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Received by OGD: 12/23/2020 9:09:37 AM
Released to Imaging: 2/10/2021 9:44:16 AM

District I
625 N. French Dr., Hobbs, NM 88240
District II
11 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-147
Revised April 3, 2017

Recycling Facility Only

Type of action: Permit Registration Modification Closure Other (explain) _____

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Cimarex Energy Co (For multiple operators attach page with information) OGRID #: 215099
Address: 202 S. Cheyenne Ave Ste 1000 Tulsa, OK 74103
Facility or well name (include API# if associated with a well): Vaca Draw SWD Riser
OCD Permit Number: 1RF-30 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr SE/SE 21 Section 25S Township 33E Range Eddy County:
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2.
 Recycling Facility:
Location of recycling facility (if applicable): Latitude 32.1106148 Longitude -103.5708542 NAD83
Proposed Use: Drilling* Completion* Production* Plugging *
**The re-use of produced water may NOT be used until fresh water zones are cased and cemented*
 Other, requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.
 Fluid Storage
 Above ground tanks Activity permitted under 19.15.17 NMAC explain type _____
 Activity permitted under 19.15.36 NMAC explain type: _____ Other explain _____
 Closure Report (required within 60 days of closure completion): Recycling Facility Closure Completion Date: _____

3.
Variations:
Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.
Check the below box only if a variance is requested:
 Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.
If a Variance is requested, it must be approved prior to implementation.

4.
Operator Application Certification:
I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.
Name (Print): Mary Barnett Title: Drilling Tech
Signature: Mary Barnett Date: 6/15/20
Email address: mbarnett@cimarex.com Telephone: 918-295-1700 or 918-295-1629

OCD Representative Signature: _____ Approval/Registration Date: _____
Title: _____ OCD Permit Number: _____
 OCD Conditions _____
 Additional OCD Conditions on Attachment _____



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

June 09, 2020

Kelly Miller
Creston Environmental LLC
PO box 1663
Norman, OK 73070

Work Order: **HS20060057**

Laboratory Results for: **Cimarex Vaca Draw /Cascade Recycl. FAC.**

Dear Kelly,

ALS Environmental received 2 sample(s) on Jun 02, 2020 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Bernadette A. Fini
Project Manager

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
Work Order: HS20060057

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS20060057-01	RF-06012020-700-01	Soil		01-Jun-2020 08:45	02-Jun-2020 09:00	<input type="checkbox"/>
HS20060057-02	Trip Blank	Water		01-Jun-2020 00:01	02-Jun-2020 09:00	<input type="checkbox"/>

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
Work Order: HS20060057

CASE NARRATIVE

GC Semivolatiles by Method SW8015M

Batch ID: 154060

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

GC Volatiles by Method SW8015

Batch ID: R362630

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

GCMS Volatiles by Method SW8260

Batch ID: R362558,R362641

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

WetChemistry by Method SW3550

Batch ID: R362580

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

WetChemistry by Method E300

Batch ID: 154026

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
 Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
 Sample ID: RF-06012020-700-01
 Collection Date: 01-Jun-2020 08:45

ANALYTICAL REPORT

WorkOrder:HS20060057
 Lab ID:HS20060057-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260				Analyst: WLR
Benzene	ND		0.0057	mg/Kg-dry	1	03-Jun-2020 15:12
Ethylbenzene	ND		0.0057	mg/Kg-dry	1	03-Jun-2020 15:12
Toluene	ND		0.0057	mg/Kg-dry	1	03-Jun-2020 15:12
Xylenes, Total	ND		0.0057	mg/Kg-dry	1	03-Jun-2020 15:12
Surr: 1,2-Dichloroethane-d4	92.9		70-126	%REC	1	03-Jun-2020 15:12
Surr: 4-Bromofluorobenzene	93.1		70-130	%REC	1	03-Jun-2020 15:12
Surr: Dibromofluoromethane	91.7		70-130	%REC	1	03-Jun-2020 15:12
Surr: Toluene-d8	100		70-130	%REC	1	03-Jun-2020 15:12
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015				Analyst: QX
Gasoline Range Organics	ND		0.056	mg/Kg-dry	1	03-Jun-2020 11:24
Surr: 4-Bromofluorobenzene	114		70-123	%REC	1	03-Jun-2020 11:24
TPH DRO/ORO BY SW8015C		Method:SW8015M			Prep:SW3541 / 03-Jun-2020	Analyst: PVL
TPH (Diesel Range)	ND		1.7	mg/Kg-dry	1	04-Jun-2020 03:31
TPH (Motor Oil Range)	7.6		3.4	mg/Kg-dry	1	04-Jun-2020 03:31
Surr: 2-Fluorobiphenyl	79.8		60-129	%REC	1	04-Jun-2020 03:31
ANIONS BY E300.0		Method:E300			Prep:E300 / 02-Jun-2020	Analyst: JHD
Chloride	26.7		5.04	mg/Kg-dry	1	05-Jun-2020 19:54
MOISTURE		Method:SW3550				Analyst: MZD
Percent Moisture	1.58		0.0100	wt%	1	02-Jun-2020 13:53

