		D PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	Remarks: MATERIAL DESCRIPTION	REMARKS
-			9 11	0								-SM- SILTY SAND; Brown, loose, dry, with no odor, with no staining.	AH-6 (0'-1') AH-6 (2'-3')
		m										4	AH-6 (3'-4')
												Bottom of borehole at 4.0 feet.	
Sam Type	pler es:	11/14	Split Spoon Shelby Bulk Sample	vi Northead	ane S alifori	nia	r C	0.pera ypes	Mud Rota Con Fligh	ary tinuous nt Auge sh		Hand Auger Air Rotary Direct Push Core Barrel	column.
Sam Туре	pler 2S:	11/14	Shelby	vi Northead	ane S	Shear nia	r C		Mud Rota	ary tinuous nt Auge sh		Air Rotary Analytical samples are shown in the "Remarks" Surface elevation is an estimated value.	column.

APPENDIX E Laboratory Analytical Data



ANALYTICAL REPORT

ConocoPhillips - Tetra Tech

Sample Delivery Group: Samples Received: Project Number: Description: L1245426 07/31/2020 212C-MD-02251 MCA 1-A Header Transit Line

Report To:

Christian Llull 901 West Wall Suite 100 Midland, TX 79701

Ср Тс Ss Cn Sr ʹQc Gl AI Sc

Page 96 of 211

Entire Report Reviewed By:

Chu, toph

Chris McCord Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Released to Imaging: 7/29/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

Cp: Cover Page	1
Tc: Table of Contents	2
	2
Ss: Sample Summary Cn: Case Narrative	з 8
	° 9
Sr: Sample Results	
BH-1 (0-1') L1245426-01	9
BH-1 (2-3') L1245426-02	10
BH-1 (6-7') L1245426-03	11
BH-1 (9-10') L1245426-04	12
BH-1 (12-13') L1245426-05	13
BH-1 (14-15') L1245426-06	14
BH-1 (17-18') L1245426-07	15
BH-1 (19-20') L1245426-08	16
BH-1 (22-23') L1245426-09	17
BH-1 (24-25') L1245426-10	18
BH-1 (26-27') L1245426-11	19
BH-1 (29-30') L1245426-12	20
BH-2 (0-1') L1245426-13	21
BH-2 (2-3') L1245426-14	22
BH-2 (6-7') L1245426-15	23
BH-2 (9-10') L1245426-16	24
BH-2 (11-12') L1245426-17	25
BH-2 (14-15') L1245426-18	26
BH-2 (17-18') L1245426-19	27
BH-2 (19-20') L1245426-20	28
BH-2 (22-23') L1245426-21	29
BH-2 (26-27') L1245426-22	30
Qc: Quality Control Summary	31
Total Solids by Method 2540 G-2011	31
Wet Chemistry by Method 300.0	34
Volatile Organic Compounds (GC) by Method 8015D/GRO	36
Volatile Organic Compounds (GC/MS) by Method 8260B	42
Semi-Volatile Organic Compounds (GC) by Method 8015	44
GI: Glossary of Terms	47
Al: Accreditations & Locations	48
Sc: Sample Chain of Custody	49

Ср

PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

PAGE: 2 of 52

SAMPLE SUMMARY

ONE LAB. NA Page 98 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

BH-1 (0-1') L1245426-01 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:00	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521260	1	08/06/20 10:15	08/06/20 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 15:13	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1522330	1	08/07/20 15:50	08/07/20 16:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519285	1	08/01/20 20:32	08/03/20 10:51	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520130	1	08/04/20 15:34	08/05/20 01:08	JN	Mt. Juliet, TN
BH-1 (2-3') L1245426-02 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:10	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521260	1	08/06/20 10:15	08/06/20 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1521200	10	08/06/20 10:19	08/06/20 15:22	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 17:00	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519285	1.04	08/01/20 20:32	08/03/20 11:10	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520130	1	08/04/20 15:34	08/05/20 01:21	JN	Mt. Juliet, TN
BH-1 (6-7') L1245426-03 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:20	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521260	1	08/06/20 10:15	08/06/20 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 15:32	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 17:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 00:50	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520130	1	08/04/20 15:34	08/05/20 01:34	JN	Mt. Juliet, TN
BH-1 (9-10') L1245426-04 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:30	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521260	1	08/06/20 10:15	08/06/20 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 15:41	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 17:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1.28	08/01/20 20:32	08/04/20 01:09	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 15:16	FM	Mt. Juliet, TN
BH-1 (12-13') L1245426-05 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:40	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521260	1	08/06/20 10:15	08/06/20 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 15:51	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 18:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 01:28	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 15:28	FM	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

5

PAGE: 3 of 52

SAMPLE SUMMARY

ONE LAB. NA Page 99 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

BH-1 (14-15') L1245426-06 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 10:50	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
wiethod	Daten	Dilution	date/time	date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	1	08/06/20 10:19	08/06/20 16:00	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 18:29	DWR	Mt. Juliet, TM
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1.01	08/01/20 20:32	08/04/20 01:47	JHH	Mt. Juliet, TM
Semi-Volatile Organic Compounds (GC) by Method 82005	WG15120132	1	08/05/20 22:31	08/06/20 15:41	FM	Mt. Juliet, T
			Collected by	Collected date/time	Received da	
BH-1 (17-18') L1245426-07 Solid			Joe Tyler	07/29/20 11:00	07/31/20 09:	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	1	08/06/20 10:19	08/06/20 16:10	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 18:51	DWR	Mt. Juliet, T
Volatile Organic Compounds (CC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 02:06	JHH	Mt. Juliet, T
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 15:54	FM	Mt. Juliet, TI
			Collected by	Collected date/time	Received da	to/timo
BH-1 (19-20') L1245426-08 Solid			Joe Tyler	07/29/20 11:20	07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
wichiod	batch	Dilution	date/time	date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 16:57	MSP	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 19:14	DWR	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 02:25	JHH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 16:07	FM	Mt. Juliet, TI
			Collected by	Collected data/time	Received da	to/timo
BH-1 (22-23') L1245426-09 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 11:40	07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 17:16	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 19:36	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 02:43	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 18:37	JN	Mt. Juliet, T
			Collected by	Collected date/time	Received da	te/time
BH-1 (24-25') L1245426-10 Solid			Joe Tyler	07/29/20 12:00	07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 17:26	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 19:58	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 03:02	JHH	Mt. Juliet, TI
	WG1520132	1	08/05/20 22:31	08/06/20 19:16	JN	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

PAGE: 4 of 52

SAMPLE SUMMARY

ONE LAB. N A Page 100 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

BH-1 (26-27') L1245426-11 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 12:20	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 17:35	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1.01	08/01/20 20:32	08/03/20 20:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 03:21	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 19:29	JN	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	
BH-1 (29-30') L1245426-12 Solid			Joe Tyler	07/29/20 12:40	07/31/20 09	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 17:45	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519518	1	08/01/20 20:32	08/03/20 22:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 03:40	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 19:41	JN	Mt. Juliet, Ti
BH-2 (0-1') L1245426-13 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 13:20	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time	-)	
Total Salida by Mathad 2E40 C 2011	WG1521261	1	08/06/20 09:59		KDW	Mt. Juliet, TN
Total Solids by Method 2540 G-2011				08/06/20 10:10		
Wet Chemistry by Method 300.0	WG1519269	1	08/06/20 10:19	08/07/20 11:33	MSP	Mt. Juliet, Th
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1522330	50	08/01/20 20:32	08/07/20 17:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 03:59	JHH	Mt. Juliet, Ti
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	5	08/05/20 22:31	08/07/20 15:39	JDG	Mt. Juliet, TN
BH-2 (2-3') L1245426-14 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 13:30	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1519269	5	08/06/20 10:19	08/06/20 18:04	MSP	Mt. Juliet, T
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519979	1	08/01/20 20:32	08/04/20 15:16	AV	Mt. Juliet, Th
Volatile Organic Compounds (GC/MS) by Method 80102/0100	WG1519731	1	08/01/20 20:32	08/04/20 04:18	JHH	Mt. Juliet, T
Semi-Volatile Organic Compounds (GC) by Method 8200B	WG1519731 WG1520132	1	08/05/20 22:31	08/06/20 19:54	JN	Mt. Juliet, T
BH-2 (6-7') L1245426-15 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 13:40	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time	· ·	
Total Solids by Method 2540 G-2011	WG1521261	1	08/06/20 09:59	08/06/20 10:10	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	5	08/06/20 10:19	08/06/20 18:14	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519979	1	08/01/20 20:32	08/04/20 15:39	AV	Mt. Juliet, TN
Valatila Organia Compounda (CC/MC) by Mathed 0200D	WG1519731	1	08/01/20 20:32	08/04/20 04:37	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B						

. Released to Imaging: 7/29/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

:)5 PAGE: 5 of 52

SAMPLE SUMMARY

ONE LAB. N A Page 101 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

BH-2 (9-10') L1245426-16 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 13:50	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	1	08/06/20 10:19	08/06/20 18:42	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1520452	1	08/01/20 20:32	08/05/20 19:58	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1.01	08/01/20 20:32	08/04/20 04:56	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 20:07	JN	Mt. Juliet, TN
BH-2 (11-12') L1245426-17 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 14:00	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time	, , , , , , , , , , , , , , , , , , ,	
Total Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1519269	5	08/06/20 10:19	08/06/20 18:52	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1520452	1	08/01/20 20:32	08/05/20 20:21	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1.01	08/01/20 20:32	08/04/20 05:15	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1520132	1	08/05/20 22:31	08/06/20 20:20	JN	Mt. Juliet, Ti
			Collected by	Collected date/time	Received da	te/time
BH-2 (14-15') L1245426-18 Solid			Joe Tyler	07/29/20 14:20	07/31/20 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
T + 10 11 1 N +1 - 10540 0 004	W04504000	4	date/time	date/time	KDW	NAL 1 11 1 T
Total Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1519269	5	08/06/20 10:19	08/06/20 19:01	MSP	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1520304 WG1519731	1 1	08/01/20 20:32 08/01/20 20:32	08/05/20 03:07 08/04/20 05:33	AV JHH	Mt. Juliet, TI Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B Semi-Volatile Organic Compounds (GC) by Method 8015	WG1519731 WG1520132	1	08/05/20 22:31	08/06/20 20:33	JN	Mt. Juliet, T
BH-2 (17-18') L1245426-19 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 14:40	Received da 07/31/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 19:20	MSP	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1520304	1	08/01/20 20:32	08/05/20 03:30	AV	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 05:52	JHH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1521551	1	08/05/20 16:04	08/07/20 03:20	JN	Mt. Juliet, Ti
			Collected by	Collected date/time	Received da	
BH-2 (19-20') L1245426-20 Solid			Joe Tyler	07/29/20 15:00	07/31/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, Tl
Wet Chemistry by Method 300.0	WG1519269	10	08/06/20 10:19	08/06/20 19:30	MSP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1520304	1	08/01/20 20:32	08/05/20 03:52	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:32	08/04/20 06:11	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1521551	1	08/05/20 16:04	08/07/20 03:33	JN	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05

PAGE: 6 of 52 Volatile Organic Compounds (GC/MS) by Method 8260B

Semi-Volatile Organic Compounds (GC) by Method 8015

SAMPLE SUMMARY

ONE LAB. N A Page 102 of 211

3H-2 (22-23') L1245426-21 Solid			Collected by Joe Tyler	Collected date/time 07/29/20 15:30	Received da 07/31/20 09:	
fethod	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
otal Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TN
Vet Chemistry by Method 300.0	WG1519268	5	08/03/20 22:00	08/04/20 07:23	ELN	Mt. Juliet, TN
olatile Organic Compounds (GC) by Method 8015D/GRO	WG1520304	1	08/01/20 20:44	08/05/20 04:14	AV	Mt. Juliet, TN
olatile Organic Compounds (GC/MS) by Method 8260B	WG1519731	1	08/01/20 20:44	08/04/20 06:30	JHH	Mt. Juliet, TN
emi-Volatile Organic Compounds (GC) by Method 8015	WG1521551	1	08/05/20 16:04	08/07/20 03:45	JN	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
3H-2 (26-27') L1245426-22 Solid			Joe Tyler	07/29/20 16:00	07/31/20 09:	00
1ethod	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
otal Solids by Method 2540 G-2011	WG1521262	1	08/06/20 13:18	08/06/20 13:29	KDW	Mt. Juliet, TN
Vet Chemistry by Method 300.0	WG1519268	5	08/03/20 22:00	08/04/20 07:41	ELN	Mt. Juliet, TN
olatile Organic Compounds (GC) by Method 8015D/GRO	WG1521831	1	08/01/20 20:44	08/07/20 05:39	JAH	Mt. Juliet, TN

WG1519731

WG1521551

1

1

08/01/20 20:44

08/05/20 16:04

08/04/20 06:49

08/07/20 03:58

JHH

JN

Mt. Juliet, TN

Mt. Juliet, TN

Τс

้รร

SDG: L1245426

DA 08/10 PAGE: 7 of 52

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord Project Manager

Released to Imaging: 07/29/2022 1:59:59 PM ConocoPhillips - Tetra Tech

PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME:

08/10/20 15:05

PAGE: 8 of 52

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 10:00

SAMPLE RESULTS - 01 L1245426

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

						Cn
	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	81.2		1	08/06/2020 10:23	WG1521260	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	611		113	246	10	08/06/2020 15:13	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanter	mg/kg	mg/kg	Diration	date / time	Baten	
TPH (GC/FID) Low Fraction	U		0.0267	0.123	1	08/07/2020 16:40	WG1522330	
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120		08/07/2020 16:40	<u>WG1522330</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000684	0.00147	1	08/03/2020 10:51	<u>WG1519285</u>
Toluene	U		0.00190	0.00733	1	08/03/2020 10:51	<u>WG1519285</u>
Ethylbenzene	U		0.00108	0.00366	1	08/03/2020 10:51	WG1519285
Total Xylenes	U		0.00129	0.00952	1	08/03/2020 10:51	WG1519285
(S) Toluene-d8	104			75.0-131		08/03/2020 10:51	WG1519285
(S) 4-Bromofluorobenzene	97.4			67.0-138		08/03/2020 10:51	WG1519285
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		08/03/2020 10:51	WG1519285

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.13	J	1.98	4.93	1	08/05/2020 01:08	<u>WG1520130</u>
C28-C40 Oil Range	3.94	<u>B J</u>	0.338	4.93	1	08/05/2020 01:08	<u>WG1520130</u>
(S) o-Terphenyl	51.2			18.0-148		08/05/2020 01:08	<u>WG1520130</u>

SDG: L1245426

DATE/TIME: 08/10/20 15:05

Collected date/time: 07/29/20 10:10

SAMPLE RESULTS - 02 L1245426

Ss

Cn

Â

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	96.1		1	08/06/2020 10:23	WG1521260	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	467		95.7	208	10	08/06/2020 15:22	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanter	mg/kg	mg/kg	Bliddoll	date / time	Batch	e
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	08/03/2020 17:00	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	97.9			77.0-120		08/03/2020 17:00	WG1519518	7

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000505	0.00108	1.04	08/03/2020 11:10	<u>WG1519285</u>
Toluene	U		0.00140	0.00541	1.04	08/03/2020 11:10	<u>WG1519285</u>
Ethylbenzene	U		0.000797	0.00270	1.04	08/03/2020 11:10	<u>WG1519285</u>
Total Xylenes	U		0.000952	0.00703	1.04	08/03/2020 11:10	<u>WG1519285</u>
(S) Toluene-d8	106			75.0-131		08/03/2020 11:10	WG1519285
(S) 4-Bromofluorobenzene	103			67.0-138		08/03/2020 11:10	<u>WG1519285</u>
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		08/03/2020 11:10	WG1519285

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.16	1	08/05/2020 01:21	<u>WG1520130</u>
C28-C40 Oil Range	0.807	<u>B J</u>	0.285	4.16	1	08/05/2020 01:21	<u>WG1520130</u>
(S) o-Terphenyl	67.2			18.0-148		08/05/2020 01:21	WG1520130

SDG: L1245426

DATE/TIME: 08/10/20 15:05

Collected date/time: 07/29/20 10:20

SAMPLE RESULTS - 03

Ss

Cn

Sr

AI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch		СР	
Analyte	%			date / time			2	
Total Solids	92.9		1	08/06/2020 10:23	<u>WG1521260</u>		Tc	

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	334		99.0	215	10	08/06/2020 15:32	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	())	Quanner			Dilution	,	Baten	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0273	J	0.0234	0.108	1	08/03/2020 17:22	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	96.9	_		77.0-120		08/03/2020 17:22	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000503	0.00108	1	08/04/2020 00:50	<u>WG1519731</u>
Toluene	U		0.00140	0.00538	1	08/04/2020 00:50	<u>WG1519731</u>
Ethylbenzene	U		0.000793	0.00269	1	08/04/2020 00:50	WG1519731
Total Xylenes	U		0.000947	0.00700	1	08/04/2020 00:50	<u>WG1519731</u>
(S) Toluene-d8	102			75.0-131		08/04/2020 00:50	WG1519731
(S) 4-Bromofluorobenzene	106			67.0-138		08/04/2020 00:50	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		08/04/2020 00:50	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.13	J	1.73	4.30	1	08/05/2020 01:34	<u>WG1520130</u>
C28-C40 Oil Range	1.11	<u>B J</u>	0.295	4.30	1	08/05/2020 01:34	<u>WG1520130</u>
(S) o-Terphenyl	71.0			18.0-148		08/05/2020 01:34	<u>WG1520130</u>

