



MCollier@H-R Enterprises.com 575-909-0326

#### Site Assessment and Closure Report

Gadwall 18 Federal Com #003 Incident# nAB1718137369 Eddy County, New Mexico

#### **Prepared For:**

Cimarex Energy Co. of Colorado 6001 Deauville Blvd. Suite 300N Midland, TX 79706

#### **Prepared By:**

H&R Enterprises, LLC 5120 W. Kansas St. Hobbs, New Mexico 88242

January 3, 2024

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Mr. Mike Bratcher **NMOCD** 1220 S. St. Francis Dr. Santa Fe, NM 87505

Subject: Site Assessment and Closure Report Gadwall 18 Federal Com #003 Eddy County, NM

Dear Mr. Bratcher,

Cimarex Energy Co. of Colorado has contracted H&R Enterprises (H&R) to perform site assessment sampling services at the above-referenced location. The results of our site assessment sampling activities are contained herein.

#### **Site Information**

The Gadwall 18 Federal Com #003 is located approximately 17 miles South of Carlsbad, New Mexico. The legal location for this release is Unit Letter D, Section 18, Township 25 South and Range 27 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.136594 North and -104.230740 West. Site plans are presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Reagan-Upton association, 0 to 9 percent slopes. The referenced soil data is attached in Appendix II. Drainage courses in this area are typically dry. The project site is located in a high Karst potential area (Karst Map, Appendix I).

#### **Groundwater and Site Characterization**

The New Mexico Office of the State Engineer web site indicates that the nearest reported depth to groundwater is 14-feet below ground surface (BGS). See Appendix II for the referenced groundwater data.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29, NMAC.

#### Approximate Depth to Groundwater

14 Feet/BGS

Yes	No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
Yes	No	Within 200 feet of any lakebed, sinkhole, or a playa lake
Yes	No	Within 300 feet from an occupied permanent residence, school, hospital, institution, or church
Yes	No	Within 500 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	Within 1000 feet of any freshwater well or spring
Yes	No	Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
Yes	No	Within 300 feet of a wetland
Yes	No	Within the area overlying a subsurface mine
Yes	No	Within an unstable area
Yes	No	Within a 100-year floodplain

As this is a site assessment in a high karst area, as well as being in an area with a depth to groundwater of less than 50-feet BGS, the closure criteria for this site is as follows:

	Tab	ole I					
Closure Criteria for Soils Impacted by a Release							
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/I TDS	Constituent	Method*	Limit**				
<u>&lt;</u> 50 feet	Chloride **	EPA 300.0 or SM4500 CIB	600 mg/kg				
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg				
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg				
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg				

#### **Incident Description**

On June 20, 2017, it was discovered that a nipple on the water transfer pump had failed. This caused the release of 20 barrels (bbls) of produced water onto the well pad behind the tank battery. A total of 4 bbls of produced water was recovered.

#### **Site Assessment Activities**

H&R mobilized personnel to begin site assessment sampling activities of the historical release area. Grab samples were obtained by way of test trenching the release area. Samples collected were transported to Eurofins Laboratory for analysis and the results are presented in the following data table. Site assessment sampling locations are illustrated on Site Assessment Map, Appendix I. Photographic documentation is attached in Appendix IV. Complete laboratory reports can be found in Appendix V. This lab report also reflects data collected for a 2015 spill that ran over the same area on the well pad and into the pasture. Data presented in the table below only represents the 2017 spill covered in this report.

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Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg	
NMOCD Tabl	e 1 Closure Crit NMAC	eria 19.15.29	50 mg/kg	10 mg/kg		100 mg/kg		100 mg/kg	600 mg/kg	
		0-1'	ND	ND	ND	50.7	ND	50.7	70.9	
Π-1	11/17/2023	2'	ND	ND	ND	ND	ND	0	68.6	
11-1		3'	ND	ND	ND	ND	ND	0	67.6	
		4'	ND	ND	ND	ND	ND	0	77	
		0-1'	ND	ND	ND	ND	ND	0	69.8	
Π-2	11/17/2023	2'	ND	ND	ND	ND	ND	0	70.4	
		3' R	ND	ND	ND	ND	ND	0	73.8	
	ND = Analyte Not Detected TT = Test Trench									

Table 1: Site Assessment Soil Samples Analysis
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Based on our sampling results, we believe the site was previously remediated in 2017 and a closure report was not submitted to the NMOCD.

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#### Closure

Based on the site assessment sampling results completed for this project, on behalf of Cimarex Energy Co. of Colorado, we request that no further actions be required, and that closure of this incident be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-909-0326.