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
 Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
 Sample ID: Trip Blank
 Collection Date: 01-Jun-2020 00:01

ANALYTICAL REPORT

WorkOrder:HS20060057
 Lab ID:HS20060057-02
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260				Analyst: AKP
Benzene	ND		0.0010	mg/L	1	03-Jun-2020 14:17
Ethylbenzene	ND		0.0010	mg/L	1	03-Jun-2020 14:17
Toluene	ND		0.0010	mg/L	1	03-Jun-2020 14:17
Xylenes, Total	ND		0.0010	mg/L	1	03-Jun-2020 14:17
Surr: 1,2-Dichloroethane-d4	91.3		70-126	%REC	1	03-Jun-2020 14:17
Surr: 4-Bromofluorobenzene	103		81-113	%REC	1	03-Jun-2020 14:17
Surr: Dibromofluoromethane	92.8		77-123	%REC	1	03-Jun-2020 14:17
Surr: Toluene-d8	95.5		82-127	%REC	1	03-Jun-2020 14:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 09-Jun-20

Weight / Prep Log

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

Batch ID: 3765	Start Date: 03 Jun 2020 07:23	End Date: 03 Jun 2020 07:23
Method: VOLATILES BY SW8260C		

Sample ID	Container	Sample Wt/Vol	Final Volume	Weight Factor	Container Type
HS20060057-01	1	4.473 (g)	5 (mL)	1.12	TerraCore (5035A)

Batch ID: 3766	Start Date: 03 Jun 2020 11:03	End Date: 03 Jun 2020 11:03
Method: GASOLINE RANGE ORGANICS BY SW8015C		Prep Code:

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20060057-01	1	4.536 (g)	5 (mL)	1.1	TerraCore (5035A)

Batch ID: 154026	Start Date: 02 Jun 2020 09:57	End Date: 02 Jun 2020 13:00
Method: 300 ANIONS SOIL PREP		Prep Code: 300_S_PR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20060057-01		5.0424 (g)	50 (mL)	9.916	

Batch ID: 154060	Start Date: 03 Jun 2020 12:30	End Date: 03 Jun 2020 15:30
Method: SOPREP: 3541 TPH		Prep Code: 8015SPR_LL

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20060057-01	1	30.17 (g)	1 (mL)	0.03315	

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 154026 (0)		Test Name : ANIONS BY E300.0			Matrix: Soil	
HS20060057-01	RF-06012020-700-01	01 Jun 2020 08:45		02 Jun 2020 09:57	05 Jun 2020 19:54	1
Batch ID: 154060 (1)		Test Name : TPH DRO/ORO BY SW8015C			Matrix: Soil	
HS20060057-01	RF-06012020-700-01	01 Jun 2020 08:45		03 Jun 2020 12:30	04 Jun 2020 03:31	1
Batch ID: R362558 (0)		Test Name : VOLATILES BY SW8260C			Matrix: Soil	
HS20060057-01	RF-06012020-700-01	01 Jun 2020 08:45			03 Jun 2020 15:12	1
Batch ID: R362580 (0)		Test Name : MOISTURE			Matrix: Soil	
HS20060057-01	RF-06012020-700-01	01 Jun 2020 08:45			02 Jun 2020 13:53	1
Batch ID: R362630 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Soil	
HS20060057-01	RF-06012020-700-01	01 Jun 2020 08:45			03 Jun 2020 11:24	1
Batch ID: R362641 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS20060057-02	Trip Blank	01 Jun 2020 00:01			03 Jun 2020 14:17	1

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: 154060 (1) **Instrument:** FID-7 **Method:** TPH DRO/ORO BY SW8015C

MBLK Sample ID: **MBLK-154060** Units: **mg/Kg** Analysis Date: **08-Jun-2020 11:18**
 Client ID: Run ID: **FID-7_362805** SeqNo: **5609776** PrepDate: **03-Jun-2020** DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