SDG: L1245426 DA1 08/10

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 10:30

SAMPLE RESULTS - 04

Total Solids by Method 2540 G-2011

	 Result	Qualifier	Dilution	Analysis	Batch	-	Ср
Analyte	%			date / time		E	2
Total Solids	92.7		1	08/06/2020 10:23	<u>WG1521260</u>		Тс

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	165	J	99.3	216	10	08/06/2020 15:41	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Quanter	mg/kg	mg/kg	Dilation	date / time	Baten	
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	08/03/2020 17:45	WG1519518	[
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		08/03/2020 17:45	WG1519518	2

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000645	0.00138	1.28	08/04/2020 01:09	<u>WG1519731</u>
Toluene	U		0.00179	0.00691	1.28	08/04/2020 01:09	<u>WG1519731</u>
Ethylbenzene	U		0.00102	0.00345	1.28	08/04/2020 01:09	WG1519731
Total Xylenes	U		0.00122	0.00898	1.28	08/04/2020 01:09	<u>WG1519731</u>
(S) Toluene-d8	104			75.0-131		08/04/2020 01:09	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 01:09	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		08/04/2020 01:09	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.98	J	1.74	4.32	1	08/06/2020 15:16	<u>WG1520132</u>
C28-C40 Oil Range	1.25	J	0.296	4.32	1	08/06/2020 15:16	<u>WG1520132</u>
(S) o-Terphenyl	50.0			18.0-148		08/06/2020 15:16	WG1520132

SDG: L1245426 ³Ss ⁴Cn ⁵Sr

ΆI

Sc

Received by OGD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 10:40

SAMPLE RESULTS - 05

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	-	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte		%			date / time		2
Total Solids		91.1		1	08/06/2020 10:23	WG1521260	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	182	J	101	220	10	08/06/2020 15:51	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guaimer	mg/kg	mg/kg	Dilution	date / time	baten	
TPH (GC/FID) Low Fraction	U		0.0238	0.110	1	08/03/2020 18:07	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		08/03/2020 18:07	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000513	0.00110	1	08/04/2020 01:28	WG1519731
Toluene	U		0.00143	0.00549	1	08/04/2020 01:28	WG1519731
Ethylbenzene	U		0.000809	0.00275	1	08/04/2020 01:28	WG1519731
Total Xylenes	U		0.000966	0.00714	1	08/04/2020 01:28	WG1519731
(S) Toluene-d8	100			75.0-131		08/04/2020 01:28	WG1519731
(S) 4-Bromofluorobenzene	106			67.0-138		08/04/2020 01:28	WG1519731
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		08/04/2020 01:28	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.77	4.39	1	08/06/2020 15:28	<u>WG1520132</u>
C28-C40 Oil Range	U		0.301	4.39	1	08/06/2020 15:28	<u>WG1520132</u>
(S) o-Terphenyl	62.3			18.0-148		08/06/2020 15:28	WG1520132

SDG: L1245426 DATE/TIME: 08/10/20 15:05
Received by OCD:	11/24/2020 1:14:06 PM
Collected date/time:	

SAMPLE RESULTS - 06

Ss

Cn

Â

Sc

Total Solids by Method 2540 G-2011

	 Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	92.2		1	08/06/2020 10:10	WG1521261	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	288		9.97	21.7	1	08/06/2020 16:00	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifior	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	Result (ury)	Qualifier	MDL (ury)	KDL (ury)	Dilution	,	Batch	6
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0247	J	0.0235	0.108	1	08/03/2020 18:29	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		08/03/2020 18:29	WG1519518	7 (

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000512	0.00109	1.01	08/04/2020 01:47	WG1519731
Toluene	U		0.00142	0.00547	1.01	08/04/2020 01:47	WG1519731
Ethylbenzene	U		0.000807	0.00274	1.01	08/04/2020 01:47	WG1519731
Total Xylenes	U		0.000964	0.00711	1.01	08/04/2020 01:47	WG1519731
(S) Toluene-d8	98.2			75.0-131		08/04/2020 01:47	WG1519731
(S) 4-Bromofluorobenzene	105			67.0-138		08/04/2020 01:47	WG1519731
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		08/04/2020 01:47	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.75	4.34	1	08/06/2020 15:41	<u>WG1520132</u>
C28-C40 Oil Range	U		0.297	4.34	1	08/06/2020 15:41	<u>WG1520132</u>
(S) o-Terphenyl	53.8			18.0-148		08/06/2020 15:41	WG1520132

SDG: L1245426

Received by OGD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 11:00

SAMPLE RESULTS - 07

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	92.2		1	08/06/2020 10:10	<u>WG1521261</u>	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	715		9.98	21.7	1	08/06/2020 16:10	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	Result (ury)	Qualifier	WDL (ury)	KDL (ury)	Dilution	,	Bateri	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0410	<u>J J3 J5</u>	0.0235	0.108	1	08/03/2020 18:51	<u>WG1519518</u>	
(S) a,a,a-Trifluorotoluene(FID)	97.6			77.0-120		08/03/2020 18:51	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000507	0.00108	1	08/04/2020 02:06	WG1519731
Toluene	U		0.00141	0.00542	1	08/04/2020 02:06	WG1519731
Ethylbenzene	U		0.000799	0.00271	1	08/04/2020 02:06	WG1519731
Total Xylenes	0.00133	J	0.000955	0.00705	1	08/04/2020 02:06	WG1519731
(S) Toluene-d8	103			75.0-131		08/04/2020 02:06	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 02:06	WG1519731
(S) 1,2-Dichloroethane-d4	95.1			70.0-130		08/04/2020 02:06	<u>WG1519731</u>

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.75	4.34	1	08/06/2020 15:54	WG1520132
C28-C40 Oil Range	U		0.297	4.34	1	08/06/2020 15:54	WG1520132
(S) o-Terphenyl	62.2			18.0-148		08/06/2020 15:54	WG1520132

SDG: L1245426 DATE/TIME: 08/10/20 15:05

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 11:20 SAMPLE RESULTS - 08

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

-	Result	Qualifier	Dilution	Analysis	Batch	C	;p
Analyte	%			date / time		2	_
Total Solids	91.6		1	08/06/2020 10:10	WG1521261	T	С

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1410		100	218	10	08/06/2020 16:57	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanner	mg/kg	mg/kg	Dilution	date / time	Baten	
TPH (GC/FID) Low Fraction	0.0300	1	0.0237	0.109	1	08/03/2020 19:14	WG1519518	
1 1	0.0500	2	0.0237	0.105	1	00/03/2020 13.14	W01313310	
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		08/03/2020 19:14	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000510	0.00109	1	08/04/2020 02:25	<u>WG1519731</u>
Toluene	U		0.00142	0.00546	1	08/04/2020 02:25	<u>WG1519731</u>
Ethylbenzene	U		0.000804	0.00273	1	08/04/2020 02:25	WG1519731
Total Xylenes	U		0.000961	0.00710	1	08/04/2020 02:25	<u>WG1519731</u>
(S) Toluene-d8	98.3			75.0-131		08/04/2020 02:25	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 02:25	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		08/04/2020 02:25	<u>WG1519731</u>

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.76	4.37	1	08/06/2020 16:07	WG1520132
C28-C40 Oil Range	U		0.299	4.37	1	08/06/2020 16:07	<u>WG1520132</u>
(S) o-Terphenyl	48.9			18.0-148		08/06/2020 16:07	WG1520132

SDG: L1245426 DATE/TIME: 08/10/20 15:05

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 11:40

SAMPLE RESULTS - 09 L1245426

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch		Ср
Analyte	%			date / time		2	
Total Solids	89.7		1	08/06/2020 10:10	WG1521261	T	Τс

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3190		103	223	10	08/06/2020 17:16	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifior	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	Result (ury)	Qualifier	MDL (ury)	KDL (ury)	Dilution	,	Batch	6
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0484	J	0.0242	0.111	1	08/03/2020 19:36	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	97.0			77.0-120		08/03/2020 19:36	<u>WG1519518</u>	7

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000574	0.00123	1	08/04/2020 02:43	<u>WG1519731</u>
Toluene	U		0.00160	0.00614	1	08/04/2020 02:43	<u>WG1519731</u>
Ethylbenzene	U		0.000906	0.00307	1	08/04/2020 02:43	<u>WG1519731</u>
Total Xylenes	U		0.00108	0.00799	1	08/04/2020 02:43	<u>WG1519731</u>
(S) Toluene-d8	101			75.0-131		08/04/2020 02:43	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 02:43	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	95.7			70.0-130		08/04/2020 02:43	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U	<u>J3 J6</u>	1.79	4.46	1	08/06/2020 18:37	<u>WG1520132</u>
C28-C40 Oil Range	U		0.305	4.46	1	08/06/2020 18:37	<u>WG1520132</u>
(S) o-Terphenyl	33.9			18.0-148		08/06/2020 18:37	WG1520132

SDG: L1245426

Ss Cn

AI

SAMPLE RESULTS - 10

Sc

Collected date/time: 07/29/20 12:00

	Result	Qualifier	r Dilution	Analysis		Batch	
Analyte	%			date / time			
Total Solids	92.6		1	08/06/2020 10:10)	WG1521261	
Wet Chemistry by	Method 300).0					
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	2780		99.4	216	10	08/06/2020 17:26	WG1519269
Volatile Organic C	Compounds ((GC) by Me	thod 8015	D/GRO			
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
			mg/kg	mg/kg		date / time	
Analyte	mg/kg		5.5				
Analyte TPH (GC/FID) Low Fraction	mg/kg U		0.0234	0.108	1	08/03/2020 19:58	<u>WG1519518</u>

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000504	0.00108	1	08/04/2020 03:02	WG1519731
Toluene	U		0.00140	0.00540	1	08/04/2020 03:02	WG1519731
Ethylbenzene	U		0.000796	0.00270	1	08/04/2020 03:02	WG1519731
Fotal Xylenes	U		0.000950	0.00702	1	08/04/2020 03:02	WG1519731
(S) Toluene-d8	101			75.0-131		08/04/2020 03:02	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 03:02	WG1519731
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		08/04/2020 03:02	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.93	J	1.74	4.32	1	08/06/2020 19:16	WG1520132
C28-C40 Oil Range	0.316	J	0.296	4.32	1	08/06/2020 19:16	WG1520132
(S) o-Terphenyl	65.5			18.0-148		08/06/2020 19:16	WG1520132

SDG: L1245426 Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 12:20

SAMPLE RESULTS - 11 L1245426

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	92.2		1	08/06/2020 10:10	WG1521261	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	2990		99.8	217	10	08/06/2020 17:35	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Patch	
	Result (uly)	Qualifier	MDL (ury)	KDL (uly)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0269	J	0.0238	0.110	1.01	08/03/2020 20:47	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	96.1			77.0-120		08/03/2020 20:47	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000507	0.00108	1	08/04/2020 03:21	<u>WG1519731</u>
Toluene	U		0.00141	0.00542	1	08/04/2020 03:21	<u>WG1519731</u>
Ethylbenzene	U		0.000799	0.00271	1	08/04/2020 03:21	WG1519731
Total Xylenes	U		0.000954	0.00705	1	08/04/2020 03:21	<u>WG1519731</u>
(S) Toluene-d8	101			75.0-131		08/04/2020 03:21	<u>WG1519731</u>
(S) 4-Bromofluorobenzene	104			67.0-138		08/04/2020 03:21	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	93.0			70.0-130		08/04/2020 03:21	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.75	4.34	1	08/06/2020 19:29	<u>WG1520132</u>
C28-C40 Oil Range	U		0.297	4.34	1	08/06/2020 19:29	<u>WG1520132</u>
(S) o-Terphenyl	51.1			18.0-148		08/06/2020 19:29	WG1520132

SDG: L1245426 DATE/TIME:

Ss Cn

A

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 12:40

SAMPLE RESULTS - 12

Ss

Cn

A

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	91.5		1	08/06/2020 10:10	<u>WG1521261</u>	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3090		101	219	10	08/06/2020 17:45	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Quanter	mg/kg	mg/kg	Dilution	date / time	buttin	
TPH (GC/FID) Low Fraction	U		0.0237	0.109	1	08/03/2020 22:07	WG1519518	
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		08/03/2020 22:07	WG1519518	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000510	0.00109	1	08/04/2020 03:40	<u>WG1519731</u>
Toluene	U		0.00142	0.00546	1	08/04/2020 03:40	<u>WG1519731</u>
Ethylbenzene	U		0.000805	0.00273	1	08/04/2020 03:40	WG1519731
Total Xylenes	U		0.000962	0.00710	1	08/04/2020 03:40	<u>WG1519731</u>
(S) Toluene-d8	99.2			75.0-131		08/04/2020 03:40	WG1519731
(S) 4-Bromofluorobenzene	101			67.0-138		08/04/2020 03:40	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	95.2			70.0-130		08/04/2020 03:40	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.76	4.37	1	08/06/2020 19:41	WG1520132
C28-C40 Oil Range	U		0.299	4.37	1	08/06/2020 19:41	WG1520132
(S) o-Terphenyl	62.7			18.0-148		08/06/2020 19:41	WG1520132

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 13:20

SAMPLE RESULTS - 13

Ss

Cn

AI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	86.9		1	08/06/2020 10:10	WG1521261	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	17.1	J	10.6	23.0	1	08/07/2020 11:33	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanner	mg/kg	mg/kg	Dilution	date / time	buten	
TPH (GC/FID) Low Fraction	109		1.42	6.52	50	08/07/2020 17:01	WG1522330	
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120		08/07/2020 17:01	WG1522330	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000609	0.00130	1	08/04/2020 03:59	<u>WG1519731</u>
Toluene	U		0.00169	0.00652	1	08/04/2020 03:59	<u>WG1519731</u>
Ethylbenzene	U		0.000961	0.00326	1	08/04/2020 03:59	WG1519731
Total Xylenes	0.00206	Ţ	0.00115	0.00847	1	08/04/2020 03:59	<u>WG1519731</u>
(S) Toluene-d8	102			75.0-131		08/04/2020 03:59	WG1519731
(S) 4-Bromofluorobenzene	132			67.0-138		08/04/2020 03:59	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	95.3			70.0-130		08/04/2020 03:59	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1270		9.27	23.0	5	08/07/2020 15:39	WG1520132
C28-C40 Oil Range	684		1.58	23.0	5	08/07/2020 15:39	<u>WG1520132</u>
(S) o-Terphenyl	171	<u>J1</u>		18.0-148		08/07/2020 15:39	<u>WG1520132</u>

Sample Narrative:

L1245426-13 WG1520132: Surrogate failure due to matrix interference

SDG: L1245426 **Received by OCD: 11/24/2020 1:14:06 PM** Collected date/time: 07/29/20 13:30

SAMPLE RESULTS - 14

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	88.7		1	08/06/2020 10:10	WG1521261	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	78.3	J	51.8	113	5	08/06/2020 18:04	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanter	mg/kg	mg/kg	Dilution	date / time	baten	
TPH (GC/FID) Low Fraction	0.0318	<u>B J</u>	0.0245	0.113	1	08/04/2020 15:16	WG1519979	
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		08/04/2020 15:16	WG1519979	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000586	0.00125	1	08/04/2020 04:18	<u>WG1519731</u>
Toluene	U		0.00163	0.00627	1	08/04/2020 04:18	WG1519731
Ethylbenzene	U		0.000924	0.00314	1	08/04/2020 04:18	WG1519731
Total Xylenes	U		0.00110	0.00815	1	08/04/2020 04:18	WG1519731
(S) Toluene-d8	101			75.0-131		08/04/2020 04:18	WG1519731
(S) 4-Bromofluorobenzene	104			67.0-138		08/04/2020 04:18	WG1519731
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		08/04/2020 04:18	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.39	J	1.81	4.51	1	08/06/2020 19:54	<u>WG1520132</u>
C28-C40 Oil Range	U		0.309	4.51	1	08/06/2020 19:54	<u>WG1520132</u>
(S) o-Terphenyl	64.4			18.0-148		08/06/2020 19:54	WG1520132

SDG: L1245426

Received by_OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 13:40

SAMPLE RESULTS - 15 L1245426

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	92.0		1	08/06/2020 10:10	WG1521261	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	58.8	J	50.0	109	5	08/06/2020 18:14	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanner	mg/kg	mg/kg	Dilution	date / time	bach	
TPH (GC/FID) Low Fraction	7.48		0.0236	0.109	1	08/04/2020 15:39	WG1519979	
(S) a,a,a-Trifluorotoluene(FID)	95.6			77.0-120		08/04/2020 15:39	WG1519979	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000508	0.00109	1	08/04/2020 04:37	<u>WG1519731</u>
Toluene	U		0.00141	0.00543	1	08/04/2020 04:37	<u>WG1519731</u>
Ethylbenzene	U		0.000801	0.00272	1	08/04/2020 04:37	WG1519731
Total Xylenes	0.00139	Ţ	0.000956	0.00706	1	08/04/2020 04:37	<u>WG1519731</u>
(S) Toluene-d8	104			75.0-131		08/04/2020 04:37	WG1519731
(S) 4-Bromofluorobenzene	113			67.0-138		08/04/2020 04:37	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	94.8			70.0-130		08/04/2020 04:37	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	485		8.75	21.7	5	08/07/2020 15:26	<u>WG1520132</u>
C28-C40 Oil Range	346		1.49	21.7	5	08/07/2020 15:26	<u>WG1520132</u>
(S) o-Terphenyl	88.8			18.0-148		08/07/2020 15:26	WG1520132