Respectfully submitted,

H&R Enterprises, LLC

Michael Collier Environmental Project Manager

Attachments:

Appendix I Site Maps Appendix II Soil Survey, Groundwater Data, FEMA Flood Zone Appendix III Initial and Final C-141 Appendix IV Photographic Documentation Appendix V Laboratory Reports

### **APPENDIX I**

### **SITE MAPS**

## **KARST MAP**

## **TOPOGRAPHIC MAP**

## LOCATOR MAP

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### **APPENDIX II**

## **GROUNDWATER DATA**

## **SOIL SURVEY**

## **FEMA FLOOD ZONE**

Released to Imaging: 1/10/2024 9:41:59 AM

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

he POD has been replaced & no longer	replaced, O=orphane			(	qua	rter	s are	1=NW	2=NE	3=SW 4=SE	E)				
erves a water right ile.)	C=the file i closed)	s		(	-	rtor	. oro	amalla	st to lar	rast) (1	NAD83 UTM in m	otors)	(In fee	<b>()</b>	
ne.)		POD		e	qua	liei	sale	smane	st to fai	gest) (1		icicis)	(III Iee	.()	
		Sub-		Q	Q	Q								W	ater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	Х	Y	DistanceDept	hWellDepth	Water Co	lumr
<u>03654 POD1</u>		CUB	ED	2	3	1	24	25S	26E	570654	3553773	2605			
<u>03261 POD1</u>		CUB	ED	3	2	1	20	25S	27E	574007	3554006*	2608	351		
03569 POD1		CUB	ED	2	1	1	14	25S	26E	568862	3555746	3331	30	0	30
2 02221		CUB	ED	4	3	2	25	25S	26E	571412	3551961*	3993	35		
2 02220		CUB	ED	3	1	2	26	25S	26E	569598	3552352*	4375	35		
01013		С	ED			4	25	25S	26E	571505	3551456*	4474	245		
<u>03655 POD3</u>		CUB	ED	1	4	4	22	25S	26E	568458	3553019	4700			
04329 POD1		С	ED	2	2	2	27	25S	26E	568577	3552567	4900	57	14	43
											Avera	ge Depth to Water	r:	7 fee	t
												Minimum Dept	th:	0 fee	t
												Maximum Dept	h:	14 fee	t
Record Count: 8															
<b>Basin/County Search</b>	<u>:</u>														
County: Eddy															
UTMNAD83 Radius	<u>Search (in 1</u>	<u>meters)</u>	<u>:</u>												
<b>Easting (X):</b> 57219	0.21		North	ing	( <b>Y</b> )	:	3555	877.56			<b>Radius:</b> 5000				
UTM location was derived	from PLSS -	- see He	lp												

11/28/23 9:49 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

#### Eddy Area, New Mexico

#### RE-Reagan-Upton association, 0 to 9 percent slopes

#### Map Unit Setting

National map unit symbol: 1w5d Elevation: 1,100 to 5,400 feet Mean annual precipitation: 6 to 14 inches Mean annual air temperature: 60 to 64 degrees F Frost-free period: 180 to 240 days Farmland classification: Farmland of statewide importance

#### Map Unit Composition

Reagan and similar soils: 70 percent Upton and similar soils: 25 percent Minor components: 5 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Reagan**

#### Setting

Landform: Fan remnants, alluvial fans Landform position (three-dimensional): Rise Down-slope shape: Convex, linear Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

#### **Typical profile**

*H1 - 0 to 8 inches:* loam *H2 - 8 to 60 inches:* loam

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e

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*Hydrologic Soil Group:* B *Ecological site:* R042CY153NM - Loamy *Hydric soil rating:* No

#### **Description of Upton**

#### Setting

Landform: Ridges, fans Landform position (three-dimensional): Side slope, rise Down-slope shape: Convex Across-slope shape: Convex Parent material: Residuum weathered from limestone

#### **Typical profile**

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

#### **Properties and qualities**

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7s Hydrologic Soil Group: D Ecological site: R042CY159NM - Shallow Loamy Hydric soil rating: No

#### **Minor Components**

#### Atoka

Percent of map unit: 3 percent Ecological site: R070BC007NM - Loamy Hydric soil rating: No

#### Pima

*Percent of map unit:* 2 percent *Ecological site:* R070BC017NM - Bottomland Hydric soil rating: No