TPH (Diesel Range)	ND	1.7							
TPH (Motor Oil Range)	ND	3.4							
Surr: 2-Fluorobiphenyl	2.352	0.10	3.33	0	70.6	70 - 130			

LCS Sample ID: **LCS-154060** Units: **mg/Kg** Analysis Date: **03-Jun-2020 23:05**
 Client ID: Run ID: **FID-7_362805** SeqNo: **5609766** PrepDate: **03-Jun-2020** DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

TPH (Diesel Range)	25.29	1.7	33.33	0	75.9	70 - 130			
TPH (Motor Oil Range)	24.97	3.4	33.33	0	74.9	70 - 130			
Surr: 2-Fluorobiphenyl	2.382	0.10	3.33	0	71.5	70 - 130			

MS Sample ID: **HS20051140-01MS** Units: **mg/Kg** Analysis Date: **03-Jun-2020 23:54**
 Client ID: Run ID: **FID-7_362805** SeqNo: **5609768** PrepDate: **03-Jun-2020** DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

TPH (Diesel Range)	30.33	1.7	33.23	4.48	77.8	70 - 130			
TPH (Motor Oil Range)	26.27	3.4	33.23	2.969	70.1	70 - 130			
Surr: 2-Fluorobiphenyl	2.621	0.10	3.32	0	78.9	60 - 129			

MSD Sample ID: **HS20051140-01MSD** Units: **mg/Kg** Analysis Date: **04-Jun-2020 00:18**
 Client ID: Run ID: **FID-7_362805** SeqNo: **5609769** PrepDate: **03-Jun-2020** DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

TPH (Diesel Range)	29.65	1.7	33.29	4.48	75.6	70 - 130	30.33	2.28	30
TPH (Motor Oil Range)	30.98	3.4	33.29	2.969	84.2	70 - 130	26.27	16.5	30
Surr: 2-Fluorobiphenyl	2.77	0.10	3.326	0	83.3	60 - 129	2.621	5.54	30

The following samples were analyzed in this batch: HS20060057-01

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362630 (0)	Instrument: FID-14	Method: GASOLINE RANGE ORGANICS BY SW8015C
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MBLK	Sample ID: MBLK-060320	Units: mg/Kg	Analysis Date: 03-Jun-2020 10:39							
Client ID:	Run ID: FID-14_362630	SeqNo: 5605977	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Gasoline Range Organics	ND	0.050								
Surr: 4-Bromofluorobenzene	0.11	0.0050	0.1	0	110	75 - 121				

LCS	Sample ID: LCS-060320	Units: mg/Kg	Analysis Date: 03-Jun-2020 10:22							
Client ID:	Run ID: FID-14_362630	SeqNo: 5605976	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Gasoline Range Organics	1.118	0.050	1	0	112	72 - 121				
Surr: 4-Bromofluorobenzene	0.09328	0.0050	0.1	0	93.3	75 - 121				

MS	Sample ID: HS20060102-01MS	Units: mg/Kg	Analysis Date: 03-Jun-2020 12:44							
Client ID:	Run ID: FID-14_362630	SeqNo: 5605983	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Gasoline Range Organics	1.022	0.048	0.96	0	106	70 - 130				
Surr: 4-Bromofluorobenzene	0.08653	0.0048	0.096	0	90.1	70 - 123				

MSD	Sample ID: HS20060102-01MSD	Units: mg/Kg	Analysis Date: 03-Jun-2020 13:00							
Client ID:	Run ID: FID-14_362630	SeqNo: 5605984	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Gasoline Range Organics	1.009	0.050	1.01	0	99.9	70 - 130	1.022	1.25	30	
Surr: 4-Bromofluorobenzene	0.08273	0.0050	0.101	0	81.9	70 - 123	0.08653	4.49	30	

The following samples were analyzed in this batch: HS20060057-01

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362558 (0)	Instrument: VOA5	Method: VOLATILES BY SW8260C
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MBLK		Sample ID: VBLKS1-060320		Units: ug/Kg		Analysis Date: 03-Jun-2020 08:56			
Client ID:		Run ID: VOA5_362558		SeqNo: 5604880		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	ND	5.0							
Ethylbenzene	ND	5.0							
Toluene	ND	5.0							
Xylenes, Total	ND	5.0							
Surr: 1,2-Dichloroethane-d4	47.96	0	50	0	95.9	76 - 125			
Surr: 4-Bromofluorobenzene	48.4	0	50	0	96.8	80 - 120			
Surr: Dibromofluoromethane	47.48	0	50	0	95.0	80 - 119			
Surr: Toluene-d8	50.4	0	50	0	101	81 - 118			