SDG: L1245426

DATE/TIME: 08/10/20 15:05

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 13:50

SAMPLE RESULTS - 16 L1245426

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	81.2		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	393		11.3	24.6	1	08/06/2020 18:42	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guainier	mg/kg	mg/kg	Dilution	date / time	butth	
TPH (GC/FID) Low Fraction	U		0.0267	0.123	1	08/05/2020 19:58	WG1520452	
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		08/05/2020 19:58	WG1520452	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000690	0.00148	1.01	08/04/2020 04:56	<u>WG1519731</u>
Toluene	U		0.00191	0.00738	1.01	08/04/2020 04:56	<u>WG1519731</u>
Ethylbenzene	U		0.00109	0.00370	1.01	08/04/2020 04:56	WG1519731
Total Xylenes	U		0.00130	0.00959	1.01	08/04/2020 04:56	<u>WG1519731</u>
(S) Toluene-d8	103			75.0-131		08/04/2020 04:56	WG1519731
(S) 4-Bromofluorobenzene	104			67.0-138		08/04/2020 04:56	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		08/04/2020 04:56	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.11	J	1.98	4.93	1	08/06/2020 20:07	WG1520132
C28-C40 Oil Range	0.658	J	0.337	4.93	1	08/06/2020 20:07	<u>WG1520132</u>
(S) o-Terphenyl	58.8			18.0-148		08/06/2020 20:07	WG1520132

SDG: L1245426

DATE/TIME: 08/10/20 15:05 Ss Cn

ΆI

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 14:00

SAMPLE RESULTS - 17

Total Solids by Method 2540 G-2011

_	, ,						Cn.
		Result	Qualifier	Dilution	Analysis	Batch	Cp
	Analyte	%			date / time		2
	Total Solids	90.5		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	289		50.8	111	5	08/06/2020 18:52	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0240	0.111	1	08/05/2020 20:21	WG1520452	
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		08/05/2020 20:21	WG1520452	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000522	0.00112	1.01	08/04/2020 05:15	WG1519731
Toluene	U		0.00145	0.00558	1.01	08/04/2020 05:15	WG1519731
Ethylbenzene	U		0.000822	0.00280	1.01	08/04/2020 05:15	WG1519731
Total Xylenes	U		0.000983	0.00725	1.01	08/04/2020 05:15	WG1519731
(S) Toluene-d8	101			75.0-131		08/04/2020 05:15	WG1519731
(S) 4-Bromofluorobenzene	106			67.0-138		08/04/2020 05:15	WG1519731
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		08/04/2020 05:15	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.78	4.42	1	08/06/2020 20:20	<u>WG1520132</u>
C28-C40 Oil Range	U		0.303	4.42	1	08/06/2020 20:20	<u>WG1520132</u>
(S) o-Terphenyl	48.8			18.0-148		08/06/2020 20:20	WG1520132

SDG: L1245426 DATE/TIME: 08/10/20 15:05 Tc Ss Cn

Sr

ΆI

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 14:20

SAMPLE RESULTS - 18 L1245426

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	92.7		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	172		49.6	108	5	08/06/2020 19:01	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
		Quanner	,	KDE (dry)	Dilution	,	Baten	6
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	08/05/2020 03:07	WG1520304	
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-120		08/05/2020 03:07	<u>WG1520304</u>	⁷ (

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000504	0.00108	1	08/04/2020 05:33	<u>WG1519731</u>
Toluene	U		0.00140	0.00540	1	08/04/2020 05:33	<u>WG1519731</u>
Ethylbenzene	U		0.000795	0.00270	1	08/04/2020 05:33	WG1519731
Total Xylenes	U		0.000950	0.00701	1	08/04/2020 05:33	<u>WG1519731</u>
(S) Toluene-d8	98.8			75.0-131		08/04/2020 05:33	WG1519731
(S) 4-Bromofluorobenzene	105			67.0-138		08/04/2020 05:33	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	95.0			70.0-130		08/04/2020 05:33	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.74	4.32	1	08/06/2020 20:33	WG1520132
C28-C40 Oil Range	U		0.296	4.32	1	08/06/2020 20:33	<u>WG1520132</u>
(S) o-Terphenyl	62.2			18.0-148		08/06/2020 20:33	WG1520132

DATE/TIME: 08/10/20 15:05 Ss Cn

ΆI

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 14:40

SAMPLE RESULTS - 19 L1245426

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	92.7		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	315		99.3	216	10	08/06/2020 19:20	WG1519269

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	duamor	mg/kg	mg/kg	2.100.011	date / time		
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	08/05/2020 03:30	WG1520304	
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		08/05/2020 03:30	<u>WG1520304</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000504	0.00108	1	08/04/2020 05:52	<u>WG1519731</u>
Toluene	U		0.00140	0.00539	1	08/04/2020 05:52	<u>WG1519731</u>
Ethylbenzene	U		0.000795	0.00270	1	08/04/2020 05:52	WG1519731
Total Xylenes	U		0.000949	0.00701	1	08/04/2020 05:52	<u>WG1519731</u>
(S) Toluene-d8	102			75.0-131		08/04/2020 05:52	WG1519731
(S) 4-Bromofluorobenzene	104			67.0-138		08/04/2020 05:52	WG1519731
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		08/04/2020 05:52	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.74	4.32	1	08/07/2020 03:20	<u>WG1521551</u>
C28-C40 Oil Range	1.78	<u>B J</u>	0.296	4.32	1	08/07/2020 03:20	<u>WG1521551</u>
(S) o-Terphenyl	58.9			18.0-148		08/07/2020 03:20	WG1521551

SDG: L1245426

DATE/TIME: 08/10/20 15:05

Received (by) OCD: 11/24/2020 1:14:06 PM	И
Collected date/time: 07/29/20 15:00	

SAMPLE RESULTS - 20

Ss

Cn

Â

Sc

Total Solids by Method 2540 G-2011

	F	esult	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	9	,)			date / time		2
Total Solids	g	1.1		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	720		101	219	10	08/06/2020 19:30	WG1519269	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guanner	mg/kg	mg/kg	Dilution	date / time	bach	
TPH (GC/FID) Low Fraction	U		0.0238	0.110	1	08/05/2020 03:52	WG1520304	
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-120		08/05/2020 03:52	<u>WG1520304</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000513	0.00110	1	08/04/2020 06:11	WG1519731
Toluene	U		0.00143	0.00549	1	08/04/2020 06:11	WG1519731
Ethylbenzene	U		0.000809	0.00274	1	08/04/2020 06:11	WG1519731
Total Xylenes	U		0.000966	0.00713	1	08/04/2020 06:11	WG1519731
(S) Toluene-d8	102			75.0-131		08/04/2020 06:11	WG1519731
(S) 4-Bromofluorobenzene	105			67.0-138		08/04/2020 06:11	WG1519731
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		08/04/2020 06:11	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.77	4.39	1	08/07/2020 03:33	<u>WG1521551</u>
C28-C40 Oil Range	1.94	<u>B J</u>	0.301	4.39	1	08/07/2020 03:33	<u>WG1521551</u>
(S) o-Terphenyl	63.7			18.0-148		08/07/2020 03:33	WG1521551

SDG: L1245426 DATE/TIME: 08/10/20 15:05

Received by OGD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 15:30

SAMPLE RESULTS - 21 L1245426

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	89.1		1	08/06/2020 13:29	WG1521262	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1200		51.6	112	5	08/04/2020 07:23	WG1519268

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	duamor	mg/kg	mg/kg	2.100.011	date / time		
TPH (GC/FID) Low Fraction	U		0.0243	0.112	1	08/05/2020 04:14	WG1520304	
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		08/05/2020 04:14	<u>WG1520304</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000582	0.00125	1	08/04/2020 06:30	WG1519731
Toluene	U		0.00162	0.00623	1	08/04/2020 06:30	WG1519731
Ethylbenzene	U		0.000918	0.00311	1	08/04/2020 06:30	WG1519731
Total Xylenes	0.00114	J	0.00110	0.00809	1	08/04/2020 06:30	WG1519731
(S) Toluene-d8	97.8			75.0-131		08/04/2020 06:30	WG1519731
(S) 4-Bromofluorobenzene	107			67.0-138		08/04/2020 06:30	WG1519731
(S) 1,2-Dichloroethane-d4	92.4			70.0-130		08/04/2020 06:30	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.81	4.49	1	08/07/2020 03:45	<u>WG1521551</u>
C28-C40 Oil Range	0.696	ВJ	0.307	4.49	1	08/07/2020 03:45	<u>WG1521551</u>
(S) o-Terphenyl	66.7			18.0-148		08/07/2020 03:45	WG1521551

SDG: L1245426

DATE/TIME: 08/10/20 15:05 Ss Cn

ΆI

Received by OCD: 11/24/2020 1:14:06 PM Collected date/time: 07/29/20 16:00

SAMPLE RESULTS - 22

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Cp	C
Analyte	%			date / time		2	-
Total Solids	92.2		1	08/06/2020 13:29	WG1521262	Tc	2

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	1180		49.9	108	5	08/04/2020 07:41	WG1519268	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0321	J	0.0235	0.108	1	08/07/2020 05:39	WG1521831	
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120		08/07/2020 05:39	<u>WG1521831</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000507	0.00108	1	08/04/2020 06:49	<u>WG1519731</u>
Toluene	U		0.00141	0.00542	1	08/04/2020 06:49	<u>WG1519731</u>
Ethylbenzene	U		0.000799	0.00271	1	08/04/2020 06:49	WG1519731
Total Xylenes	U		0.000955	0.00705	1	08/04/2020 06:49	<u>WG1519731</u>
(S) Toluene-d8	103			75.0-131		08/04/2020 06:49	WG1519731
(S) 4-Bromofluorobenzene	104			67.0-138		08/04/2020 06:49	<u>WG1519731</u>
(S) 1,2-Dichloroethane-d4	91.9			70.0-130		08/04/2020 06:49	WG1519731

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.78		1.75	4.34	1	08/07/2020 03:58	<u>WG1521551</u>
C28-C40 Oil Range	9.02	B	0.297	4.34	1	08/07/2020 03:58	<u>WG1521551</u>
(S) o-Terphenyl	46.0			18.0-148		08/07/2020 03:58	<u>WG1521551</u>

SDG: L1245426 DATE/TIME: 08/10/20 15:05

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

Method Blank (MB)

	(IVID)					Cn
(MB) R3557295-1 08	3/06/20 10:23					Ср
	MB Result	MB Qualifier	MB MDL	MB RDL		2
Analyte	%		%	%		Tc
Total Solids	0.00100				L	

L1245424-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1245424-06 08	8/06/20 10:23 • (DU	P) R3557295-	-3 08/06/2	20 10:23		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	84.0	84.4	1	0.458		10

Laboratory Control Sample (LCS)

(LCS) R3557295-2 08	(LCS) R3557295-2 08/06/20 10:23								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	%	%	%	%					
Total Solids	50.0	50.0	99.9	85.0-115					

DATE/TIME: 08/10/20 15:05

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY <u>11245426-06,07,08,09,10,11,12,13,14,15</u>

Cn

Sr

[°]Qc

GI

Â

Sc

Method Blank (MB)

Method Didirk					1	^{1}Cr
(MB) R3557287-1 (8/06/20 10:10					
	MB Result	MB Qualifier	MB MDL	MB RDL		2
Analyte	%		%	%		Tc
Total Solids	0.000					
					3	³ Ss
						L

L1245426-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1245426-06 08/	(OS) L1245426-06 08/06/20 10:10 • (DUP) R3557287-3 08/06/20 10:10						
	Original Resu	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	
Analyte	%	%		%		%	
Total Solids	92.2	91.9	1	0.395		10	

Laboratory Control Sample (LCS)

(LCS) R3557287-2 08	(LCS) R3557287-2 08/06/20 10:10								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	%	%	%	%					
Total Solids	50.0	50.0	100	85.0-115					

SDG: L1245426 DATE/TIME: 08/10/20 15:05 PAGE: 32 of 52

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1245426-16,17,18,19,20,21,22

ONE LAB. N A Page 128 of 211

GI

Â

Sc

Method Blank (MB)

Method Blank	. (MB)				
(MB) R3557330-1 (38/06/20 13:29				Ср
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	%		%	%	Tc [Tc
Total Solids	0.00200				
					³ Ss

L1245426-17 Original Sample (OS) • Duplicate (DUP)

L1245426-17 Or	iginal Sample	(OS) • Dup	plicate (DUP)						
(OS) L1245426-17 08	/06/20 13:29 • (DUI	P) R3557330-3	3 08/06/2	0 13:29						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits				
Analyte	%	%		%		%				
Total Solids	90.5	91.2	1	0.751		10				

Laboratory Control Sample (LCS)

(LCS) R3557330-2 08/	(LCS) R3557330-2 08/06/20 13:29							
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier			
Analyte	%	%	%	%				
Total Solids	50.0	50.0	100	85.0-115				

DATE/TIME: 08/10/20 15:05

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1245426-21,22

Τс

Ss

Cn

Sr

Qc

Method Blank (MB)

(MB) R3556076-1 08/03/20 23:37						
	MB Result	MB Qualifier	MB MDL	MB RDL		
Analyte	mg/kg		mg/kg	mg/kg		
Chloride	U		9.20	20.0		

L1244535-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1244535-02 08/04	1/20 01:17 • (DUP)) R3556076-3	3 08/04/20	D 01:35		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	2130	2160	1	1.50	E	20

L1245426-22 Original Sample (OS) • Duplicate (DUP)

L1245426-22 (Driginal Sample	e (OS) • Du	plicate	(DUP)			⁷ Gl
(OS) L1245426-22 (08/04/20 07:41 • (DU	P) R3556076-	6 08/04/2	20 07:58			
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/kg	mg/kg		%		%	
Chloride	1180	1160	5	1.34		20	⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3556076-2 08/03	CS) R3556076-2 08/03/20 23:55											
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier							
Analyte	mg/kg	mg/kg	%	%								
Chloride	200	208	104	90.0-110								

L1244535-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1244535-14 08/04/2	(OS) L1244535-14 08/04/20 05:39 • (MS) R3556076-4 08/04/20 05:56 • (MSD) R3556076-5 08/04/20 06:13												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
Chloride	599	1750	2550	2330	133	96.6	1	80.0-120	<u>E J5</u>	E	9.01	20	

Released to	Imaging ^{AC%} /29/2022	1:59:59 PM
	ConocoPhillips - Tetra Te	ch

PROJECT: 212C-MD-02251

SDG: L1245426

DATE/TIME: 08/10/20 15:05

PAGE: 34 of 52

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1245426-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Τс

Ss

⁶Qc

Method Blank (MB)

(MB) R3557417-1 08/	(MB) R3557417-1 08/06/20 14:44											
	MB Result	MB Qualifier	MB MDL	MB RDL								
Analyte	mg/kg		mg/kg	mg/kg								
Chloride	U		9.20	20.0								

L1245426-08 Original Sample (OS) • Duplicate (DUP)

L1245426-08 Orig	inal Sample	(OS) • Du	plicate	(DUP)		
(OS) L1245426-08 08/06	6/20 16:57 • (DUF	P) R3557417-5	5 08/06/2	0 17:07		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	1410	1360	10	3.86		20

L1245426-18 Original Sample (OS) • Duplicate (DUP)

L1245426-18 Origir	al Sample	(OS) • Dup	olicate (DUP)		
OS) L1245426-18 08/06/2	20 19:01 • (DUP)	R3557417-6	08/06/20	19:11		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
alyte	mg/kg	mg/kg		%		%
Chloride	172	171	5	0.125		20

Laboratory Control Sample (LCS)

(LCS) R3557417-2 08/06	.CS) R3557417-2 08/06/20 14:54											
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier							
Analyte	mg/kg	mg/kg	%	%								
Chloride	200	192	96.0	90.0-110								

L1245426-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245426-07 08/06/	(OS) L1245426-07 08/06/20 16:10 • (MS) R3557417-3 08/06/20 16:19 • (MSD) R3557417-4 08/06/20 16:48												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
Chloride	542	715	1310	1240	110	97.5	1	80.0-120	E	E	5.15	20	

PROJECT: 212C-MD-02251

SDG: L1245426

DATE/TIME: 08/10/20 15:05

PAGE: 35 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY 1245426-02,03,04,05,06,07,08,09,10,11,12

°Cn

Sr

Qc

GI

ΑI

Sc

Method Blank (MB)

)				
20 13:11				
MB Result	MB Qualifier	MB MDL	MB RDL	
mg/kg		mg/kg	mg/kg	
U		0.0217	0.100	
97.2			77.0-120	
	20 13:11 MB Result mg/kg U	20 13:11 MB Result <u>MB Qualifier</u> mg/kg U	20 13:11 MB Result <u>MB Qualifier</u> MB MDL mg/kg mg/kg U 0.0217	MB Result MB Qualifier MB MDL MB RDL mg/kg mg/kg mg/kg mg/kg U 0.0217 0.100