#### **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 19, Sep 7, 2023



#### Received by OCD: 1/3/2024 2:02:40 PM National Flood Hazard Layer FIRMette



#### Legend

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## **INITIAL C-141**

## **FINAL C-141**

#### NM OIL CONSERVATION

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								ARTESIA DISTRI		
<u>District 1</u> 1625 N. French District II	Dr., Hobbs,	NM 88240				New Mex		JUN 26 201	7 Form C- Revised August 8,	
811 S. First St., Artesia, NM 88210							iteriore ringest s,			
1000 Rio Brazo	s Road, Aztc	c, NM 87410				h St. Franc		RECEIVE	to appropriate District Offi cordance with 19.15.29 NM	IAC.
1020 C Et Empire De Coute E DE COTOC				e, NM 875						
			Rel	ease Notifica		-		ction		
DABIT	11813	1369				<b>OPERA</b>	ГOR	🛛 Initi	al Report 🔲 Final R	eport
Name of Co	ompany C	imarex Energ		142.48	3		ristine Alderma	n		
		enfeld Ste 60		nd TX			No. 432-853-70	59		
Facility Nat	ne Gadwa	all 18 Battery	/		1	Facility Typ	e Production			
Surface Ow	ner BLM			Mineral Ov	vner			API No	. 30-015-39964	
				LOCA	тю	N OF RE	LEASE			
Unit Letter	Section	Township	Range			South Line	Feet from the	East/West Linc	County	
D	18	258	<b>27</b> E	220		ы	810	w	Eddy	
D	10	235	Z/B	330		N	I	•	Eddy	
				Latitude_32.13	36276	2_Longitud	e -104.2353287			
				NATU	URE	OF REL		·····	······································	
Type of Rele Source of Re		ed water					Release 20 bbls		Lecovered 4 bbls Hour of Discovery	
Transfer pum						6/20/2017		6/20/201		
Was Immedia						If YES, To	Whom?			
			Yes 2	No 🗌 Not Req	uircd		_			
By Whom? Was a Water						Date and I	Lour 6/2 folume Impacting f	6/2017		
in all a finances	ee albe itea		Yes 🛛	7 No		1 120, 1				
		em and Reme ne water transf		on Taken.*				- <u>-</u>		
		and Cleanup A tion pad, Area		ken.* nately 60' x 30' x 1	". Sa	mples will be	taken and area w	ill be remediated.		
regulations al public health should their of or the environ	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to a	o report a acceptan idequatel ICD acce	nd/or file certain rel ce of a C-141 report y investigate and rer	lease 1 t by th media	notifications a ne NMOCD m te contaminat	nd perform correct arked as "Final R ion that pose a thr	ctive actions for rel ceport" does not rel reat to ground wate	ruant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human heal ompliance with any other	lth
,	11.	F. A	ΛJ	_			OIL CON	SERVATION	DIVISION	
Signature: (MUSUNO Walnman				4	Signed I	3y Miles &	Concellence_			
Printed Name	e: Christing	Alderman				Approved by	Environmental S			
Title: ESH S	upervisor				SWAN SOM Y	Approval Da		Expiration	Dance N/A	
E-mail Addro	ess: calderr	nan@cimarex	.com			Conditions o	f Approval:	attached	Attached	
Date:		432-853-7059			1		Jul .	minnieu(		
Attach Addi	tional She	ets If Necess	•	Please refer to th	e Ne	w Mexico O	ił		2RP-42	12
				Conservation Divi		Website for			•	
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				DCD/ forms.html		Thank you				
			2		-	πατικ γοι	<b>.</b>			

Location	n of spill:	Gadwall 18 Feder	al Com #003		Date of Spill:	6/20/2	017		
			· · · · ·		<b>quipment, i.e wellhead, stu</b> r r pump, or storage tank place a	· · · · · · · · · · · · · · · · · · ·			
					t Data:	OIL:	WATER:		
					own enter the volumes here:	0.0000 BBL			
lf "known" spill	I volumes ar	e given, input data	for the following	j "Area C	alculations" is optional. The	above will ove	rride the calculated	volumes.	
То	tal Area Ca	lculations			5	Standing Liqu	uid Calculations		
Total Surface Area	width	length	wet soil depth	oil (%)	Standing Liquid Area	width	length	liquid depth	oil (%)
Rectangle Area #1	60 ft X	30 ft X	5 in	0%	Rectangle Area #1	0 ft			0%
Rectangle Area #2	0 ft X	0 ft X	0 in	0%	Rectangle Area #2	0 ft	X Oft	X <mark>0</mark> in	0%
Rectangle Area #3	0 ft X	0 ft X	0 in	0%	Rectangle Area #3	0 ft			0%
Rectangle Area #4	0 ft X	0 ft X	0 in	0%	Rectangle Area #4	0 ft	X Oft	X <mark>0</mark> in	0%
Rectangle Area #5	0 ft X	0 ft X	<mark>0</mark> in	0%	Rectangle Area #5	<mark>0</mark> ft 2	X Oft	X <mark>0</mark> in	0%
Rectangle Area #6	0 ft X	0 ft X	0 in	0%	Rectangle Area #6	<mark>0</mark> ft	X Oft	X <mark>0</mark> in	0%
Rectangle Area #7	0ft X	0 ft X	0 in	0%	Rectangle Area #7	<mark>0</mark> ft 2	X Oft 2	X <mark>0</mark> in	0%
Rectangle Area #8	0 ft X	0 ft X	0 in	0%	Rectangle Area #8	<mark>0</mark> ft 2	X Oft	X 0 in	0%
Saturated Soil Volume	Calculations	:			Free Liquid Volu	me Calculation	s:		
		H2O	OIL		<u> </u>		H2O	OIL	
Total Solid/Liquid Volume:	1,800 sq. ft.	795 cu. ft.	cu. fi	t.	Total Free Liquid Volume:	sq. f	t <mark>000</mark> cu. f	t000 cu.	. ft.
Estimated Volumes Spil	lled				Estimated Production V	<u>'olumes Lost</u>			
Liquid i		<u>H2O</u> 19.8 BBL	OIL 0.0 BBL		Estimated Producti	on Spilled:	<u>H2O</u> 0.000000 BBL	<u>OIL</u> 0.000000 BB	L
	Liquid: Totals:	<u>0.0</u> <u>BBL</u> 19.822 BBL	0.00 BBL 0.000 BBL		Estimated Surface Surface Area:	<u>Damage</u> 1,800 sq. fi			
Total Liquid Spill	Liquid:	19.822 BBL	0.000 BBL		Surface Area:	.0413 acre			
Recovered Volumes	<u>i</u>				Estimated Weights, an	nd Volumes			
Estimated oil recovered: Estimated water recovered:	0.0 BBL 0.0 BBL	check - check -	· · · · · · · · · · · · · · · · · · ·		Saturated Soil = Total Liquid =	89,040 lbs 20 BBL	795 cu.ft. 832.52 gallo		