LCS		Sample ID: VLCSS1-060320		Units: ug/Kg		Analysis Date: 03-Jun-2020 08:06			
Client ID:		Run ID: VOA5_362558		SeqNo: 5604879		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	45.91	5.0	50	0	91.8	75 - 124			
Ethylbenzene	45.93	5.0	50	0	91.9	70 - 123			
Toluene	44.97	5.0	50	0	89.9	76 - 122			
Xylenes, Total	137.6	5.0	150	0	91.8	77 - 128			
Surr: 1,2-Dichloroethane-d4	49.47	0	50	0	98.9	76 - 125			
Surr: 4-Bromofluorobenzene	49.45	0	50	0	98.9	80 - 120			
Surr: Dibromofluoromethane	50.06	0	50	0	100	80 - 119			
Surr: Toluene-d8	49.77	0	50	0	99.5	81 - 118			

MS		Sample ID: HS20060091-05MS		Units: ug/Kg		Analysis Date: 03-Jun-2020 12:41			
Client ID:		Run ID: VOA5_362558		SeqNo: 5605381		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	43.72	4.8	48.5	0	90.2	70 - 130			
Ethylbenzene	43.59	4.8	48.5	0	89.9	70 - 130			
Toluene	43.18	4.8	48.5	0	89.0	70 - 130			
Xylenes, Total	131	4.8	145.5	0	90.0	70 - 130			
Surr: 1,2-Dichloroethane-d4	48.99	0	48.5	0	101	70 - 126			
Surr: 4-Bromofluorobenzene	48.02	0	48.5	0	99.0	70 - 130			
Surr: Dibromofluoromethane	48.87	0	48.5	0	101	70 - 130			
Surr: Toluene-d8	47.18	0	48.5	0	97.3	70 - 130			

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362558 (0)		Instrument: VOA5		Method: VOLATILES BY SW8260C						
MSD	Sample ID: HS20060091-05MSD	Units: ug/Kg			Analysis Date: 03-Jun-2020 13:06					
Client ID:	Run ID: VOA5_362558	SeqNo: 5605382		PrepDate:			DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	45.02	4.8	48.5	0	92.8	70 - 130	43.72	2.92	30	
Ethylbenzene	44.92	4.8	48.5	0	92.6	70 - 130	43.59	3.01	30	
Toluene	44.39	4.8	48.5	0	91.5	70 - 130	43.18	2.75	30	
Xylenes, Total	135.8	4.8	145.5	0	93.3	70 - 130	131	3.57	30	
Surr: 1,2-Dichloroethane-d4	46.73	0	48.5	0	96.4	70 - 126	48.99	4.71	30	
Surr: 4-Bromofluorobenzene	48.08	0	48.5	0	99.1	70 - 130	48.02	0.119	30	
Surr: Dibromofluoromethane	48.39	0	48.5	0	99.8	70 - 130	48.87	0.973	30	
Surr: Toluene-d8	47.87	0	48.5	0	98.7	70 - 130	47.18	1.45	30	

The following samples were analyzed in this batch: HS20060057-01

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362641 (0)	Instrument: VOA2	Method: LOW LEVEL VOLATILES BY SW8260C
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MBLK		Sample ID: VBLKW-200603		Units: ug/L		Analysis Date: 03-Jun-2020 12:16			
Client ID:		Run ID: VOA2_362641		SeqNo: 5606388		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	ND	1.0							
Ethylbenzene	ND	1.0							
Toluene	ND	1.0							
Xylenes, Total	ND	1.0							
Surr: 1,2-Dichloroethane-d4	44.98	1.0	50	0	90.0	70 - 123			
Surr: 4-Bromofluorobenzene	50.75	1.0	50	0	102	82 - 115			
Surr: Dibromofluoromethane	47.15	1.0	50	0	94.3	73 - 126			
Surr: Toluene-d8	48.19	1.0	50	0	96.4	81 - 120			