Laboratory Control Sample (LCS)

(LCS) R3557545-2 08/03	3/20 12:25				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	6.39	116	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			101	77.0-120	

L1245426-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245426-07 08/03	(OS) L1245426-07 08/03/20 18:51 • (MS) R3557545-4 08/03/20 22:51 • (MSD) R3557545-5 08/03/20 23:39												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
TPH (GC/FID) Low Fraction	5.91	0.0410	17.4	6.27	293	105	1	10.0-151	<u>E J5</u>	<u>J3</u>	93.8	28	
(S) a,a,a-Trifluorotoluene(FID)					95.4	97.5		77.0-120					

SDG: L1245426 DATE/TIME: 08/10/20 15:05

PAGE: 36 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

ONE LAB. N A Page 132 of 211

Method Blank (MB)

MB) R3556176-3 08/04/2	20 12:16			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	0.0678	J	0.0217	0.100
(S) ,a,a-Trifluorotoluene(FID)	98.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3556176-2 08/04	/20 11:31				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.55	101	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			97.5	77.0-120	

Cp Tc Ss ⁺Cn Sr Qc GI Â

Sc

SDG: L1245426 DATE/TIME: 08/10/20 15:05 PAGE: 37 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

⁴Cn

Sr

Qc

GI

AI

Sc

Method Blank (MB)

	<i>'</i>)				
(MB) R3557182-3 08/05/	20 02:23				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	98.3			77.0-120	

Laboratory Control Sample (LCS)

(LCS) R3557182-2 08/05	/20 01:38				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.89	107	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			97.7	77.0-120	

L1245576-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245576-02 08/05	5/20 10:17 • (MS)	R3557182-6 0	8/05/20 11:24 •	(MSD) R3557	182-7 08/05/20	0 11:45						
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg				%	%		%			%	%
TPH (GC/FID) Low Fraction	1110	432	1250	1430	69.1	84.4	202	10.0-151			13.5	28
(S) a.a.a-Trifluorotoluene(FID)					94.9	96.8		77.0-120				

SDG: L1245426 DATE/TIME: 08/10/20 15:05 PAGE: 38 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

ONE LAB. N Page 134 of 211

Method Blank (MB)

	/				- Ľ
(MB) R3556902-3 08/05	/20 15:20				
	MB Result	MB Qualifier	MB MDL	MB RDL	i
Analyte	mg/kg		mg/kg	mg/kg	
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	98.1			77.0-120	

Laboratory Control Sample (LCS)

					· · · · · · · · · · · · · · · · · · ·
(LCS) R3556902-2 08/0)5/20 14:35				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	6.50	118	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			102	77.0-120	

	³ Ss
	⁴ Cn
	⁵Sr
1	
	⁶ Qc
	⁷ Gl
	⁸ AI
1	
	°Sc

DATE/TIME: 08/10/20 15:05 PAGE: 39 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

ONE LAB. N Page 135 of 211

Method Blank (MB)

(MB) R3557472-3 08/07/	/20 02:43			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3557472-2 08/07	7/20 01:18				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.88	107	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			103	77.0-120	

Sc

DATE/TIME: 08/10/20 15:05 PAGE: 40 of 52

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

ONE LAB. N APage 136 of 211

Method Blank (MB)

)				1'C
(MB) R3557815-2 08/07/	20 15:42				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/kg		mg/kg	mg/kg	T
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120	³ Ss

Laboratory Control Sample (LCS)

(LCS) R3557815-1 08/07/	/20 15:01				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.72	104	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			101	77.0-120	

Sc

DATE/TIME: 08/10/20 15:05 PAGE: 41 of 52 Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

ONE LAB. NA Page 137 of 211

Qc

Method Blank (MB)

)				
(MB) R3555948-2 08/03/	/20 04:32				
	MB Result	MB Qualifier	MB MDL	MB RDL	2_
Analyte	mg/kg		mg/kg	mg/kg	T
Benzene	U		0.000467	0.00100	
Ethylbenzene	U		0.000737	0.00250	3
Toluene	U		0.00130	0.00500	Ĺ
Xylenes, Total	U		0.000880	0.00650	4
(S) Toluene-d8	100			75.0-131	
(S) 4-Bromofluorobenzene	102			67.0-138	
(S) 1,2-Dichloroethane-d4	95.3			70.0-130	5

Laboratory Control Sample (LCS)

(LCS) R3555948-1 08/0	3/20 03:36					7
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	[′] Gl
Analyte	mg/kg	mg/kg	%	%		
Benzene	0.125	0.0993	79.4	70.0-123		8
Ethylbenzene	0.125	0.114	91.2	74.0-126		AI
Toluene	0.125	0.101	80.8	75.0-121		9
Xylenes, Total	0.375	0.318	84.8	72.0-127		Sc
(S) Toluene-d8			94.6	75.0-131		
(S) 4-Bromofluorobenzene			112	67.0-138		
(S) 1,2-Dichloroethane-d4			101	70.0-130		

DATE/TIME: 08/10/20 15:05 PAGE: 42 of 52 Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY L1245426-03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22

Ср

Τс

Ss

Cn

Sr

ິQc

GI

A

Sc

Method Blank (MB)

(MB) R3557175-2 08/04/2	20 00:31			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	99.9			75.0-131
(S) 4-Bromofluorobenzene	105			67.0-138
(S) 1,2-Dichloroethane-d4	95.0			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3557175-1 08/03/	20 23:28					
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	ľ
Analyte	mg/kg	mg/kg	%	%		L
Benzene	0.125	0.100	80.0	70.0-123		8
Ethylbenzene	0.125	0.117	93.6	74.0-126		
Toluene	0.125	0.0943	75.4	75.0-121		4
Xylenes, Total	0.375	0.319	85.1	72.0-127		ľ
(S) Toluene-d8			90.6	75.0-131		L
(S) 4-Bromofluorobenzene			112	67.0-138		
(S) 1,2-Dichloroethane-d4			101	70.0-130		

L1245426-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245426-13 08/04/20 03:59 • (MS) R3557175-3 08/04/20 07:08 • (MSD) R3557175-4 08/04/20 07:27												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.163	U	0.159	0.159	97.6	97.6	1	10.0-149			0.000	37
Ethylbenzene	0.163	U	0.202	0.175	124	107	1	10.0-160			14.5	38
Toluene	0.163	U	0.182	0.158	112	96.8	1	10.0-156			14.6	38
Xylenes, Total	0.489	0.00206	0.532	0.473	108	96.4	1	10.0-160			11.7	38
(S) Toluene-d8					113	97.4		75.0-131				
(S) 4-Bromofluorobenzene					159	152		67.0-138	<u>J1</u>	<u>J1</u>		
(S) 1,2-Dichloroethane-d4					95.8	94.9		70.0-130				

SDG: L1245426

DATE/TIME: 08/10/20 15:05 Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY L1245426-01,02,03

Â

Sc

Method Blank (MB)

Method Blank (IV	IB)					1 Cp					
(MB) R3556442-1 08/0	(MB) R3556442-1 08/04/20 21:57										
	MB Result	MB Qualifier	MB MDL	MB RDL		2					
Analyte	mg/kg		mg/kg	mg/kg		Tc					
C10-C28 Diesel Range	U		1.61	4.00							
C28-C40 Oil Range	1.70	J	0.274	4.00		³ Ss					
(S) o-Terphenyl	70.9			18.0-148		00					
						4					
						Cn					

Laboratory Control Sample (LCS)

(LCS) R3556442-2 08/0	04/20 22:10				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	38.4	76.8	50.0-150	
(S) o-Terphenyl			81.4	18.0-148	

L1245424-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245424-05 08/05/20 01:59 • (MS) R3556442-3 08/05/20 02:12 • (MSD) R3556442-4 08/05/20 02:25												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	58.1	U	39.6	34.5	68.3	59.4	1	50.0-150			13.9	20
(S) o-Terphenyl					70.2	63.5		18.0-148				

SDG: L1245426

DATE/TIME: 08/10/20 15:05

PAGE: 44 of 52 Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY 1245426-04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

Method Blank (MB)

	0)				
MB) R3557067-1 08/0	6/20 11:09				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
C10-C28 Diesel Range	U		1.61	4.00	
C28-C40 Oil Range	U		0.274	4.00	
(S) o-Terphenyl	79.9			18.0-148	

Laboratory Control Sample (LCS)

(LCS) R3557067-2 08/	06/20 11:22									
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier					
Analyte	mg/kg	mg/kg	%	%						
C10-C28 Diesel Range	50.0	33.0	66.0	50.0-150						
(S) o-Terphenyl			64.1	18.0-148						

L1245426-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1245426-09 08/06	OS) L1245426-09 08/06/20 18:37 • (MS) R3557067-3 08/06/20 18:50 • (MSD) R3557067-4 08/06/20 19:03												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
C10-C28 Diesel Range	54.0	U	26.4	34.8	48.9	64.3	1	50.0-150	<u>J6</u>	<u>J3</u>	27.3	20	
(S) o-Terphenyl					48.5	57.0		18.0-148					

DATE/TIME: 08/10/20 15:05 Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

Method Blank (MB)

	2)				l'Cn l				
(MB) R3557069-1 08/06/20 14:10									
	MB Result	MB Qualifier	MB MDL	MB RDL	2				
Analyte	mg/kg		mg/kg	mg/kg	Tc				
C10-C28 Diesel Range	U		1.61	4.00					
C28-C40 Oil Range	1.82	J	0.274	4.00	³ Ss				
(S) o-Terphenyl	62.6			18.0-148	00				

Laboratory Control Sample (LCS)

(LCS) R3557069-2 08/0	6/20 14:23				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte C10-C28 Diesel Range	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.3	72.6	50.0-150	
(S) o-Terphenyl			67.7	18.0-148	

Sc

DATE/TIME: 08/10/20 15:05 PAGE: 46 of 52

Τс

ŚS

Cn

Sr

Qc

GI

AI

Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

Abbreviations and	a Definitions
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
В	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

SDG: L1245426

Received by OCD: 11/24/2020 1:14:06 PMCCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
ldaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ¹⁶	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ¹⁴	2006
Louisiana 1	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 5	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Released to Imaging: 7/20/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1245426 DATE/TIME: 08/10/20 15:05 ¹ Cp ² Tc ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ GI ⁸ AI ⁹ Sc

Analysis Request of Chain of Custody Record

Page: 1 of 3

1-, 1-,0

Tetra Tech, Inc.						901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946							1043														
Client Name:	Site Manage	Site Manager: Christian Llull								ANALYSIS REQUEST (Circle or Specify Method No.)																	
Project Name: MCA 1-A Header Transit Line		Contact Info	Contact Into:					Email: christian.llull@tetratech.com Phone: (512) 338-1667								irci	e (or S	5pe	ecil	fy N 	/let	hod	No	o.)		1
Project Location: (county, state)		Project #:	Project #: 2					212C-MD-02251																1			
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texa	as 79701	1										6	5											list)		
Receiving Laboratory:	Pace Analytical	Sampler Sig	nature:	Jo	e Ty	/ler							IOBM - C	60 1 1 2 3 1	Se Hg	Se Hg									attached		
Comments: COPTET	RA Acctnum				2						10	8260B	C35) DRO - ORO	C 1993	Ba Cd Cr Pb Se Hg	Ba Cd Cr Pb	100		4	8270C/625					y (see at		
		SAMP	SAMPLING				PRESERVATIVE			RS	(N/A)	X	(Ext to C35)	63 mil	Ag As Ba C	As		atiles	8260B / 624	10.000	08			ate TDS	Chemistral		
L1245424 LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	YEAR: 2020 DATE	TIME	WATER	OIL	HCL	HNO ₃	ICE NONE		CONTAINERS	FILTERED (Y	X 8021B	PH TX1005 (E	1 8270C	Metals	CLP Metals Ag	CLP Volatiles	TCLP Semi Volatiles	'MS Vol.		CB's 8082 / 608	ORM I M (Ashestos)	ide 30	Sulf	eneral Water Che nion/Cation Balar	PH 8015R	L IOH
-01	BH-1 (0'-1')	07/29/20	1000	S O	-	I	_	x X	$^{+}$	#	N	m X		<	F	F	F			0	_	ZA	. U	00	> C	F	1
02	BH-1 (2'-3')	07/29/20	1010	×				x	T	1	N	x)	<									X				
03	BH-1 (6'-7')	07/29/20	1020	×	:	\square		x		1	Ν	x)	<									X	-			
04	BH-1 (9'-10')	07/29/20	1030	×	(x		1	N	X)	<					T		Π		X				
05	BH-1 (12'-13')	07/29/20	1040	X				x		1	Ν	X)	<									X				
04	BH-1 (14'-15')	07/29/20	1050	×				x		1	Ν	X)	<						12			X				
07	BH-1 (17'-18')	07/29/20	1100	×	(-	x		1	Ν	X)	<									X		1		
08	BH-1 (19'-20')	07/29/20	1120	×	(x		1	Ν	X)	<			Te vy						X				
09	BH-1 (22'-23')	07/29/20	1140	×	(x		1	Ν	Х)	<			1		19				X				
ID	BH-1 (24'-25')	07/29/20	1200	X	2	1	1.1	x		1	Ν	Х)	X									X		28. M		
Relinquished by:	Date: Time:	Received by: Received by: Received by: Received by:	F.C.	Ł	7.	7/3 Da 34		Tim Tim C () Tim		ja R	0 0	Sam	LAI O	NL	Y			F	Stand IUSH Rush	I: Sa Char	ges A	uthoriz	4 hr. zed or TRR		9 98-2 9-2	hr.	
		Rh	- 1. A		?	-31	-20	d i	ace	2	122								peci	ai ne	DOILE	mints C	n TRR	r nep	JOIL		a.
		ORIGINA	L COPY				9. j	100	Č.			(Cir	cle)	HAN	DD	ELIV	ERE	D FI	EDE	хu	PS	Trac	king #	:	742	in a	
Analysis Request of Chain of Custody Record

Page 145 of 211
Page : 2 of 3

T	Tetra Tech, Inc.					Midlan Tel (4	id, T 432)	Street, \$ [exas 79) 682-45) 682-39	701 59	100			が見たし		うれた						の後に					
Client Name:	Conoco Phillips	Site Manage	er:	Chri	istian	Llull																JES				
Project Name:	MCA 1-A Header Transit Line	Contact Info	:			ristian. 12) 33		@tetrate 667	ch.co	m				(C	irc	le:	or	Sp 	bec 	ify	Me	etho 	l bc	No.) 		1
Project Location: county, state)	Lea County, New Mexico	Project #:		212	C-MD	-02251																				
nvoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 797	9701										0											list)			
Receiving Laboratory:	Pace Analytical	Sampler Signature: Joe Tyler										ORO - MRO)	CO LOS	d Cr Pb Se Ha									attached			
Comments: COPTE	TRA Acctnum				-						8260B	1.2	DRO - ORI	40.07	Cd Cr Pb				4	C/625			S	y (see at		
L1 24947		SAMP YEAR: 2020	LING	MA	TRIX			RVATIVE HOD		(N/A)	BTEX	(Ext to	GRO -	V D D	Ag As Ba		Semi Volatiles			. VOI. 82/UC/)s)	00.0 Sulfate TDS	er Chemistr	Balance	
LAB # (LAB USE) ONLY)	SAMPLE IDENTIFICATION	DATE	TIME	WATER	SOIL	HCL	HNO ₃ ICE NONE		# CONTAINERS	FILTERED	BTEX 8021B	TPH TX1005		Total Matala	TCLP Metals	1			Vol.	PCB's R082 / 608	NORM	M (As	Chloride 300.0 Chloride Sulf	General Water	Anion/Cation Balance TPH 8015R	
~1]	BH-1 (26'-27')	07/29/20	1220		X			×	1	N	Х		X	T		T				T			x			
12	BH-1 (29'-30')	07/29/20	1240		x			x	1	N	x		х				1						x			
13	BH-2 (0'-1')	07/29/20	1320		X			x	1	N	X		X										x			
14	BH-2 (2'-3')	07/29/20	1330		X			x	1	N	X	12	X										x			
19	BH-2 (6'-7')	07/29/20	1340		X			x	1	N	X		х										x			
16	BH-2 (9'-10')	07/29/20	1350		X			x	1	N	X		X										x			
17	BH-2 (11'-12')	07/29/20	1400		x			x	1	N	X		Х										x			
18	BH-2 (14'-15')	07/29/20	1420		х			X	1	N	X		X										x		1	
19	BH-2 (17'-18')	07/29/20	1440		X			x	1	N	X	-	Х										x			
20	BH-2 (19'-20')	07/29/20	1500		X			x	1	N	X		X								1		x		1	
Relinquished by:	Date: Time: <u>Jer 1342 63</u> Date: Time: <u>Job 63</u> Date: Time: <u>Date: Time:</u>	Received by Received by Received by	RE V	t)	Dat 7/3 7 Dat 7-3		Time	16	33 32	1.000	(AB U ONL	Y		R		Rus	ndan SH: S	Same arges	Autho	orized		I hr.	72 hr.	
	ng: 7/29/2022 1:59:59 PM	ORIGINA	AL COPY			7-3	1-2			/		1.01			and the second		ED	No.4				s or 1 ackin	dina.	leport		いたので、「「「なん」