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Received by OCD: 1/3/2024 2:02:40 PM Form C-141 State of New Mexico

Oil Conservation Division

	Page 22 0J 1	UZ
Incident ID		
District RP		
Facility ID		

Facility ID 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?	(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 <b>not</b> 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
Depth to water determination
Determination of water sources and significant watercourses within ½-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.

orm (_141	2:02:40 PM State of New Mexico		Page 23 of 1
		Incident ID	
ge 4	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	
public health or the environm failed to adequately investiga addition, OCD acceptance of	equired to report and/or file certain release notifications an ent. The acceptance of a C-141 report by the OCD does not te and remediate contamination that pose a threat to ground a C-141 report does not relieve the operator of responsibility	of relieve the operator of liability should the lwater, surface water, human health or the e	eir operations have environment. In
Printed Name: Signature:	Date:		
Signature:	Date:		

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Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

### Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report. A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_ Signature: Date: Telephone: email: **OCD Only** Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:	Date:
Printed Name:	Title:

#### **Ashton Thielke**

From: Sent: To: Cc: Subject:	Hall, Brittany, EMNRD <brittany.hall@emnrd.nm.gov> Thursday, December 28, 2023 2:54 PM Ashton Thielke Laci Luig RE: [EXTERNAL] NAB1718137369 - GADWALL 18 FEDERAL COM #003 - Variance Request (19.15.29.12.D.1.A-C)</brittany.hall@emnrd.nm.gov>
Follow Up Flag:	Follow up
Flag Status:	Completed

**WARNING:** This email originated from outside of Coterra Energy. Do not click links or open attachments unless you recognize the sender, are expecting the content and know it is safe.

Ashton,

The variance request for NAB1718137369 - GADWALL 18 FEDERAL COM #003 is approved.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you, **Brittany Hall** • Environmental Specialist Environmental Bureau Projects Group EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87110 505.517.5333 | <u>Brittany.Hall@emnrd.nm.gov</u> <u>http://www.emnrd.nm.gov/ocd/</u>

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at <u>https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/</u> or <u>https://www.emnrd.nm.gov/ocd/ocd-forms/</u>.

From: Ashton Thielke <Ashton.Thielke@coterra.com>
Sent: Tuesday, December 26, 2023 7:36 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: [EXTERNAL] NAB1718137369 - GADWALL 18 FEDERAL COM #003 - Variance Request (19.15.29.12.D.1.A-C)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good morning Brittany,

Cimarex Energy Co. of Colorado is requesting a variance to NMAC 19.15.29.12.D.1.A-C for the above mentioned spill incident.

A desktop review was conducted to look for evidence of any remediation activities, but due to the age of this spill, no evidence was found internally. (invoices, photographs, facility notes, personal email files) An environmental consultant was recently tasked with vertically and horizontally delineating the historical spill area to see if any impact may remain onsite from possible historical remediation efforts.

The result of the site assessment was that all soil samples collected have concentrations below remediation and reclamation standards found on Table I of <u>19.15.29.12</u> NMAC.

Details of the site assessment and findings will be found in the closure report.

Due to the age of the spill and possibility of this remediation taking place before the implementation of the new spill rule defined in 19.15.29.1-16, a variance is requested to NMAC 19.15.29.12.D.1.A-C.