LCS		Sample ID: VLCSW-200603		Units: ug/L		Analysis Date: 03-Jun-2020 11:28			
Client ID:		Run ID: VOA2_362641		SeqNo: 5606387		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	18.57	1.0	20	0	92.9	74 - 120			
Ethylbenzene	19.77	1.0	20	0	98.9	77 - 117			
Toluene	18.91	1.0	20	0	94.5	77 - 118			
Xylenes, Total	62.78	1.0	60	0	105	75 - 122			
Surr: 1,2-Dichloroethane-d4	45.96	1.0	50	0	91.9	70 - 130			
Surr: 4-Bromofluorobenzene	50.03	1.0	50	0	100	82 - 115			
Surr: Dibromofluoromethane	44.85	1.0	50	0	89.7	73 - 126			
Surr: Toluene-d8	47.06	1.0	50	0	94.1	81 - 120			

MS		Sample ID: HS20060098-01MS		Units: ug/L		Analysis Date: 03-Jun-2020 16:39			
Client ID:		Run ID: VOA2_362641		SeqNo: 5606398		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	18.33	1.0	20	0	91.7	70 - 127			
Ethylbenzene	19.69	1.0	20	0	98.5	70 - 124			
Toluene	19.1	1.0	20	0	95.5	70 - 123			
Xylenes, Total	63.24	1.0	60	0	105	70 - 130			
Surr: 1,2-Dichloroethane-d4	46.51	1.0	50	0	93.0	70 - 126			
Surr: 4-Bromofluorobenzene	50.17	1.0	50	0	100	81 - 113			
Surr: Dibromofluoromethane	45.05	1.0	50	0	90.1	77 - 123			
Surr: Toluene-d8	46.88	1.0	50	0	93.8	82 - 127			

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362641 (0)		Instrument: VOA2		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS20060098-01MSD	Units: ug/L			Analysis Date: 03-Jun-2020 17:03					
Client ID:	Run ID: VOA2_362641	SeqNo: 5606399		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.51	1.0	20	0	87.6	70 - 127	18.33	4.56	20	
Ethylbenzene	19.49	1.0	20	0	97.5	70 - 124	19.69	1.01	20	
Toluene	18.6	1.0	20	0	93.0	70 - 123	19.1	2.63	20	
Xylenes, Total	61.69	1.0	60	0	103	70 - 130	63.24	2.48	20	
Surr: 1,2-Dichloroethane-d4	46.54	1.0	50	0	93.1	70 - 126	46.51	0.0556	20	
Surr: 4-Bromofluorobenzene	51.17	1.0	50	0	102	81 - 113	50.17	1.97	20	
Surr: Dibromofluoromethane	45.6	1.0	50	0	91.2	77 - 123	45.05	1.2	20	
Surr: Toluene-d8	47.51	1.0	50	0	95.0	82 - 127	46.88	1.32	20	

The following samples were analyzed in this batch: HS20060057-02

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: 154026 (0)	Instrument: ICS-Integrion	Method: ANIONS BY E300.0
-------------------------------	----------------------------------	---------------------------------

MBLK	Sample ID: MBLK-154026	Units: mg/Kg	Analysis Date: 03-Jun-2020 10:37							
Client ID:	Run ID: ICS-Integrion_362596	SeqNo: 5605492	PrepDate: 02-Jun-2020 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Chloride ND 5.00

LCS	Sample ID: LCS-154026	Units: mg/Kg	Analysis Date: 03-Jun-2020 02:10							
Client ID:	Run ID: ICS-Integrion_362596	SeqNo: 5605482	PrepDate: 02-Jun-2020 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Chloride 198.9 5.00 200 0 99.5 90 - 110

MS	Sample ID: HS20060033-03MS	Units: mg/Kg	Analysis Date: 03-Jun-2020 03:22							
Client ID:	Run ID: ICS-Integrion_362596	SeqNo: 5605486	PrepDate: 02-Jun-2020 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Chloride 100.3 4.94 98.71 3.212 98.4 75 - 125

MSD	Sample ID: HS20060033-03MSD	Units: mg/Kg	Analysis Date: 03-Jun-2020 03:40							
Client ID:	Run ID: ICS-Integrion_362596	SeqNo: 5605487	PrepDate: 02-Jun-2020 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Chloride 97.45 4.95 99.08 3.212 95.1 75 - 125 100.3 2.91 20

The following samples were analyzed in this batch: HS20060057-01

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

QC BATCH REPORT

Batch ID: R362580 (0)		Instrument: Balance1		Method: MOISTURE						
DUP	Sample ID: HS20060056-01DUP	Units: wt%		Analysis Date: 02-Jun-2020 13:53						
Client ID:	Run ID: Balance1_362580	SeqNo: 5605242		PrepDate:			DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	