Received by OCD: 11/24/2020 1:14:06 PM Analysis Request of Chain of Custody Record

æ	Tetra Tech, Inc.					Midla Tel	nd, (432	l Street Texas 7 2) 682-4 2) 682-3	7970 1559	1)																
Client Name:	Conoco Phillips	Site Manage	er:	Ch	ristian	Llull												IAL							神子		
Project Name:	MCA 1-A Header Transit Line	Contact Info	D:		ail: ch one: (5			@tetra 667	tech.	.com			1		(Cii 	rcl(e o 	rs 	peo 	cify 	/ M	eth 	od	No 	.)		Γ
Project Location: (county, state)	Lea County, New Mexico	Project #:	in a	212	2C-MD	-0225	1				ġ.																
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 797	701									6											list)					
Receiving Laboratory:	Pace Analytical	Sampler Sig	Sampler Signature: Joe Tyler					-		ORO - MRO		Se Hg	Se Hg								attached						
Comments: COPTE	TRA Acctnum			e de la composition de la comp	-							8260B	C35) DRO - ORI		d Cr I	Cd Cr Pb				0C/625				TDS istry (see al			
L1249426		SAM	PLING	M	ATRIX			RVATI	VE	SF	(N)	BTEX	GRO - D		As Ba	As Ba	tilac			ol. 8270C/	R		122	E E	ance		
LAB #	SAMPLE IDENTIFICATION	YEAR: 2020		E.					TAINERS RED (Y/N)	8021B	TX1005 (Ext to C35) 8015M (GRO - DRO -	8270C	Metals Ag	CLP Metals Ag	Volatiles Semi Volatiles		Vol.	Semi. Vol.	CB'S 8082 / 608 ORM	(Asbestos)	33	Water	ion/Cation Balance	8015R			
(LAB USE)		DATE	TIME	WATER	SOIL	HCL	HN03	NONE		# COI	FILTE		T HHT	PAH 8	Total N	TCLP	TCLP		GC/MS	GC/MS	NORM	PLM ()	Chloric	Chloride General	Anion/	TPH 8	НОГР
-21	BH-2 (22'-23')	07/29/20	1530		X			X		1	Ν	Х	X										х				
22	BH-2 (26'-27')	07/29/20	1600		X			X 															X				
Relinquished by:	Date: Time: 5 Jac 7.3 20 1530 Date: Time: 10 7.30.20 16:3 Date: Time:	Received by Received by Received by	LE Z)- 7.	Da Da Da	te:	Tin 22 Tin 0 7 1 20	14 ne: 10	6	<u>予</u> え		LAE OI	VL Y	1			_] Ru	anda ISH: sh Cł	Sam	s Autl	norize	d	48 hr. 9 Repo		Yr.	
Released to Imagin	ng: 7/29/2022 1:59:59 PM	ORIGIN	AL COPY		5		「「「「「					11.00	cle) + 9	2.52		din e	18.23	1.20		19-2-4	2146.5	racki	ng #:				

Pace Analytical National Center	for Testing & Innov	vation	
Cooler Receip	ot Form		
Client: Tetra Tech COPTE	TRA	L124	5426
Cooler Received/Opened On: 7 / 3 / / 20	Temperature:	.8	
Received By: Bryan Burgess			
Signature: G K			
			a la sala den de
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	1		
COC Signed / Accurate?		/	
Bottles arrive intact?		1	and a start of the second second second second second second second second second second second second second s
Correct bottles used?	The second second second	Carl Carl	
Sufficient volume sent?		1	
If Applicable		A CARE AND A CARE	
VOA Zero headspace?			
Preservation Correct / Checked?		CALER AND A	



ANALYTICAL REPORT

ConocoPhillips - Tetra Tech

Sample Delivery Group: Samples Received: Project Number: Description:

Report To:

L1251164 08/15/2020 212C-MD-02251 MCA 1-A Header Transit Line

Christian Llull 901 West Wall Suite 100 Midland, TX 79701

Тс Ss Cn Sr ʹQc Gl AI Sc

Ср

Entire Report Reviewed By:

Chu, toph

Chris McCord Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Released to Imaging: 7/29/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

PAGE: 1 of 44

Page 148 of 211

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	7
Sr: Sample Results	8
H 20-1 (0-1) L1251164-01	8
H 20-1 (2-3) L1251164-02	9
H 20-1 (3-4) L1251164-03	10
H 20-2 (0-1) L1251164-04	11
H 20-2 (2-3) L1251164-05	12
H 20-2 (3-4) L1251164-06	13
H 20-3 (0-1) L1251164-07	14
H 20-3 (2-3) L1251164-08	15
H 20-3 (3-4) L1251164-09	16
H 20-4 (0-1) L1251164-10	17
H 20-4 (2-3) L1251164-11	18
H 20-4 (3-4) L1251164-12	19
H 20-5 (0-1) L1251164-13	20
H 20-5 (2-3) L1251164-14	21
H 20-5 (3-4) L1251164-15	22
H 20-6 (0-1) L1251164-16	23
H 20-6 (2-3) L1251164-17	24
H 20-6 (3-4) L1251164-18	25
Qc: Quality Control Summary	26
Total Solids by Method 2540 G-2011	26
Wet Chemistry by Method 300.0	29
Volatile Organic Compounds (GC) by Method 8015D/GRO	30
Volatile Organic Compounds (GC/MS) by Method 8260B	35
Semi-Volatile Organic Compounds (GC) by Method 8015	37
GI: Glossary of Terms	40
Al: Accreditations & Locations	41
Sc: Sample Chain of Custody	42



PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

D 18:08

PAGE: 2 of 44

SAMPLE SUMMARY

ONE LAB. N APage 150 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

H 20-1 (0-1) L1251164-01 Solid			Collected by Adrian	Collected date/time 08/13/20 08:00	Received da 08/15/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529497	1	08/20/20 21:50	08/20/20 22:01	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 16:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529361	1	08/19/20 17:00	08/20/20 19:10	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 21:11	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529484	1	08/21/20 17:11	08/22/20 18:02	JN	Mt. Juliet, Ti
H 20-1 (2-3) L1251164-02 Solid			Collected by Adrian	Collected date/time 08/13/20 08:10	Received da 08/15/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529497	1	08/20/20 21:50	08/20/20 22:01	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 16:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529361	1	08/19/20 17:00	08/20/20 19:32	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 21:31	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529484	1	08/21/20 17:11	08/22/20 16:32	JN	Mt. Juliet, TI
			Collected by	Collected date/time	Received da	te/time
H 20-1 (3-4) L1251164-03 Solid			Adrian	08/13/20 08:20	08/15/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529497	1	08/20/20 21:50	08/20/20 22:01	KBC	Mt. Juliet, Tl
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 16:43	ELN	Mt. Juliet, Tl
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529361	1	08/19/20 17:00	08/20/20 19:54	AV	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 21:52	JAH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529484	1	08/21/20 17:11	08/22/20 16:45	JN	Mt. Juliet, TI
			Collected by	Collected date/time	Received da	te/time
H 20-2 (0-1) L1251164-04 Solid			Adrian	08/13/20 08:30	08/15/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529497	1	08/20/20 21:50	08/20/20 22:01	KBC	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 16:53	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529361	1	08/19/20 17:00	08/20/20 20:16	AV	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 22:12	JAH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 05:28	TJD	Mt. Juliet, T
			Collected by	Collected date/time	Received da	te/time
H 20-2 (2-3) L1251164-05 Solid			Adrian	08/13/20 08:40	08/15/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529497	1	08/20/20 21:50	08/20/20 22:01	KBC	Mt. Juliet, Ti
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 17:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531602	1	08/25/20 10:57	08/25/20 13:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 22:33	JAH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 05:41	TJD	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

PAGE: 3 of 44

SAMPLE SUMMARY

ONE LAB. N A Page 151 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

H 20-2 (3-4) L1251164-06 Solid			Collected by Adrian	Collected date/time 08/13/20 08:50	Received da 08/15/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, Ti
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 17:12	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531484	1	08/19/20 17:00	08/24/20 17:15	BMB	Mt. Juliet, Ti
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 22:54	JAH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 05:54	TJD	Mt. Juliet, TI
H 20-3 (0-1) L1251164-07 Solid			Collected by Adrian	Collected date/time 08/13/20 09:00	Received da 08/15/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 17:40	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529803	1.01	08/19/20 17:00	08/21/20 08:54	BMB	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 23:15	JAH	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 06:06	TJD	Mt. Juliet, T
			Collected by	Collected date/time	Received da	
H 20-3 (2-3) L1251164-08 Solid			Adrian	08/13/20 09:10	08/15/20 09:	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, T
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 17:50	ELN	Mt. Juliet, T
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529803	1	08/19/20 17:00	08/21/20 09:14	BMB	Mt. Juliet, T
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 23:35	JAH	Mt. Juliet, T
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 08:26	TJD	Mt. Juliet, T
			Collected by	Collected date/time	Received da	
H 20-3 (3-4) L1251164-09 Solid			Adrian	08/13/20 09:20	08/15/20 09:	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, T
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 17:59	ELN	Mt. Juliet, T
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531484	1	08/19/20 17:00	08/24/20 17:37	BMB	Mt. Juliet, T
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529592	1	08/19/20 17:00	08/20/20 23:56	JAH	Mt. Juliet, T
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 08:38	TJD	Mt. Juliet, T
			Collected by	Collected date/time	Received da	
H 20-4 (0-1) L1251164-10 Solid			Adrian	08/13/20 09:30	08/15/20 09:	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, T
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 18:09	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531602	1	08/25/20 10:57	08/25/20 13:22	BMB	Mt. Juliet, T
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 11:07	ADM	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 09:16	TJD	Mt. Juliet, TI

PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

PAGE: 4 of 44

SAMPLE SUMMARY

ONE LAB. NA Page 152 of 211

Ср

Тс

Ss

Cn

Sr

Qc

GI

Â

Sc

H 20-4 (2-3) L1251164-11 Solid			Collected by Adrian	Collected date/time 08/13/20 09:40	Received dat 08/15/20 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 18:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529803	1.01	08/19/20 17:00	08/21/20 10:16	BMB	Mt. Juliet, Ti
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 11:27	ACG	Mt. Juliet, TI
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 09:29	TJD	Mt. Juliet, Ti
H 20-4 (3-4) L1251164-12 Solid			Collected by Adrian	Collected date/time 08/13/20 09:50	Received da: 08/15/20 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 18:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531484	1	08/19/20 17:00	08/24/20 18:22	BMB	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 11:47	ACG	Mt. Juliet, Ti
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1529516	1	08/21/20 19:36	08/23/20 07:22	TJD	Mt. Juliet, TI
			Collected by	Collected date/time	Received dat	
H 20-5 (0-1) L1251164-13 Solid			Adrian	08/13/20 10:00	08/15/20 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, Ti
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 18:56	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531602	1	08/25/20 10:57	08/25/20 13:43	BMB	Mt. Juliet, T
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 12:07	ACG	Mt. Juliet, T
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 09:55	TJD	Mt. Juliet, TI
			Collected by	Collected date/time	Received dat	te/time
H 20-5 (2-3) L1251164-14 Solid			Adrian	08/13/20 10:10	08/15/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, TI
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 19:06	ELN	Mt. Juliet, TI
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531602	1	08/25/20 10:57	08/25/20 14:03	BMB	Mt. Juliet, Tl
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 12:27	ACG	Mt. Juliet, Tl
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 10:07	TJD	Mt. Juliet, TI
			Collected by	Collected date/time	Received da	
H 20-5 (3-4) L1251164-15 Solid			Adrian	08/13/20 10:20	08/15/20 09:	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1529500	1	08/20/20 21:10	08/20/20 21:38	KBC	Mt. Juliet, Ti
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 19:34	ELN	Mt. Juliet, Ti
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529803	1	08/19/20 17:00	08/21/20 12:06	BMB	Mt. Juliet, TI
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 16:06	ADM	Mt. Juliet, Tl
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 10:20	TJD	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

PAGE: 5 of 44

SAMPLE SUMMARY

ONE LAB. N A Page 153 of 211

	SAMPLES		MARI		ONLL	
			Collected by	Collected date/time	Received da	ite/time
H 20-6 (0-1) L1251164-16 Solid			Adrian	08/13/20 10:30	08/15/20 09:	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529502	1	08/20/20 19:52	08/20/20 20:09	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 19:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1531484	1	08/19/20 17:00	08/24/20 19:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 16:26	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 14:56	TJD	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	ite/time
H 20-6 (2-3) L1251164-17 Solid			Adrian	08/13/20 10:40	08/15/20 09:	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529502	1	08/20/20 19:52	08/20/20 20:09	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 19:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1529803	1	08/19/20 17:00	08/21/20 12:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 16:46	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 10:33	TJD	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	ite/time
H 20-6 (3-4) L1251164-18 Solid			Adrian	08/13/20 10:50	08/15/20 09:	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1529502	1	08/20/20 19:52	08/20/20 20:09	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1529566	1	08/21/20 11:30	08/21/20 20:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1530437	1	08/19/20 17:00	08/21/20 23:12	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1529284	1	08/19/20 17:00	08/20/20 17:05	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1530250	1	08/21/20 17:09	08/23/20 11:11	TJD	Mt. Juliet, TN

PROJECT: 212C-MD-02251

SDG: L1251164

PAGE: 6 of 44

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord Project Manager

Released to Imaging: 09/29/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

TIME:) 18:08 PAGE: 7 of 44

SAMPLE RESULTS - 01 L1251164

Ss

Cn

Â

Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	98.9		1	08/20/2020 22:01	<u>WG1529497</u>	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.30	20.2	1	08/21/2020 16:15	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guaimer	mg/kg	mg/kg	Dilution	date / time	Baten	
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	08/20/2020 19:10	WG1529361	
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		08/20/2020 19:10	<u>WG1529361</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000477	0.00102	1	08/20/2020 21:11	WG1529592
Toluene	U		0.00133	0.00511	1	08/20/2020 21:11	<u>WG1529592</u>
Ethylbenzene	U		0.000753	0.00255	1	08/20/2020 21:11	WG1529592
Total Xylenes	U		0.000899	0.00664	1	08/20/2020 21:11	<u>WG1529592</u>
(S) Toluene-d8	102			75.0-131		08/20/2020 21:11	WG1529592
(S) 4-Bromofluorobenzene	98.5			67.0-138		08/20/2020 21:11	<u>WG1529592</u>
(S) 1,2-Dichloroethane-d4	95.5			70.0-130		08/20/2020 21:11	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.09		1.63	4.04	1	08/22/2020 18:02	WG1529484
C28-C40 Oil Range	6.60		0.277	4.04	1	08/22/2020 18:02	<u>WG1529484</u>
(S) o-Terphenyl	82.2			18.0-148		08/22/2020 18:02	WG1529484

SDG: L1251164

DATE/TIME: 08/27/20 18:08

SAMPLE RESULTS - 02 L1251164

Ss

Cn

Â

Sc

Total Solids by Method 2540 G-2011

	 Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	99.4		1	08/20/2020 22:01	WG1529497	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.26	20.1	1	08/21/2020 16:24	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	qualifier	mg/kg	mg/kg	Dilation	date / time	Bateri	
TPH (GC/FID) Low Fraction	U		0.0218	0.101	1	08/20/2020 19:32	WG1529361	
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		08/20/2020 19:32	WG1529361	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000473	0.00101	1	08/20/2020 21:31	<u>WG1529592</u>
Toluene	U		0.00132	0.00506	1	08/20/2020 21:31	<u>WG1529592</u>
Ethylbenzene	U		0.000746	0.00253	1	08/20/2020 21:31	<u>WG1529592</u>
Total Xylenes	U		0.000891	0.00658	1	08/20/2020 21:31	<u>WG1529592</u>
(S) Toluene-d8	102			75.0-131		08/20/2020 21:31	<u>WG1529592</u>
(S) 4-Bromofluorobenzene	97.1			67.0-138		08/20/2020 21:31	<u>WG1529592</u>
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		08/20/2020 21:31	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.84		1.62	4.03	1	08/22/2020 16:32	<u>WG1529484</u>
C28-C40 Oil Range	1.39	<u>B J</u>	0.276	4.03	1	08/22/2020 16:32	<u>WG1529484</u>
(S) o-Terphenyl	86.0			18.0-148		08/22/2020 16:32	WG1529484

SDG: L1251164

DATE/TIME: 08/27/20 18:08

SAMPLE RESULTS - 03

Total Solids by Method 2540 G-2011

	-	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte		%			date / time		2
Total Solids		99.7		1	08/20/2020 22:01	WG1529497	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.23	20.1	1	08/21/2020 16:43	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guanner	mg/kg	mg/kg	Dilution	date / time	butth	
TPH (GC/FID) Low Fraction	U		0.0218	0.100	1	08/20/2020 19:54	WG1529361	
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		08/20/2020 19:54	WG1529361	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000470	0.00101	1	08/20/2020 21:52	<u>WG1529592</u>
Toluene	U		0.00131	0.00503	1	08/20/2020 21:52	<u>WG1529592</u>
Ethylbenzene	U		0.000742	0.00252	1	08/20/2020 21:52	WG1529592
Total Xylenes	U		0.000886	0.00654	1	08/20/2020 21:52	<u>WG1529592</u>
(S) Toluene-d8	101			75.0-131		08/20/2020 21:52	WG1529592
(S) 4-Bromofluorobenzene	95.8			67.0-138		08/20/2020 21:52	<u>WG1529592</u>
(S) 1,2-Dichloroethane-d4	92.0			70.0-130		08/20/2020 21:52	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	5.11		1.62	4.01	1	08/22/2020 16:45	WG1529484
C28-C40 Oil Range	4.37		0.275	4.01	1	08/22/2020 16:45	<u>WG1529484</u>
(S) o-Terphenyl	86.7			18.0-148		08/22/2020 16:45	WG1529484