- A. No 2 business day notification for final sampling due to current rule implementation occurring after possible site remediation
- B. No composite or grab sample plan submitted due to current rule implementation occurring after possible site remediation
- C. No 200 square foot composite sampling due to current rule implementation occurring after possible site remediation

The variance is requested due to remediation taking place before the current rule was implemented and due to the condition of the site currently, contoured to natural grade with evidence of vegetation throughout the entire area.

This email and correspondence will be attached in the final closure report, which will be submitted following your response.

Please feel free to give me a call if you have any questions.

Thanks,



Ashton Thielke | PBU - Environmental Consultant T: 432.813.8988 | M: 281.753.5659 | <u>Ashton.Thielke@coterra.com</u> | <u>www.coterra.com</u> Coterra Energy Inc. | 6001 Deauville Blvd., Suite 300N | Midland, TX 79706

Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

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# PHOTOGRAPHIC DOCUMENTATION

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#### PHOTOGRAPHIC DOCUMENTATION

#### **TEST TRENCH PHOTOGRAPHS**



TT-1



TT-2



.



# LABORATORY REPORTS

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**Environment Testing** 

### **ANALYTICAL REPORT**

### **PREPARED FOR**

Attn: Michael Collier H & R Enterprises 5120 W Kansas St Hobbs, New Mexico 88242 Generated 11/29/2023 11:28:48 AM

### JOB DESCRIPTION

GADWALL 18 FED COM #002H Eddy County NM

### **JOB NUMBER**

890-5662-1



1089 N Canal St. Carlsbad NM 88220

**Eurofins Carlsbad** 

### **Eurofins Carlsbad**

#### Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

#### **Authorization**

AMER

Generated 11/29/2023 11:28:48 AM

Authorized for release by Jessica Kramer, Project Manager Jessica.Kramer@et.eurofinsus.com (432)704-5440

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

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DLC EDL LOD LOQ MCL MDA MDC MDL

ML MPN

MQL

NC

ND

NEG POS

PQL PRES

QC

RER

RL RPD

TEF

TEQ

TNTC

#### Client: Project/

	Definitions/Glossary		
	-	1ab ID: 800 5662 1	
Client: H & R E Project/Site: GA	DWALL 18 FED COM #002H	Job ID: 890-5662-1 SDG: Eddy County NM	
Qualifiers			3
GC VOA Qualifier	Qualifier Description		
S1-	Surrogate recovery exceeds control limits, low biased.		
S1+	Surrogate recovery exceeds control limits, high biased.		Ę
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VOA			
Qualifier	Qualifier Description		
F1	MS and/or MSD recovery exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		8
HPLC/IC			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
Glossary			
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		
%R	Percent Recovery		
CFL	Contains Free Liquid		
CFU	Colony Forming Unit		
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		
	Detection Limit (DoD/DOE)		
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
	Decision Level Concentration (Radiochemistry)		
EDL	Estimated Detection Limit (Dioxin)		
	Limit of Detection (DoD/DOE)		
	Limit of Quantitation (DoD/DOE)		
MCL	EPA recommended "Maximum Contaminant Level"		
MDA MDC	Minimum Detectable Activity (Radiochemistry)		
MDC	Minimum Detectable Concentration (Radiochemistry)		

Method Detection Limit Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

Quality Control

Method Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Not Detected at the reporting limit (or MDL or EDL if shown)

Eurofins Carlsbad

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H Job ID: 890-5662-1 SDG: Eddy County NM

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#### Job ID: 890-5662-1

#### Laboratory: Eurofins Carlsbad

#### Narrative

Job Narrative 890-5662-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/17/2023 1:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar:  $S - 1 \ 0-1' \ (890-5662-1), S - 1 \ 2' \ (890-5662-2), S - 1 \ 3'R \ (890-5662-3), S - 2 \ 0-1' \ (890-5662-4), S - 2 \ 2'R \ (890-5662-5), S - 3 \ 0-1' \ (890-5662-6), S - 3 \ 2' \ (890-5662-7), S - 3 \ 3'R \ (890-5662-8), S - 4 \ 0-1' \ (890-5662-9), S - 4 \ 2' \ (890-5662-10), S - 4 \ 3'R \ (890-5662-11), S - 5 \ 0-1' \ (890-5662-12), S - 5 \ 2' \ (890-5662-13), S - 6 \ 0-1' \ (890-5662-14), S - 6 \ 2' \ (890-5662-15), S - 6 \ 3'R \ (890-5662-16), S - 7 \ 0-1' \ (890-5662-17), S - 7 \ 2' \ (890-5662-18), S - 7 \ 3'R \ (890-5662-19), TT - 1 \ 0-1' \ (890-5662-20), TT - 1 \ 2' \ (890-5662-21), TT - 1 \ 3' \ (890-5662-22), TT - 1 \ 4' \ (890-5662-23), TT - 2 \ 0-1' \ (890-5662-24), TT - 2 \ 2' \ (890-5662-26).$ 

#### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: S - 1 3'R (890-5662-3), S - 3 0-1' (890-5662-6), S - 6 2' (890-5662-15), S - 7 2' (890-5662-18) and S - 7 3'R (890-5662-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67739 and analytical batch 880-67691 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67586 and analytical batch 880-67691 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-67684/20), (CCV 880-67684/31) and (CCV 880-67684/5). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-67795 and analytical batch 880-67801 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: TT - 1 2' (890-5662-21), TT - 1 3' (890-5662-22), TT - 1 4' (890-5662-23), TT - 2 0-1' (890-5662-24), TT - 2 2' (890-5662-25), TT - 2 3'R (890-5662-26), (890-5662-A-21-D MS) and (890-5662-A-21-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-67795 and analytical batch 880-67801 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within

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#### **Case Narrative**

#### Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Job ID: 890-5662-1 SDG: Eddy County NM

#### Job ID: 890-5662-1 (Continued)

#### Laboratory: Eurofins Carlsbad (Continued)

acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.
# Client Sample ID: S - 1 0-1'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 0-1'

_	
Method: SW846 8021B - Volatile Organic Compounds (GC	)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/23 14:02	11/23/23 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130				11/22/23 14:02	11/23/23 13:14	1
1,4-Difluorobenzene (Surr)	87		70 - 130				11/22/23 14:02	11/23/23 13:14	1
Method: TAL SOP Total BTEX	- Total BTEX Cal	sulation							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400		0.00400		mg/Kg			11/23/23 13:14	1
Method: SW846 8015 NM - Die	sel Range Organ	ics (DRO) (	GC)						
Wethou. 30040 0015 MW - Die	oor range organ		-		Unit	D	Prepared	Analyzed	
Analyte		Qualifier	RL	MDL	Unit		riepaieu	Analyzeu	Dil Fac
			<b>RL</b>	MDL	mg/Kg			11/27/23 10:51	Dil Fac
Analyte	Result <50.1	U	50.1	MDL					Dil Fac 1

Gasoline Range Organics	<50.1	U	50.1	mg/Kg	11/27/23 09:35	11/27/23 10:51	1
(GRO)-C6-C10 Diesel Range Organics (Over	<50.1	U	50.1	mg/Kg	11/27/23 09:35	11/27/23 10:51	1
C10-C28)							
Oll Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg	11/27/23 09:35	11/27/23 10:51	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130		11/27/23 09:35	11/27/23 10:51	1
o-Terphenyl	101		70 - 130		11/27/23 09:35	11/27/23 10:51	1

Method: EPA 300.0 - Anions, Ion C	Chromatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.5	5.03	mg/Kg			11/22/23 18:37	1

#### Client Sample ID: S - 1 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 2'

Г

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130				11/22/23 14:02	11/23/23 13:34	1

Eurofins Carlsbad

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-1

Matrix: Solid

Lab Sample ID: 890-5662-2 Matrix: Solid

# **Client Sample Results**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Client Sample ID: S - 1 2'

Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35 Sample Depth: 2'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82		70 - 130				11/22/23 14:02	11/23/23 13:34	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00404	U	0.00404		mg/Kg			11/23/23 13:34	1
Analyte Total TPH	Result <49.6	Qualifier U		MDL	Unit mg/Kg	<u> </u>	Prepared	Analyzed 11/27/23 11:56	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			11/27/23 11:56	1
Method: SW846 8015B NM - D	iesel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.6	U	49.6		mg/Kg		11/27/23 09:35	11/27/23 11:56	1
(GRO)-C6-C10									
(010)-00-010									
Diesel Range Organics (Over	<49.6	U	49.6		mg/Kg		11/27/23 09:35	11/27/23 11:56	1

Oll Range Organics (Over C28-C36)	<49.6 U	49.6	mg/Kg	11/27/23 09:35	11/27/23 11:56	1
Surrogate	%Recovery Qualifier	<u>Limits</u>		<b>Prepared</b> 11/27/23 09:35	Analyzed	Dil Fac
o-Terphenyl	107	70 - 130		11/27/23 09:35	11/27/23 11:56	1

Lab Sample ID: 890-5662-3

Matrix: Solid

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.3	5.03	mg/Kg			11/22/23 18:56	1

Client Sample ID: S - 1 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 3'R

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 13:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/22/23 14:02	11/23/23 13:55	1
1,4-Difluorobenzene (Surr)	56	S1-	70 - 130				11/22/23 14:02	11/23/23 13:55	1
- Method: TAL SOP Total BTEX - 1	otal BTEX Calo	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/23/23 13:55	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