Percent Moisture	12.9	0.0100					12.8	0.778	20
------------------	------	--------	--	--	--	--	------	-------	----

The following samples were analyzed in this batch: HS20060057-01

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
WorkOrder: HS20060057

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected
mg/L	Milligrams per Liter
wt%	

ALS Houston, US

Date: 09-Jun-20

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	20-030-0	26-Mar-2021
Dept of Defense	ANAB L2231 V009	22-Dec-2021
Florida	E87611-28	30-Jun-2020
Illinois	2000322020-4	09-May-2021
Kansas	E-10352 2019-2020	31-Jul-2020
Louisiana	03087, 2019-2020	30-Jun-2020
Maryland	343, 2019-2020	30-Jun-2020
North Carolina	624-2020	31-Dec-2020
Oklahoma	2019-141	31-Aug-2020
Texas	T104704231-20-26	30-Apr-2021

ALS Houston, US

Date: 09-Jun-20

Client: Creston Environmental LLC
Project: Cimarex Vaca Draw /Cascade Recycl. FAC.
Work Order: HS20060057

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS20060057-01	RF-06012020-700-01	Login	6/2/2020 12:53:40 PM	PMG	Disposed
HS20060057-01	RF-06012020-700-01	Login	6/2/2020 12:53:40 PM	PMG	Disposed
HS20060057-01	RF-06012020-700-01	Login	6/2/2020 12:53:40 PM	PMG	Disposed
HS20060057-01	RF-06012020-700-01	Login	6/2/2020 12:53:40 PM	PMG	Disposed
HS20060057-02	Trip Blank	Login	6/2/2020 12:53:40 PM	PMG	Disposed

ALS Houston, US

Date: 09-Jun-20

Sample Receipt Checklist

Work Order ID: HS20060057

Date/Time Received: 02-Jun-2020 09:00

Client Name: Creston Environmental LLC Norman OK

Received by: Paresh M. Giga

Completed By: /S/ Paresh M. Giga	02-Jun-2020 12:58	Reviewed by: /S/ Bernadette A. Fini	02-Jun-2020 16:50
eSignature	Date/Time	eSignature	Date/Time

Matrices: Soil/Water

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes No Not Present
- Chain of custody present? Yes No 1 Page(s)
- Chain of custody signed when relinquished and received? Yes No COC IDs:None
- Samplers name present on COC? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No

Temperature(s)/Thermometer(s):	1.0C U/C	IR25
Cooler(s)/Kit(s):	45130	
Date/Time sample(s) sent to storage:	6/1/2020 13:10	

- Water - VOA vials have zero headspace? Yes No No VOA vials submitted
- Water - pH acceptable upon receipt? Yes No N/A
- pH adjusted? Yes No N/A

pH adjusted by:

Login Notes: Terracore Labels Blank IDs on Ziplock Bags

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

HS20060057

Creston Environmental LLC
Cimarex Vaca Draw /Cascade Recycl. FAC.



Environmental Chain of Custody (COC)
Cimarex Energy Special Project - PERMIAN Recycling Facility SOIL SAMPLES

ALS Environmental Project Manager:
Bernadette Fini
10450 Stancilff Road, Suite 210
Houston, TX 77099
Phone: (281) 530-5656
Email: bernadette.fini@alsglobal.com

Creston Project Manager:
Kelly A. Miller
PO Box 1663
Norman, OK 73070
Cell: 405-209-7204
Email: millerk@crestonenv.com

*PROJECT NAME:
VACA DRAW/CASCADE RECYCL. FAC.

ANALYSIS TURNAROUND TIME (working days)
Standard TAT = 10 working days
(unless otherwise noted below)

*SAMPLER NAME(S) & SAMPLER NUMBER(S):
D. Athay - 700

*LANDOWNER NAME:
HUGHES PROPERTIES

Rush TAT = _____ working days

*COUNTY & STATE:
EDDY, NM | **LEA, NM**

*LOCATION CODE:
RF-06012020-700-01

*Sample Identification	*Sample Date	*Sample Time	Sample Type	Matrix	*# of Cont.	Filtered Sample (Y/N)	BTEX: EPA SW-846 Method 8021D or 8260B	TPH (GRO+DRO+MRO): EPA SW-846 Method 8015M	Chloride: EPA 300.0	Moisture	Standard Parameters	COC Page 1 of 1
RF-06012020-700-01	6/1/2020	0845	Composite	SO	9	N	X	X	X	X		Sample Specific Notes / Additional Parameters: COC Revised by Kelly Miller 6/4/2020
Trip Blank	use sample collection date above	0:01	Grab	W	2	N	X					
TEMP Blank	---	---	---	W	1	N						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= CH4O; 7= NaHSO4; 8= Other