SDG: L1251164 DATE/TIME: 08/27/20 18:08 Ss Cn

Sr

ΆI

SAMPLE RESULTS - 04

Ss

Cn

ΆI

Sc

Total Solids by Method 2540 G-2011

						l' Cn	ς.
	Result	Qualifier	Dilution	Analysis	Batch	Cp)
Analyte	%			date / time		2	_
Total Solids	98.8		1	08/20/2020 22:01	<u>WG1529497</u>	Tc	-

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.32	20.3	1	08/21/2020 16:53	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0220	0.101	1	08/20/2020 20:16	WG1529361	
(S) a,a,a-Trifluorotoluene(FID)	97.2			77.0-120		08/20/2020 20:16	<u>WG1529361</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000479	0.00103	1	08/20/2020 22:12	WG1529592
Toluene	U		0.00133	0.00513	1	08/20/2020 22:12	WG1529592
Ethylbenzene	U		0.000756	0.00256	1	08/20/2020 22:12	WG1529592
Total Xylenes	U		0.000902	0.00666	1	08/20/2020 22:12	WG1529592
(S) Toluene-d8	102			75.0-131		08/20/2020 22:12	WG1529592
(S) 4-Bromofluorobenzene	96.9			67.0-138		08/20/2020 22:12	WG1529592
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		08/20/2020 22:12	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.50	J	1.63	4.05	1	08/23/2020 05:28	<u>WG1529516</u>
C28-C40 Oil Range	1.14	J	0.277	4.05	1	08/23/2020 05:28	<u>WG1529516</u>
(S) o-Terphenyl	91.6			18.0-148		08/23/2020 05:28	WG1529516

SDG: L1251164 DATE/TIME: 08/27/20 18:08

SAMPLE RESULTS - 05 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	81.6		1	08/20/2020 22:01	WG1529497	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	L
Analyte	mg/kg		mg/kg	mg/kg		date / time		4
Chloride	18.0	J	11.3	24.5	1	08/21/2020 17:02	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0266	0.123	1	08/25/2020 13:01	WG1531602	
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-120		08/25/2020 13:01	WG1531602	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000678	0.00145	1	08/20/2020 22:33	WG1529592
Toluene	U		0.00189	0.00726	1	08/20/2020 22:33	WG1529592
Ethylbenzene	U		0.00107	0.00363	1	08/20/2020 22:33	WG1529592
Total Xylenes	U		0.00128	0.00944	1	08/20/2020 22:33	WG1529592
(S) Toluene-d8	101			75.0-131		08/20/2020 22:33	WG1529592
(S) 4-Bromofluorobenzene	95.5			67.0-138		08/20/2020 22:33	WG1529592
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		08/20/2020 22:33	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.97	4.90	1	08/23/2020 05:41	<u>WG1529516</u>
C28-C40 Oil Range	U		0.336	4.90	1	08/23/2020 05:41	WG1529516
(S) o-Terphenyl	75.7			18.0-148		08/23/2020 05:41	WG1529516

SDG: L1251164 DATE/TIME:

³Ss ⁴Cn

Â

SAMPLE RESULTS - 06 L1251164

Total Solids by Method 2540 G-2011

	-	Result	Qualifier	Dilution	Analysis	Batch		Ср
Analyte		%			date / time		1	2
Total Solids		81.0		1	08/20/2020 21:38	WG1529500		Tc

Wet Chemistry by Method 300.0

								1
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		4
Chloride	22.2	J	11.4	24.7	1	08/21/2020 17:12	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	dumer	mg/kg	mg/kg	Dilution	date / time	Bateri	
TPH (GC/FID) Low Fraction	U		0.0268	0.124	1	08/24/2020 17:15	WG1531484	
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		08/24/2020 17:15	WG1531484	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000686	0.00147	1	08/20/2020 22:54	WG1529592
Toluene	U		0.00191	0.00735	1	08/20/2020 22:54	WG1529592
Ethylbenzene	U		0.00108	0.00367	1	08/20/2020 22:54	WG1529592
Total Xylenes	U		0.00129	0.00955	1	08/20/2020 22:54	<u>WG1529592</u>
(S) Toluene-d8	103			75.0-131		08/20/2020 22:54	WG1529592
(S) 4-Bromofluorobenzene	93.9			67.0-138		08/20/2020 22:54	<u>WG1529592</u>
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		08/20/2020 22:54	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.99	4.94	1	08/23/2020 05:54	<u>WG1529516</u>
C28-C40 Oil Range	U		0.338	4.94	1	08/23/2020 05:54	<u>WG1529516</u>
(S) o-Terphenyl	63.2			18.0-148		08/23/2020 05:54	WG1529516

SDG: L1251164

DATE/TIME: 08/27/20 18:08 ³Ss ⁴Cn ⁵Sr

Â

SAMPLE RESULTS - 07 L1251164

Total Solids by Method 2540 G-2011

						I'C	`n
	Result	Qualifier	Dilution	Analysis	Batch		·٢
Analyte	%			date / time		2	_
Total Solids	89.3		1	08/20/2020 21:38	WG1529500	T	С

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	10.6	J	10.3	22.4	1	08/21/2020 17:40	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanner	mg/kg	mg/kg	Dilution	date / time	Bateri	e
TPH (GC/FID) Low Fraction	U		0.0245	0.113	1.01	08/21/2020 08:54	WG1529803	
(S) a,a,a-Trifluorotoluene(FID)	88.1			77.0-120		08/21/2020 08:54	<u>WG1529803</u>	7

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000579	0.00124	1	08/20/2020 23:15	WG1529592
Toluene	U		0.00161	0.00620	1	08/20/2020 23:15	WG1529592
Ethylbenzene	U		0.000915	0.00310	1	08/20/2020 23:15	WG1529592
Total Xylenes	U		0.00109	0.00807	1	08/20/2020 23:15	WG1529592
(S) Toluene-d8	102			75.0-131		08/20/2020 23:15	WG1529592
(S) 4-Bromofluorobenzene	95.1			67.0-138		08/20/2020 23:15	WG1529592
(S) 1,2-Dichloroethane-d4	95.7			70.0-130		08/20/2020 23:15	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.80	4.48	1	08/23/2020 06:06	<u>WG1529516</u>
C28-C40 Oil Range	U		0.307	4.48	1	08/23/2020 06:06	<u>WG1529516</u>
(S) o-Terphenyl	80.6			18.0-148		08/23/2020 06:06	WG1529516

SDG: L1251164

DATE/TIME: 08/27/20 18:08 Ss Cn

ΆI

SAMPLE RESULTS - 08 L1251164

Total Solids by Method 2540 G-2011

						 Cn
	Result	Qualifier	Dilution	Analysis	Batch	 Cp
Analyte	%			date / time		 2
Total Solids	99.5		1	08/20/2020 21:38	WG1529500	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.25	20.1	1	08/21/2020 17:50	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	quanner	mg/kg	mg/kg	Dilution	date / time	Baten	e
TPH (GC/FID) Low Fraction	U		0.0218	0.101	1	08/21/2020 09:14	WG1529803	
(S) a,a,a-Trifluorotoluene(FID)	87.8			77.0-120		08/21/2020 09:14	WG1529803	5

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000472	0.00101	1	08/20/2020 23:35	<u>WG1529592</u>
Toluene	U		0.00131	0.00505	1	08/20/2020 23:35	<u>WG1529592</u>
Ethylbenzene	U		0.000744	0.00253	1	08/20/2020 23:35	WG1529592
Total Xylenes	U		0.000889	0.00657	1	08/20/2020 23:35	<u>WG1529592</u>
(S) Toluene-d8	104			75.0-131		08/20/2020 23:35	WG1529592
(S) 4-Bromofluorobenzene	97.4			67.0-138		08/20/2020 23:35	<u>WG1529592</u>
(S) 1,2-Dichloroethane-d4	98.2			70.0-130		08/20/2020 23:35	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.62	4.02	1	08/23/2020 08:26	<u>WG1529516</u>
C28-C40 Oil Range	1.67	J	0.275	4.02	1	08/23/2020 08:26	<u>WG1529516</u>
(S) o-Terphenyl	94.7			18.0-148		08/23/2020 08:26	WG1529516

SDG: L1251164 DATE/TIME:

Ss Cn

ΆI

SAMPLE RESULTS - 09 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	82.1		1	08/20/2020 21:38	WG1529500	Tc

Wet Chemistry by Method 300.0

	Decult (dm)	Qualifian	MDL (dm)		Dilution	Analusia	Datab	
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	17.4	J	11.2	24.4	1	08/21/2020 17:59	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Guanner	mg/kg	mg/kg	Dilution	date / time	bach	
TPH (GC/FID) Low Fraction	U		0.0264	0.122	1	08/24/2020 17:37	WG1531484	
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		08/24/2020 17:37	WG1531484	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000671	0.00144	1	08/20/2020 23:56	WG1529592
Toluene	U		0.00187	0.00719	1	08/20/2020 23:56	WG1529592
Ethylbenzene	U		0.00106	0.00359	1	08/20/2020 23:56	WG1529592
Total Xylenes	U		0.00126	0.00934	1	08/20/2020 23:56	WG1529592
(S) Toluene-d8	98.6			75.0-131		08/20/2020 23:56	WG1529592
(S) 4-Bromofluorobenzene	96.6			67.0-138		08/20/2020 23:56	WG1529592
(S) 1,2-Dichloroethane-d4	95.6			70.0-130		08/20/2020 23:56	WG1529592

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.96	4.87	1	08/23/2020 08:38	<u>WG1529516</u>
C28-C40 Oil Range	U		0.334	4.87	1	08/23/2020 08:38	<u>WG1529516</u>
(S) o-Terphenyl	84.9			18.0-148		08/23/2020 08:38	WG1529516

SDG: L1251164

³Ss ⁴Cn

Â

SAMPLE RESULTS - 10

Al

Sc

Collected date/time: 08/13/20 09:30

	Result	Qualifie	r Dilution	Analysis		Batch	
Analyte	%			date / time			
Total Solids	82.2		1	08/20/2020 21:	38	WG1529500	
Wet Chemistr	y by Method 300.(Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
						date / time	
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Analyte Chloride	mg/kg 46.6		mg/kg 11.2	mg/kg 24.3	1	08/21/2020 18:09	WG1529566
loride		C) by Me	11.2	24.3	1		<u>WG1529566</u>

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0264	0.122	1	08/25/2020 13:22	WG1531602
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120		08/25/2020 13:22	WG1531602

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000669	0.00143	1	08/20/2020 11:07	<u>WG1529284</u>
Toluene	U		0.00186	0.00717	1	08/20/2020 11:07	<u>WG1529284</u>
Ethylbenzene	U		0.00106	0.00358	1	08/20/2020 11:07	WG1529284
Total Xylenes	U		0.00126	0.00932	1	08/20/2020 11:07	WG1529284
(S) Toluene-d8	111			75.0-131		08/20/2020 11:07	WG1529284
(S) 4-Bromofluorobenzene	102			67.0-138		08/20/2020 11:07	WG1529284
(S) 1,2-Dichloroethane-d4	87.8			70.0-130		08/20/2020 11:07	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.96	4.87	1	08/23/2020 09:16	WG1529516
C28-C40 Oil Range	U		0.333	4.87	1	08/23/2020 09:16	WG1529516
(S) o-Terphenyl	66.4			18.0-148		08/23/2020 09:16	WG1529516

SDG: L1251164

SAMPLE RESULTS - 11 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	81.6		1	08/20/2020 21:38	<u>WG1529500</u>	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		4
Chloride	20.3	J	11.3	24.5	1	08/21/2020 18:37	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
		Quanner		KDE (dry)	Dilution	,	baten	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0268	0.124	1.01	08/21/2020 10:16	WG1529803	
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		08/21/2020 10:16	WG1529803	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000677	0.00145	1	08/20/2020 11:27	WG1529284
Toluene	U		0.00188	0.00725	1	08/20/2020 11:27	<u>WG1529284</u>
Ethylbenzene	U		0.00107	0.00362	1	08/20/2020 11:27	WG1529284
Total Xylenes	U		0.00128	0.00942	1	08/20/2020 11:27	<u>WG1529284</u>
(S) Toluene-d8	110			75.0-131		08/20/2020 11:27	WG1529284
(S) 4-Bromofluorobenzene	98.5			67.0-138		08/20/2020 11:27	<u>WG1529284</u>
(S) 1,2-Dichloroethane-d4	86.2			70.0-130		08/20/2020 11:27	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.97	4.90	1	08/23/2020 09:29	<u>WG1529516</u>
C28-C40 Oil Range	U		0.336	4.90	1	08/23/2020 09:29	<u>WG1529516</u>
(S) o-Terphenyl	76.8			18.0-148		08/23/2020 09:29	WG1529516

SDG: L1251164

DATE/TIME: 08/27/20 18:08 ³Ss ⁴Cn sr

ΆI

SAMPLE RESULTS - 12

Cn

Â

Sc

Collected date/time: 08/13/20 09:50

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	%			date / time		2
Total Solids	81.9		1	08/20/2020 21:38	WG1529500	

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		4
Chloride	18.6	J	11.2	24.4	1	08/21/2020 18:47	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg	Quanter	mg/kg	mg/kg	Dilution	date / time	Baten	
TPH (GC/FID) Low Fraction	U		0.0265	0.122	1	08/24/2020 18:22	WG1531484	
(S) a,a,a-Trifluorotoluene(FID)	97.1			77.0-120		08/24/2020 18:22	WG1531484	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000674	0.00144	1	08/20/2020 11:47	WG1529284
Toluene	U		0.00188	0.00721	1	08/20/2020 11:47	<u>WG1529284</u>
Ethylbenzene	U		0.00106	0.00361	1	08/20/2020 11:47	<u>WG1529284</u>
Total Xylenes	U		0.00127	0.00938	1	08/20/2020 11:47	<u>WG1529284</u>
(S) Toluene-d8	110			75.0-131		08/20/2020 11:47	WG1529284
(S) 4-Bromofluorobenzene	99.9			67.0-138		08/20/2020 11:47	<u>WG1529284</u>
(S) 1,2-Dichloroethane-d4	87.1			70.0-130		08/20/2020 11:47	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.97	4.88	1	08/23/2020 07:22	WG1529516
C28-C40 Oil Range	U		0.335	4.88	1	08/23/2020 07:22	<u>WG1529516</u>
(S) o-Terphenyl	69.5			18.0-148		08/23/2020 07:22	WG1529516

SDG: L1251164 DATE/TIME: 08/27/20 18:08

SAMPLE RESULTS - 13 L1251164

ΆI

Sc

Collected date/time: 08/13/20 10:00

	Result	Qualifier	Dilution	Analysis		Batch		
Analyte	%			date / time				
Total Solids	80.5		1	08/20/2020 21:3	20	WG1529500		
	v by Method 300.0)				<u>woiszssoo</u>		
	v by Method 300.0		1 1DL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	v by Method 300.0	Qualifier M	1 IDL (dry) ng/kg				Batch	

Volatile Organic Compounds (GC) by Method 8015D/GRC

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	6
Analyte	mg/kg		mg/kg	mg/kg		date / time		ľ
TPH (GC/FID) Low Fraction	U		0.0270	0.124	1	08/25/2020 13:43	WG1531602	
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120		08/25/2020 13:43	<u>WG1531602</u>	7

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000694	0.00149	1	08/20/2020 12:07	<u>WG1529284</u>
Toluene	U		0.00193	0.00743	1	08/20/2020 12:07	WG1529284
Ethylbenzene	U		0.00109	0.00371	1	08/20/2020 12:07	WG1529284
Total Xylenes	U		0.00131	0.00966	1	08/20/2020 12:07	WG1529284
(S) Toluene-d8	110			75.0-131		08/20/2020 12:07	WG1529284
(S) 4-Bromofluorobenzene	101			67.0-138		08/20/2020 12:07	<u>WG1529284</u>
(S) 1,2-Dichloroethane-d4	84.4			70.0-130		08/20/2020 12:07	<u>WG1529284</u>

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		2.00	4.97	1	08/23/2020 09:55	<u>WG1530250</u>
C28-C40 Oil Range	U		0.340	4.97	1	08/23/2020 09:55	<u>WG1530250</u>
(S) o-Terphenyl	63.9			18.0-148		08/23/2020 09:55	WG1530250