49.8

mg/Kg

Eurofins Carlsbad

11/27/23 12:18

Job ID: 890-5662-1 SDG: Eddy County NM

Matrix: Solid

5

13

50.1

1

Total TPH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 12:18	1
Diesel Range Organics (Over C10-C28)	50.1		49.8		mg/Kg		11/27/23 09:35	11/27/23 12:18	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 12:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/27/23 09:35	11/27/23 12:18	1
o-Terphenyl	102		70 - 130				11/27/23 09:35	11/27/23 12:18	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.3	5.02	mg/Kg			11/22/23 19:03	1

#### Client Sample ID: S - 2 0-1'

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sam	nle	Dept	th:	0-1'
Juili		DCP		<b>U</b> -1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
Toluene	< 0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
Ethylbenzene	<0.00201		0.00201		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
m-Xylene & p-Xylene	<0.00402		0.00402		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/23 14:02	11/23/23 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/22/23 14:02	11/23/23 14:15	1
1,4-Difluorobenzene (Surr)	72		70 - 130				11/22/23 14:02	11/23/23 14:15	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX		culation	70 - 130				11/22/23 14:02	11/23/23 14:15	1
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald Result	Qualifier	RL	MDL	Unit	D	11/22/23 14:02 Prepared	Analyzed	7 Dil Fac
Method: TAL SOP Total BTEX	- Total BTEX Cal	Qualifier		MDL	Unit mg/Kg	<u>D</u>			7 
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cale Result <0.00402	Qualifier U	<b>RL</b> 0.00402	MDL		<u>D</u>		Analyzed	7 1
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Cale Result <0.00402 sel Range Organ	Qualifier U	<b>RL</b> 0.00402	MDL	mg/Kg	<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Cale Result <0.00402 sel Range Organ	Qualifier U ics (DRO) ( Qualifier	RL 0.00402		mg/Kg		Prepared	Analyzed	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Cale Result <0.00402 sel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402 GC) RL 49.9		mg/Kg Unit		Prepared	Analyzed 11/23/23 14:15 Analyzed	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Cale Result <0.00402 sel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402 GC) RL 49.9		mg/Kg Unit mg/Kg		Prepared	Analyzed 11/23/23 14:15 Analyzed	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - Die	- Total BTEX Cale Result <0.00402 sel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U nics (DRO) Qualifier	RL         0.00402         GC)         RL         49.9         (GC)	MDL	mg/Kg Unit mg/Kg	D	Prepared Prepared	Analyzed 11/23/23 14:15 Analyzed 11/27/23 12:40	1 Dil Fac 1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - Di Analyte	- Total BTEX Cald Result <0.00402 sel Range Organ Result <49.9 iesel Range Orga Result	Qualifier U ics (DRO) ( Qualifier U nics (DRO) Qualifier	RL 0.00402 GC) RL 49.9 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit	D	Prepared Prepared Prepared	Analyzed 11/23/23 14:15 Analyzed 11/27/23 12:40 Analyzed	1 Dil Fac 1

C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	11/27/23 09:35	11/27/23 12:40	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130		11/27/23 09:35	11/27/23 12:40	1
o-Terphenyl	104		70 - 130		11/27/23 09:35	11/27/23 12:40	1

Eurofins Carlsbad

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-3

Lab Sample ID: 890-5662-4

Matrix: Solid

Matrix: Solid

# **Client Sample Results**

Client: H & R Enterprises
Project/Site: GADWALL 18 FED COM #002H

Job ID: 890-5662-1 SDG: Eddy County NM

Project/Site: GADWALL 18 FED CO	DM #002H							SDG: Eddy Co	unty NM
Client Sample ID: S - 2 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 0-1'							Lab Sar	nple ID: 890- Matri	5662-4 ix: Solid
Method: EPA 300.0 - Anions, Ion									
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Chloride	91.7		4.96		mg/Kg			11/22/23 07:38	1
Client Sample ID: S - 2 2'R Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 2'R							Lab Sar	nple ID: 890- Matri	5662-5 ix: Solid
Method: SW846 8021B - Volatile Analyte		ounds (GC Qualifier	) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199		0.00199		mg/Kg		11/22/23 14:02	11/23/23 14:36	1
Toluene	< 0.00199		0.00199		mg/Kg		11/22/23 14:02	11/23/23 14:36	1
Ethylbenzene	< 0.00199		0.00199		mg/Kg		11/22/23 14:02	11/23/23 14:36	1
m-Xylene & p-Xylene	<0.00398		0.00398		mg/Kg		11/22/23 14:02	11/23/23 14:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 14:36	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/23 14:02	11/23/23 14:36	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	84		70 - 130				11/22/23 14:02	11/23/23 14:36	1
1,4-Difluorobenzene (Surr)	78		70 - 130				11/22/23 14:02	11/23/23 14:36	1
- Method: TAL SOP Total BTEX - 1	otal BTEX Calo	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/23/23 14:36	1
 Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			11/27/23 13:02	1
Method: SW846 8015B NM - Dies									
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		11/27/23 09:35	11/27/23 13:02	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		11/27/23 09:35	11/27/23 13:02	
Oll Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/27/23 09:35	11/27/23 13:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/27/23 09:35	11/27/23 13:02	1
o-Terphenyl	101		70 _ 130				11/27/23 09:35	11/27/23 13:02	1
Method: EPA 300.0 - Anions, Ion			e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.5		5.03		mg/Kg			11/22/23 07:57	1