Possible Hazard Identification (Must be updated by consultant sampler if outside of unknown category)

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
****Please report BTEX in mg/kg, trip blank in mg/L****

*FEDEX TRACKING #: **1251 0297 5531**

*PARCEL ID: **4-000-516-590-003 (T25S-R33E-29)**

*SAMPLE SOURCE DESCRIPTION/SAMPLE LOCATION DESCRIPTION:
5-Point Composite: 1-5

*RELINQUISHED BY:
[Signature]

*COMPANY NAME:
Creston Environmental

*DATE/TIME:
6/1/2020 1300

Received by: *[Signature]* Company: **ALS** Date/Time: **6/12/2020 office**

HS20060057

Creston Environmental LLC
Cimarex Vaca Draw /Cascade Recycl. FAC.



Environmental Chain of Custody (COC)
Cimarex Energy Special Project - PERMIAN Recycling Facility SOIL SAMPLES

ALS Environmental Project Manager:

Bernadette Fini
10450 Stancliff Road, Suite 210
Houston, TX 77099
Phone: (281) 530-5656
Email: bernadette.fini@alsglobal.com

Creston Project Manager:

Kelly A. Miller
PO Box 1663
Norman, OK 73070
Cell: 405-209-7204
Email: millerk@crestonenv.com



*PROJECT NAME: VACA DRAW/CASCADE RECYCL. FAC.	ANALYSIS TURNAROUND TIME (working days) Standard TAT = 10 working days (unless otherwise noted below)	*SAMPLER NAME(S) & SAMPLER NUMBER(S): D. Athay - 700
---	---	--

*LANDOWNER NAME: HUGHES PROPERTIES	Rush TAT = _____ working days	Standard Parameters	COC Page 1 of 1
--	-------------------------------	---------------------	-----------------

*COUNTY & STATE:
EDDY, NM

*LOCATION CODE:
RF-06012020-700-01

*Sample Identification	*Sample Date	*Sample Time	Sample Type	Matrix	*# of Cont.	Filtered Sample (Y/N)	BTEX: EPA SW-846 Method 8021B or 8260B	TPH (GRO+DRO+MRO): EPA SW-846 Method 8015M	Chloride: EPA 300.0	Moisture	Sample Specific Notes / Additional Parameters:															
RF-06012020-700-01	6/1/2020	0845	Composite	SO	9	N	X	X	X	X																
Trip Blank	use sample collection date above	0:01	Grab	W	2	N	X																			
TEMP Blank	---	---	---	W	1	N																				

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6=CH4O, 7=NaHSO4, 8= Other
Possible Hazard Identification (Must be updated by consultant sampler if outside of unknown category)

Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown

Return To Client
 Disposal By Lab after two (2) months of final report date

Special Instructions/QC Requirements & Comments:
****Please report BTEX in mg/kg, trip blank in mg/L****

*FEDEX TRACKING #: 1251 0297 5531	*PARCEL ID: 4-000-516-590-003 (T25S-R33E-29)
---	--

*SAMPLE SOURCE DESCRIPTION/SAMPLE LOCATION DESCRIPTION:
5-Point Composite: 1-5

*RELINQUISHED BY: <i>Bernadette Fini</i>	*COMPANY NAME: Creston Environmental	*DATE/TIME: 6/1/2020 1300	Received by: <i>[Signature]</i>	Company: ALS	Date/Time: 6/2/2020 08:00
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

45130
1.00
#21

ALS
 10450 Stancliff Rd., Suite 210
 Houston, Texas 77099
 Tel. +1 281 530 5656
 Fax. +1 281 530 5667

Date: 6/16
 Name: Diana
 Company: CD

CUSTODY SEAL

Seal Broken By: P
6/21/20

Date: 6/20 Time: 1300
 Name: Denise
 Company: CD

ALS
 10450 Stancliff Rd., Suite 210
 Houston, Texas 77099
 Tel. +1 281 530 5656
 Fax. +1 281 530 5887

Date: 6/16/20
 Name: Denise
 Company: CD

CUSTODY SEAL

Seal Broken By: P
6/21/20

Date: 6/16/20 Time: 1300
 Name: Denise
 Company: CD

ORIGIN ID:SGRA (405) 209-7204
 KELLY A. MILLER
 CRESTON ENVIRONMENT
 2204 DIANA DR.