SDG: L1251164

SAMPLE RESULTS - 14 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	82.4		1	08/20/2020 21:38	WG1529500	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	58.7		11.2	24.3	1	08/21/2020 19:06	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte mg/kg mg/kg date / time TPH (GC/FID) Low Fraction U 0.0263 0.121 1 08/25/2020 14:03 WG1531602		Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
TPH (GC/FID) Low Fraction U 0.0263 0.121 1 08/25/2020 14:03 WG1531602	aluto		Quanner			Dilution	,	Baten	
	,	U		5 5		1		WG1531602	
(S) 106 77.0-120 08/25/2020 14:03 WG1531602	(S)	106							

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000666	0.00143	1	08/20/2020 12:27	<u>WG1529284</u>
Toluene	U		0.00186	0.00714	1	08/20/2020 12:27	<u>WG1529284</u>
Ethylbenzene	U		0.00105	0.00357	1	08/20/2020 12:27	<u>WG1529284</u>
Total Xylenes	U		0.00126	0.00928	1	08/20/2020 12:27	<u>WG1529284</u>
(S) Toluene-d8	108			75.0-131		08/20/2020 12:27	<u>WG1529284</u>
(S) 4-Bromofluorobenzene	98.1			67.0-138		08/20/2020 12:27	<u>WG1529284</u>
(S) 1,2-Dichloroethane-d4	81.4			70.0-130		08/20/2020 12:27	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.95	4.85	1	08/23/2020 10:07	<u>WG1530250</u>
C28-C40 Oil Range	U		0.332	4.85	1	08/23/2020 10:07	<u>WG1530250</u>
(S) o-Terphenyl	74.8			18.0-148		08/23/2020 10:07	WG1530250

SDG: L1251164

Ss Cn

Â

SAMPLE RESULTS - 15 L1251164

A

Sc

Collected date/time: 08/13/20 10:20

	Result	Qualifier	Dilution	Analysis		Batch		
Analyte	%			date / time				
Total Solids	95.2		1	08/20/2020 21:	.38	WG1529500		
Wet Chemistry	/ by Method 300.0	1						
Wet Chemistry			IDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Wet Chemistry		Qualifier M	IDL (dry) ng/kg				Batch	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0520	<u>B J</u>	0.0228	0.105	1	08/21/2020 12:06	WG1529803
(S) a,a,a-Trifluorotoluene(FID)	87.9			77.0-120		08/21/2020 12:06	WG1529803

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000514	0.00110	1	08/20/2020 16:06	<u>WG1529284</u>
Toluene	U		0.00143	0.00550	1	08/20/2020 16:06	<u>WG1529284</u>
Ethylbenzene	U		0.000811	0.00275	1	08/20/2020 16:06	WG1529284
Total Xylenes	U		0.000969	0.00715	1	08/20/2020 16:06	WG1529284
(S) Toluene-d8	112			75.0-131		08/20/2020 16:06	WG1529284
(S) 4-Bromofluorobenzene	103			67.0-138		08/20/2020 16:06	WG1529284
(S) 1,2-Dichloroethane-d4	88.9			70.0-130		08/20/2020 16:06	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	08/23/2020 10:20	<u>WG1530250</u>
C28-C40 Oil Range	U		0.288	4.20	1	08/23/2020 10:20	<u>WG1530250</u>
(S) o-Terphenyl	84.8			18.0-148		08/23/2020 10:20	WG1530250

SAMPLE RESULTS - 16 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	82.1		1	08/20/2020 20:09	WG1529502	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	45.5		11.2	24.4	1	08/21/2020 19:44	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	ma/ka	dunner	mg/kg	mg/kg	Bildtion	date / time	baten	
TPH (GC/FID) Low Fraction	U		0.0264	0.122	1	08/24/2020 19:29	WG1531484	
(S) a,a,a-Trifluorotoluene(FID)	96.5			77.0-120		08/24/2020 19:29	WG1531484	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000670	0.00144	1	08/20/2020 16:26	WG1529284
Toluene	U		0.00187	0.00718	1	08/20/2020 16:26	WG1529284
Ethylbenzene	U		0.00106	0.00359	1	08/20/2020 16:26	WG1529284
Total Xylenes	U		0.00126	0.00933	1	08/20/2020 16:26	WG1529284
(S) Toluene-d8	110			75.0-131		08/20/2020 16:26	WG1529284
(S) 4-Bromofluorobenzene	101			67.0-138		08/20/2020 16:26	WG1529284
(S) 1,2-Dichloroethane-d4	87.7			70.0-130		08/20/2020 16:26	<u>WG1529284</u>

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.96	4.87	1	08/23/2020 14:56	<u>WG1530250</u>
C28-C40 Oil Range	3.64	J	0.334	4.87	1	08/23/2020 14:56	<u>WG1530250</u>
(S) o-Terphenyl	76.0			18.0-148		08/23/2020 14:56	WG1530250

SDG: L1251164

Cn

Â

Sc

Ss

SAMPLE RESULTS - 17 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	82.4		1	08/20/2020 20:09	<u>WG1529502</u>	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	19.0	J	11.2	24.3	1	08/21/2020 19:53	WG1529566	

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	U		0.0263	0.121	1	08/21/2020 12:48	WG1529803	
(S) a,a,a-Trifluorotoluene(FID)	88.2			77.0-120		08/21/2020 12:48	<u>WG1529803</u>	

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000667	0.00143	1	08/20/2020 16:46	<u>WG1529284</u>
Toluene	U		0.00186	0.00714	1	08/20/2020 16:46	<u>WG1529284</u>
Ethylbenzene	U		0.00105	0.00357	1	08/20/2020 16:46	WG1529284
Total Xylenes	U		0.00126	0.00929	1	08/20/2020 16:46	<u>WG1529284</u>
(S) Toluene-d8	110			75.0-131		08/20/2020 16:46	WG1529284
(S) 4-Bromofluorobenzene	99.0			67.0-138		08/20/2020 16:46	WG1529284
(S) 1,2-Dichloroethane-d4	88.6			70.0-130		08/20/2020 16:46	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.95	4.86	1	08/23/2020 10:33	<u>WG1530250</u>
C28-C40 Oil Range	U		0.333	4.86	1	08/23/2020 10:33	<u>WG1530250</u>
(S) o-Terphenyl	66.5			18.0-148		08/23/2020 10:33	WG1530250

SDG: L1251164

DATE/TIME: 08/27/20 18:08 °Ss Cn

ΆI

SAMPLE RESULTS - 18 L1251164

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	C	р
Analyte	%			date / time		2	_
Total Solids	99.7		1	08/20/2020 20:09	WG1529502	Tc	С

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.22	20.1	1	08/21/2020 20:03	WG1529566

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	6
Analyte	mg/kg		mg/kg	mg/kg		date / time		
TPH (GC/FID) Low Fraction	0.0536	<u>B J</u>	0.0218	0.100	1	08/21/2020 23:12	WG1530437	L
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120		08/21/2020 23:12	WG1530437	7

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000469	0.00101	1	08/20/2020 17:05	WG1529284
Toluene	U		0.00131	0.00503	1	08/20/2020 17:05	<u>WG1529284</u>
Ethylbenzene	U		0.000741	0.00251	1	08/20/2020 17:05	WG1529284
Total Xylenes	U		0.000885	0.00653	1	08/20/2020 17:05	<u>WG1529284</u>
(S) Toluene-d8	110			75.0-131		08/20/2020 17:05	WG1529284
(S) 4-Bromofluorobenzene	99.7			67.0-138		08/20/2020 17:05	<u>WG1529284</u>
(S) 1,2-Dichloroethane-d4	88.8			70.0-130		08/20/2020 17:05	WG1529284

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.51	J	1.61	4.01	1	08/23/2020 11:11	<u>WG1530250</u>
C28-C40 Oil Range	U		0.275	4.01	1	08/23/2020 11:11	<u>WG1530250</u>
(S) o-Terphenyl	84.7			18.0-148		08/23/2020 11:11	WG1530250

SDG: L1251164

DATE/TIME: 08/27/20 18:08 Ss Cn

ΆI

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

Cn

Sr

[°]Qc

GI

Â

Sc

Method Blank (MB)

Method Bidlin					1	'Cn
(MB) R3562308-1	08/20/20 22:01					Ср
	MB Result	MB Qualifier	MB MDL	MB RDL	2	2
Analyte	%		%	%		Tc
Total Solids	0.000					
					3	³Ss

L1251164-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1251164-02 08/20	D/20 22:01 • (DUP) R3562308-3	3 08/20/20	J 22:01		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	99.4	99.3	1	0.0606		10

Laboratory Control Sample (LCS)

(LCS) R3562308-2 0	08/20/20 22:01				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

SDG: L1251164 DATE/TIME: 08/27/20 18:08

PAGE: 26 of 44

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1251164-06,07,08,09,10,11,12,13,14,15

Gl

Â

Sc

Method Blank (MB)

Method Blank	: (MB)				
(MB) R3562304-1 (08/20/20 21:38				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	%		%	%	Tc
Total Solids	0.000				
					^³ Ss

L1251164-12 Original Sample (OS) • Duplicate (DUP)

L1251164-12 Orig	ginal Sample (OS) • Dup	licate (D)UP)					
(OS) L1251164-12 08/2	20/20 21:38 • (DUP) R3562304-3	08/20/20) 21:38					
	Original Result	t DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits			
Analyte	%	%		%		%			
Total Solids	81.9	83.0	1	1.32		10			

Laboratory Control Sample (LCS)

(LCS) R3562304-2 08/	20/20 21:38				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

SDG: L1251164

DATE/TIME: 08/27/20 18:08

PAGE: 27 of 44

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1251164-16,17,18

°Qc

GI

Â

Sc

Method Blank (MB)

Method Blank						
(MB) R3562297-1	08/20/20 20:09					
	MB Result	MB Qualifier	MB MDL	MB RDL		
Analyte	%		%	%		
Total Solids	0.000					

L1251170-01 Original Sample (OS) • Duplicate (DUP)

L1251170-01 O	riginal Sample	(OS) • Dup	licate (D)UP)			
(OS) L1251170-01 08	3/20/20 20:09 • (DU	P) R3562297-	3 08/20/2	0 20:09			
	Original Resul	t DUP Result	Dilution	DUP RPD	DUP Qualifier	UP RPD mits	
Analyte	%	%		%			
Total Solids	84.7	85.0	1	0.253)	

Laboratory Control Sample (LCS)

(LCS) R3562297-2 08	8/20/20 20:09				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

SDG: L1251164

DATE/TIME: 08/27/20 18:08

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1251164-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

⁺Cn

Sr

Qc

Method Blank (MB)

Method Dian					1'c
(MB) R3562816-1	08/21/20 15:37				
	MB Result	MB Qualifier	MB MDL	/B RDL	2
Analyte	mg/kg		mg/kg	ng/kg	T
Chloride	U		9.20	0.0	
					3

L1251164-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1251164-02 08/21/2	20 16:24 • (DUP)	R3562816-3	08/21/20 1	6:34		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	U	U	1	0.000		20

L1251164-18 Original Sample (OS) • Duplicate (DUP)

L1251164-18 Ori	ginal Sample (OS) • Dup	licate (D	OUP)		
DS) L1251164-18 08/	21/20 20:03 • (DUP)	R3562816-6	08/21/20	20:12		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3562816-2 08/21,	/20 15:46				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	190	95.1	90.0-110	

L1251164-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1251164-10 08/21/20	0 18:09 • (MS) R	3562816-4 08	/21/20 18:18 • (N	/ISD) R356281	6-5 08/21/201	8:28						
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	608	46.6	609	626	92.5	95.2	1	80.0-120			2.71	20

Released to	Imaging ^{AC%/29/2022} 1:59:59 PM
	ConocoPhillips - Tetra Tech

PROJECT: 212C-MD-02251

SDG: L1251164

DATE/TIME: 08/27/20 18:08

PAGE: 29 of 44 Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

⁴Cn

Sr

Qc

GI

Â

Sc

Method Blank (MB)

IVIELITOU DIALIK (IVID	9				
(MB) R3562114-3 08/20/2	20 16:54				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	99.6			77.0-120	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3562114-1 08/20/2	20 15:46 • (LCSE	D) R3562114-2	08/20/20 16:0	9						
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	6.25	6.88	114	125	72.0-127			9.60	20
(S) a,a,a-Trifluorotoluene(FID)				100	101	77.0-120				

L1251205-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1251205-13 08/21/2	20 01:26 • (MS) F	3562114-4 08	/21/20 01:48 •	(MSD) R35621	14-5 08/21/20	02:10							
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
TPH (GC/FID) Low Fraction	106	U	60.1	62.1	56.7	58.6	25	10.0-151			3.27	28	
(S) a,a,a-Trifluorotoluene(FID)					70.2	69.8		77.0-120	<u>J2</u>	<u>J2</u>			

DATE/TIME: 08/27/20 18:08

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

Method Blank (MB)

	.)				l'Cr
(MB) R3563142-2 08/21/	20 02:36				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/kg		mg/kg	mg/kg	Tc
TPH (GC/FID) Low Fraction	0.0220	J	0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	90.9			77.0-120	³Ss

Laboratory Control Sample (LCS)

(LCS) R3563142-1 08/21/2	20 01:55				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.14	93.5	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			106	77.0-120	

 ² Tc
³ Ss
⁴ Cn
⁵Sr
⁶ Qc
⁷ Gl
⁸ Al

Sc

DATE/TIME: 08/27/20 18:08 PAGE: 31 of 44

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

ONE LAB. N APage 179 of 211

°Cn

Sr

Qc

GI

Â

Sc

Method Blank (MB)

)			
(MB) R3562817-2 08/21/2	20 21:59			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	0.0439	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3562817-1 08/21/2	20 21:18				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.51	100	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			101	77.0-120	

DATE/TIME: 08/27/20 18:08

PAGE: 32 of 44

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

Method Blank (MB)

	~)				1' c
(MB) R3563294-2 08/24	/20 13:16				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/kg		mg/kg	mg/kg	
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120	3

Laboratory Control Sample (LCS)

(LCS) R3563294-1 08/24	/20 12:31				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.10	92.7	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			97.2	77.0-120	

	² Tc
	0
	³ Ss
	⁴ Cn
_	
	⁵Sr
	⁶ Qc
	⁷ Gl
	8
	Ă

Sc

PROJECT: 212C-MD-02251

SDG: L1251164

DATE/TIME: 08/27/20 18:08 PAGE: 33 of 44
Received by OCD: 11/24/2020 1:14:06 PM

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

⁺Cn

Sr

Qc

GI

Â

Sc

Method Blank (MB)

)				
(MB) R3563564-3 08/25	/20 12:06				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
TPH (GC/FID) Low Fraction	U		0.0217	0.100	
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120	

Laboratory Control Sample (LCS)

(LCS) R3563564-2 08/25	5/20 11:25				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.92	108	72.0-127	
(S) a.a.a-Trifluorotoluene(FID)			103	77.0-120	

DATE/TIME: 08/27/20 18:08 PAGE: 34 of 44 Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY L1251164-10,11,12,13,14,15,16,17,18

Тс

Ss

Cn

Sr

ິQc

GI

A

Sc

Method Blank (MB)

(MB) R3562068-3 08/20/	20 10:21				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
Benzene	U		0.000467	0.00100	
Ethylbenzene	U		0.000737	0.00250	
Toluene	U		0.00130	0.00500	
Xylenes, Total	U		0.000880	0.00650	
(S) Toluene-d8	112			75.0-131	
(S) 4-Bromofluorobenzene	102			67.0-138	
(S) 1,2-Dichloroethane-d4	83.0			70.0-130	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3562068-1 08/20	/20 09:01 • (LCS	SD) R3562068	3-2 08/20/20 0)9:21							
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	ľ
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%	
Benzene	0.125	0.133	0.133	106	106	70.0-123			0.000	20	. 8
Ethylbenzene	0.125	0.136	0.141	109	113	74.0-126			3.61	20	
Toluene	0.125	0.139	0.137	111	110	75.0-121			1.45	20	0
Xylenes, Total	0.375	0.423	0.428	113	114	72.0-127			1.18	20	
(S) Toluene-d8				110	109	75.0-131					
(S) 4-Bromofluorobenzene				104	105	67.0-138					
(S) 1,2-Dichloroethane-d4				92.2	87.3	70.0-130					

L1251164-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1251164-10 08/20/20					68-5 08/20/2	0 17:45						
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.179	U	0.140	0.159	78.0	88.8	1	10.0-149			12.9	37
Ethylbenzene	0.179	U	0.149	0.173	83.2	96.8	1	10.0-160			15.1	38
Toluene	0.179	U	0.148	0.172	82.4	96.0	1	10.0-156			15.2	38
Xylenes, Total	0.538	U	0.449	0.528	83.5	98.1	1	10.0-160			16.2	38
(S) Toluene-d8					111	111		75.0-131				
(S) 4-Bromofluorobenzene					102	103		67.0-138				
(S) 1,2-Dichloroethane-d4					83.7	88.3		70.0-130				

SDG: L1251164 DATE/TIME: 08/27/20 18:08 PAGE: 35 of 44 Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1251164-01,02,03,04,05,06,07,08,09

(MB) R3563152-2 08/20/2	20 20:33				1
	MB Result	MB Qualifier	MB MDL	MB RDL	Ē
Analyte	mg/kg		mg/kg	mg/kg	
Benzene	U		0.000467	0.00100	<u> </u>
Ethylbenzene	0.00100	J	0.000737	0.00250	
Toluene	U		0.00130	0.00500	
Xylenes, Total	U		0.000880	0.00650	L I
(S) Toluene-d8	103			75.0-131	
(S) 4-Bromofluorobenzene	98.8			67.0-138	
(S) 1,2-Dichloroethane-d4	94.8			70.0-130	