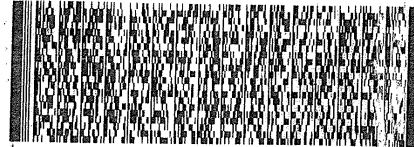
SHIP DATE: 220116
 ACTWT: 1.00 LB 11AN
 CAD: 300130/CAFE3211
 DIMS: 26x14x14 IN

NORMAN, OK 73071
 UNITED STATES US

10 CLIENT SERVICES
 ALS LABORATORY GROUP
 10450 STANCLIFF ROAD
 SUITE 210
 HOUSTON TX 77099

(281) 530-5656
 REF: CIMAREX - SOIL - BO 71928 - BF

RMA: ||| ||| |||



FedEx
 TRK# 0221 1251 0297 5531

RETURNS MON - SAT
 TUE - 02 JUN 10:30A
 PRIORITY OVERNIGHT

AB SGRA

77099 99
 TX-US
 IAH



FD 511984 01JUN20 ROMA 56RC1/C700/05A2

19.15.34.14 NMAC: CLOSURE AND SITE RECLAMATION REQUIREMENTS FOR RECYCLING CONTAINMENTS

Table I
Closure Criteria for Recycling Containments

Constituent	Method	Unit	Limit if Depth below bottom of containment to groundwater less than 10,000 mg/L TDS is <u>51 feet - 100 feet</u>	Limit if Depth below bottom of containment to groundwater less than 10,000 mg/L TDS is <u>> 100 feet</u>	VACA DRAW/CASCADE RECYCLING FACILITY RF-06012020-700-01 5-Point Composite (Points 1-5) HS20060057
Chloride	EPA 300.0	mg/kg	10,000	20,000	26.7
TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	mg/kg	2,500	2,500	7.6
GRO+DRO	EPA SW-846 Method 8015M	mg/kg	1,000	1,000	<0.056
BTEX	EPA SW-846 Method 8260B	mg/kg	50	50	<0.0057
Benzene	EPA SW-846 Method 8260B	mg/kg	10	10	<0.0057
Percent Moisture	SW3550	%	Not Required		1.58

Notes:

< : Analyte not detected at laboratory reporting limit.

J : Result is considered estimated

Concentrations which exceed the limits listed in Table I have been highlighted in yellow.

Please note that the division may require additional delineation upon review of the results and the operator must receive approval before proceeding with closure.



- 5-Pt Composite Sample
- Well Head

VACA DRAW/CASCADE RECYCLING FACILITY
COUNTY: LEA, NM



Project: VACA DRAW/CASCADE RECYCLING FACILITY
Parcel ID: 4-000-516-590-003
Owner: HUGHES PROPERTIES
RF-06012020-700-01
Area of Sampling Facing North (Pre-Sample)

Released to Imaging: 2/10/2021 9:44:16 AM

12/23/2020 9:09:37 AM



2020. 6. 1 8:40

Page 26 of 28

Project: VACA DRAW/CASCADE RECYCLING FACILITY
Parcel ID: 4-000-516-590-003
Owner: HUGHES PROPERTIES
RF-06012020-700-01
Area of Sampling Facing South (Post-Sample)

Ring: 2/10/2021 9:44:16 AM

Received by: OCD: 12/23/2020 9:09:37 AM



2020. 6. 1 8:54

Page 27 of 28

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

Action 13027

CONDITIONS OF APPROVAL

Operator: CIMAREX ENERGY CO. Suite 600	600 N. Marienfeld Street Midland, TX79701	OGRID: 215099	Action Number: 13027	Action Type: C-147S
--	--	------------------	-------------------------	------------------------

OCD Reviewer	Condition
vvenegas	NMOCD has reviewed and approved the closure report submitted on 12/23/2020 9:07 AM by Operator: [215099] CIMAREX ENERGY CO for 1RF-30 - Cimarex Vaca Draw SWD Recycling Facility P-21-25S-33E, in Lea County, New Mexico. A copy of the approved C-147 for 1RF-30 can be found in the OCD Imaging system @: https://ocdimage.emnrd.state.nm.us/imaging/AEOrderFileView.aspx?appNo=pOY1815638246