Laboratory Control Sample (LCS)

(LCS) R3563152-1 08/20	/20 19:32				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Benzene	0.125	0.133	106	70.0-123	
Ethylbenzene	0.125	0.123	98.4	74.0-126	
Toluene	0.125	0.112	89.6	75.0-121	
Xylenes, Total	0.375	0.366	97.6	72.0-127	
(S) Toluene-d8			95.0	75.0-131	
(S) 4-Bromofluorobenzene			107	67.0-138	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

L1251178-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

DS) L1251178-02 08/21/20 02:41 • (MS) R3563152-3 08/21/20 04:04 • (MSD) R3563152-4 08/21/20 04:24												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	1.29	U	1.19	1.42	91.7	110	8	10.0-149			18.1	37
Ethylbenzene	1.29	0.680	1.97	2.25	99.4	121	8	10.0-160			13.5	38
Toluene	1.29	0.266	1.26	1.51	77.0	96.4	8	10.0-156			18.1	38
Xylenes, Total	3.88	7.11	12.0	13.2	127	157	8	10.0-160			9.23	38
(S) Toluene-d8					90.5	91.7		75.0-131				
(S) 4-Bromofluorobenzene					117	118		67.0-138				
(S) 1,2-Dichloroethane-d4					108	106		70.0-130				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

Released to Imaging 2022 1:59:59 PM ConocoPhillips - Tetra Tech

PROJECT: 212C-MD-02251

SDG: L1251164

DATE/TIME: 08/27/20 18:08

PAGE: 36 of 44

ONE LAB. N A Page 183 of 211

[°]Qc

GI

A

Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

Â

Sc

Method Blank (MB)

	(D)			
(MB) R3562648-1 08/2	2/20 13:36			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.333	J	0.274	4.00
(S) o-Terphenyl	79.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3562648-2 08/2	22/20 13:49				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	44.5	89.0	50.0-150	
(S) o-Terphenyl			64.9	18.0-148	

L1250943-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1250943-10 08/22/	(OS) L1250943-10 08/22/20 17:24 • (MS) R3562648-3 08/22/20 17:37 • (MSD) R3562648-4 08/22/20 17:50												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
C10-C28 Diesel Range	61.4	3.23	42.5	49.6	64.0	76.3	1	50.0-150			15.3	20	
(S) o-Terphenyl					46.8	51.4		18.0-148					

DATE/TIME: 08/27/20 18:08

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L1251164-04,05,06,07,08,09,10,11,12

⁺Cn

Sr

ິQc

GI

Â

Sc

Method Blank (MB)

	2)				l'Cn l
(MB) R3562836-1 08/23	3/20 03:47				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/kg		mg/kg	mg/kg	Tc
C10-C28 Diesel Range	U		1.61	4.00	
C28-C40 Oil Range	U		0.274	4.00	³ Ss
(S) o-Terphenyl	84.5			18.0-148	00

Laboratory Control Sample (LCS)

(LCS) R3562836-2 08/2	3/20 04:00				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.1	72.2	50.0-150	
(S) o-Terphenyl			81.4	18.0-148	

DATE/TIME: 08/27/20 18:08

PAGE: 38 of 44 Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

Â

Sc

Method Blank (MB)

Method Blank (M	10)							
(MB) R3562650-1 08/2	2/20 07:52							
	MB Result	MB Qualifier	MB MDL	MB RDL				
Analyte	mg/kg		mg/kg	mg/kg				
C10-C28 Diesel Range	U		1.61	4.00				
C28-C40 Oil Range	U		0.274	4.00				
(S) o-Terphenyl	79.6			18.0-148				

Laboratory Control Sample (LCS)

(LCS) R3562650-2 08/2	22/20 08:05				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	40.1	80.2	50.0-150	
(S) o-Terphenyl			59.6	18.0-148	

L1251164-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1251164-17 08/23/20 10:33 • (MS) R3562837-1 08/23/20 10:46 • (MSD) R3562837-2 08/23/20 10:58													
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
C10-C28 Diesel Range	58.5	U	33.1	32.9	56.6	56.9	1	50.0-150			0.735	20	
(S) o-Terphenyl					56.9	100		18.0-148					

DATE/TIME: 08/27/20 18:08

Τс

Ss

Cn

Sr

Qc

GI

AI

Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

Abbreviations and	d Definitions
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifior	Description

Qualifier	Description
В	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.

SDG: L1251164

Received by OCD: 11/24/2020 1:14:06 PMCCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
lowa	364
Kansas	E-10277
Kentucky ¹⁶	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee ¹⁴	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 5	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Released to Imaging: 7/20/2022 1:59:59 PM ConocoPhillips - Tetra Tech PROJECT: 212C-MD-02251

SDG: L1251164 DATE/TIME: 08/27/20 18:08

Received by OCD: 11/24/2020 1:14:06 PM Analysis Request of Chain of Custody Record

Page 189 of 211
Page : 1 of 2

Ŧ	Tetra Tech, Inc.					Midla Tel	and, (43)	Il Stree Texas 2) 682 2) 682	797 -455	701 i9	00	(H176															
Client Name:	Conoco Phillips	Site Manage	r:	Chr	istian	Llull															EQ						
Project Name:	MCA - 1A Header Release	Contact Info: Email: christian.llull@tetratech.com (Circle or S) Phone: (512) 338-1667									pe	cify	/ M 	eth 	lod	No	•)		1								
Project Location: (county, state)	Lea County, New Mexico	Project #:		212	C-MD	-0225	51																				
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 7970	01								1												list)					
Receiving Laboratory:	Pace Analytical	Sampler Sig	nature:		Adria	n						1	O-MRO		Se Hg	Se Hg					1	-		attached			
Comments: COPTE	TRA Acctnum	2 2 2 6 0 B										(see															
L1251164		CAMPLING MATTERY PRESERVATIVE						×	(Ext to C3 GRO - DI	10.00	Ag As Ba C	As Ba	Volatiles		8260B / 624		80			T	lance						
LAB#	SAMPLE IDENTIFICATION	YEAR: 2020	and the		-	Π				AINE			TX1005 (E8015M (G		als Ag	Metals Ag	mi Vola		Vol. 82	Semi. Vol.	8082 / 608	(Asbestos)	300.0	Water Che	tion Ba	н	
(LAB USE)		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE		# CONTAINERS	FILTERED	X	TPH 801	PAH 8270C	Total Metals	TCLP Metals	TCLP Semi	RCI	GC/MS V		PCB's 80 NORM	PLM (Ast	Chloride 300.0	Chloride General V	Anion/Cation Balance	TPH 8015R	ногр
-01	H 20-1 (0-1)	8/13/2020	800		x			x		1	N	X	×							T	T	T	X		Ť		T
02	H 20-1 (2-3)	8/13/2020	810		x		1	Х		1	N	X	×						199.000		1		X	1			
03	H 20-1 (3-4)	8/13/2020	820		x			X		1	N	X	X	1									X				
04	H 20-2 (0-1)	8/13/2020	830		X		-	Х		1	Ν	X	X								1		X	1.			
05	H 20-2 (2-3)	8/13/2020	840		X			X		1	Ν	X	×			< 1							х		4		
06	H 20-2 (3-4)	8/13/2020	850		X			X	1.145	1	Ν	X	×										Х				
07	H 20-3 (0-1)	8/13/2020	900		X			X		1	N	X	×					1). -					х				
08	H 20-3 (2-3)	8/13/2020	910		x			X		1	Ν	X	×										х				
09	H 20-3 (3-4)	8/13/2020	920		X			Х	5	1	N	X	×						-				X				
10	H 20-4 (0-1)	8/13/2020	930		x		-	X	1	1	N	X	×										Х		E TRU		
Relinquished by: Relinquished by: Relinquished by:	Date: Time: 8/15/20 1/00 Date: Time: 8/15/20 1/00 Date: Time: Date: Time:	Received by: Received by: Received by:	X	/	8	13	ate:	17 TI	me: // me: //	<u>(6</u>	-D 10	Sam	OI ple Te	B USE REMARKS: NLY Standard emperature RUSH: Same Day 24 hr. 48 hr. 72 hr. Rush Charges Authorized Special Report Limits or TRRP Report HAND DELIVERED FEDEX UPS Tracking #:													
		ORIGINA	LCÓPY			l	-								2.5	LIVEF	1.1	FED	DEX	UP	S T	racki	ing #:				-
Released to Imagin	g: 7/29/2022 1:59:59 PM									1.	3:	1	=].	2	7	A	1										

Received by OCD: 11/24/2020 1:14:06 PM Analysis Request of Chain of Custody Record

Page 190 of 211

Page: 2 of 2

T	Tetra Tech, Inc.				901	Midla Tel	ind, (43	all Stre , Texas 32) 682 32) 682	s 797 2-455	701 59	00																
Client Name:	Conoco Phillips	Site Manage	er:																								
Project Name:	MCA - 1A Header Release	Contact Info):		nail: ch one: (5			III@teti 1667	ratec	ch.con	n	(Circle or Specify Method No.)						0.)		F 1							
Project Location: (county, state)	Lea County, New Mexico	Project #: 212C-MD-02251							1																		
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701	1							1		-											list)					
Receiving Laboratory	y: Pace Analytical	Sampler Sig	gnature:		Adria	n			-	E		1		COHIM - C	Se Hg	Se Hg											
Comments: COPT	ETRA Acctnum		ar stad									8260B		- 0H0 - 0H0	Cr Pb	Cd Cr Pt			4	8270C/625				DS	y (see at		
11251164		SAMPLING MATRIX PRESERVATIVE METHOD							(N/N)	BTEX	Ext to C3	In - 040	Ag As Ba C	Ag As Ba		atiles	30B / 62	ol. 8270	608			tte TD	Chemistr	Carlos Carlos			
LAB # (LAB USE) ONLY)	SAMPLE IDENTIFICATION	YEAR: 2020 DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE NONE		# CONTAINERS	FILTERED (Y	3TEX 8021B	BTEX 8021B TPH TX1005 (E) TPH 8015M (Gi PAH 8270C Total Metals Ag / TCLP Metals Ag /				CLP Volatiles	ICLP Semi Volatiles	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol.	8082 /	NORM PI M (Achactoc)	Chloride 300.0	Chloride Sulfate	General Water Chemistry (see attached	PH 8015R	НОГР
-1]	H 20-4 (2-3)	8/13/2020	940	ŕ	X		-	X		1	N	X		X		F	-					2 4	X			F	
12	H 20-4 (3-4)	8/13/2020	950		X			x		1	N	X		x	t								X				
13	H 20-5 (0-1)	8/13/2020	1000	T	X		1	X		1	N	X		x						T			X				
14	H 20-5 (2-3)	8/13/2020	1010		X		-	x		1	N	X		x	T							T	X			\top	
15	H 20-5 (3-4)	8/13/2020	1020		X			X		1	N	X		x								T	X			T	
16	H 20-6 (0-1)	8/13/2020	1030		X			х		1	N	X		X									X				23
17 -	H 20-6 (2-3)	8/13/2020	1040		X	10		x		1	N	X		×								T	X				
18	H 20-6 (3-4)	8/13/2020	1050		x			X		1	N	X		×					-			-	X				
Relinguished by:	Date: Time: Date: Time: Date: Time:	Received by	Th		8	19	ite:	2	ime: (/ 2	a				B U				MAR	Stand		me Di		24 br	481		2 hr	
Relinquished by:	Date: Time:	Received by	X		81	141	te: $\frac{1}{5}$	5	ime: ((ime:	(i) 97		Sample Temperature RUSH: Same Day 24 hr. 48 hr. 72 hr. Rush Charges Authorized Special Report Limits or TRRP Report (Circle) HAND DELIVERED FEDEX UPS Tracking #:					. 10.										
and and a second second second second second second second second second second second second second second se		ORIGINA	IL COPY				V					(Cir	cle)	HAN	DD	ELIVE	REI	DF	EDE>	(U	PS	Trac	cking	#:		-	
Released to Imag	ing: 7/29/2022 1:59:59 PM											12	,	1-	.1	2	U	in	1								

Pace Analytical	National Center for	Testing & Innov	vation	
	Cooler Receipt Fo	orm		
Client:	COPTETRA		L125	:1164
Cooler Received/Opened On:	8 / 15 / 20	Temperature:	1.2	
Received By: DECARS	O GOOĎE		Pro Part	of the local sector
Signature: DPanno	Conde			
		any and a real	1999	
Receipt Check List		NP	Yes	No
COC Seal Present / Intact?		/	NAME ST	
COC Signed / Accurate?	A Street States and a street str	- Martin Martine	1	Contraction of the
Bottles arrive intact?	Sec. 19	Straight and an	-/	
Correct bottles used?	and the second second second second second second second second second second second second second second second		/	
Sufficient volume sent?			1	
If Applicable				1 - 1 - 1 - 1
VOA Zero headspace?		44、美国美国东东部门	No. Maria 24	
Preservation Correct / Checked?	particular and the second		1 Martine	10-6 019
			A second server the main of the start	and the second second second second second second second second second second second second second second second

.

APPENDIX F NMSLO Seed Mixture Details



Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New **Mexico**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

.

Contents

Preface	2
How Soil Surveys Are Made	
Soil Map	
Soil Map (MCA 1-A Header Release)	
Legend	
Map Unit Legend (MCA 1-A Header Release)	
Map Unit Descriptions (MCA 1-A Header Release)	11
Lea County, New Mexico	
KM—Kermit soils and Dune land, 0 to 12 percent slopes	
References	

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

.

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Received by OCD: 11/24/2020 1:14:06 PM



•

Custom Soil Resource Report

MAP L	EGEND	MAP INFORMATION
Area of Interest (AOI) ○ Area of Interest (AOI) Soils Soil Map Unit Polygons ○ Borrow Pit ○ Clay Spot ○ Closed Depression ○ Gravel Pit ○ Clay Spot ○ Landfill ▲ Lava Flow	 Spoil Area Stony Spot Very Stony Spot Very Stony Spot Other Other Special Line Features Water Features Streams and Canals Transportation teams and Canals Interstate Highways Interstate Highways INS Routes Major Roads Local Roads	projection, which preserves direction and shape but distorts
Clay Spot Closed Depression Gravel Pit Gravelly Spot Landfill	 Rails Interstate Highways US Routes Major Roads 	measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Mercator
 Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot 		This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Lea County, New Mexico Survey Area Data: Version 17, Jun 8, 2020 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
 Sinkhole Slide or Slip Sodic Spot 		Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (MCA 1-A Header Release)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
КМ	Kermit soils and Dune land, 0 to 12 percent slopes	0.1	100.0%
Totals for Area of Interest		0.1	100.0%

Map Unit Descriptions (MCA 1-A Header Release)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lea County, New Mexico

KM—Kermit soils and Dune land, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpx Elevation: 3,000 to 4,400 feet Mean annual precipitation: 10 to 15 inches Mean annual air temperature: 60 to 62 degrees F Frost-free period: 190 to 205 days Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 46 percent *Dune land:* 44 percent *Minor components:* 10 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Kermit

Setting

Landform: Dunes Landform position (two-dimensional): Shoulder, backslope, footslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear, concave Across-slope shape: Convex Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand C - 8 to 60 inches: fine sand

Properties and qualities

Slope: 5 to 12 percent Depth to restrictive feature: More than 80 inches Drainage class: Excessively drained Runoff class: Very low Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 3 percent Gypsum, maximum content: 1 percent Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Sodium adsorption ratio, maximum: 2.0 Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: A Ecological site: R042XC022NM - Sandhills Hydric soil rating: No

Description of Dune Land

Setting

Landform: Dunes Landform position (two-dimensional): Shoulder, backslope, footslope Landform position (three-dimensional): Side slope Down-slope shape: Convex, linear, concave Across-slope shape: Convex

Typical profile

A - 0 to 6 inches: fine sand *C* - 6 to 60 inches: fine sand

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8e Hydrologic Soil Group: A Hydric soil rating: No

Minor Components

Palomas

Percent of map unit: 3 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Pyote

Percent of map unit: 3 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Wink

Percent of map unit: 2 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Maljamar

Percent of map unit: 2 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

NMSLO Seed Mix

Sandy (S)

SANDY (S) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
-			
<u>Grasses:</u>			
Sand bluestem	Elida, VNS, So.	2.0	F
Little bluestem	Cimarron, Pastura	3.0	F
Black grama	VNS, Southern	1.0	D
Sand dropseed	VNS, Southern	4.0	S
Plains bristlegrass	VNS, Southern	2.0	D
Forbs:			2
Firewheel (Gaillardia)	VNS, Southern	1.0	D
Annual Sunflower	VNS, Southern	1.0	D
Shrubs:			B
Fourwing Saltbush	VNS, Southern	1.0	F
Nº S	Total PLS/a	cre 16.0	8

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.



District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

COMMENTS

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	11325
	Action Type:
	[C-141] Release Corrective Action (C-141)

COMMENTS

COMMENT		
Created By		Comment Date
jharimon	Closure approved on 08/30/2021 by Bradford Billings	7/29/2022

Action 11325

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	11325
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	7/29/2022

Action 11325