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# Client Sample ID: S - 3 0-1'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 0-1'

ethod: SW846	8021B - Vol	atile Organic	Compounds	(GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/22/23 14:02	11/23/23 14:56	1
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130				11/22/23 14:02	11/23/23 14:56	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)						
Analyte	•••	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.4		50.2		mg/Kg			11/27/23 13:24	1
Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
									Dil Fac
5 5	<50.2	U	50.2		mg/Kg		11/27/23 09:35	11/27/23 13:24	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over	<50.2 56.4	U	50.2		mg/Kg mg/Kg		11/27/23 09:35 11/27/23 09:35	11/27/23 13:24 11/27/23 13:24	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)									
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	56.4		50.2		mg/Kg		11/27/23 09:35	11/27/23 13:24	Dil Fac

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	62.2		4.99		mg/Kg			11/22/23 08:04	1	

70 - 130

110

#### Client Sample ID: S - 3 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 2'

o-Terphenyl

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/22/23 14:02	11/23/23 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				11/22/23 14:02	11/23/23 15:17	1

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-6

Matrix: Solid

5

Matrix: Solid

11/27/23 09:35 11/27/23 13:24

Lab Sample ID: 890-5662-7

## **Client Sample Results**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Client Sample ID: S - 3 2'

Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35

Sample Depth: 2'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	80		70 - 130				11/22/23 14:02	11/23/23 15:17	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/23/23 15:17	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			11/27/23 13:46	1
		· · · ·	(,						
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier		MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	Result <50.2	Qualifier	· · ·	MDL	Unit mg/Kg	D	Prepared 11/27/23 09:35	Analyzed 11/27/23 13:46	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	Qualifier U	RL 50.2	MDL	mg/Kg	<u> </u>	11/27/23 09:35	11/27/23 13:46	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over		Qualifier U	RL	MDL		<u> </u>	<u> </u>		Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.2	Qualifier U U	RL 50.2	MDL	mg/Kg mg/Kg	<u> </u>	11/27/23 09:35 11/27/23 09:35	11/27/23 13:46 11/27/23 13:46	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.2	Qualifier U U	RL 50.2	MDL	mg/Kg	<u> </u>	11/27/23 09:35	11/27/23 13:46	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.2	Qualifier U U U	RL 50.2	MDL	mg/Kg mg/Kg	<u> </u>	11/27/23 09:35 11/27/23 09:35	11/27/23 13:46 11/27/23 13:46	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.2 <50.2 <50.2 <50.2	Qualifier U U U	RL	MDL	mg/Kg mg/Kg	<u>D</u>	11/27/23 09:35           11/27/23 09:35           11/27/23 09:35           11/27/23 09:35	11/27/23 13:46 11/27/23 13:46 11/27/23 13:46	1

Method. EPA 300.0 - Anions, for Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	70.9		5.03		mg/Kg			11/22/23 08:11	1

**Client Sample ID: S - 3** 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 3'R

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00201 U 0.00201 mg/Kg 11/22/23 14:02 11/23/23 15:37 Toluene <0.00201 U 0.00201 11/22/23 14:02 11/23/23 15:37 mg/Kg 1 Ethylbenzene <0.00201 U 0.00201 mg/Kg 11/22/23 14:02 11/23/23 15:37 0.00402 m-Xylene & p-Xylene <0.00402 U mg/Kg 11/22/23 14:02 11/23/23 15:37 1 o-Xylene <0.00201 U 0.00201 mg/Kg 11/22/23 14:02 11/23/23 15:37 1 Xylenes, Total <0.00402 U 0.00402 mg/Kg 11/22/23 14:02 11/23/23 15:37 1 %Recovery Surrogate Qualifier Limits Dil Fac Prepared Analvzed 103 70 - 130 4-Bromofluorobenzene (Surr) 11/22/23 14:02 11/23/23 15:37 1 1,4-Difluorobenzene (Surr) 78 70 - 130 11/22/23 14:02 11/23/23 15:37 1 Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Total BTEX <0.00402 U 0.00402 11/23/23 15:37 mg/Kg 1 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

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11/27/23 14:08

Lab Sample ID: 890-5662-8

Matrix: Solid

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-7

Matrix: Solid

5

**Total TPH** 

49.7

53.0

mg/Kg

Job ID: 890-5662-1 SDG: Eddy County NM

Lab Sample ID: 890-5662-9

# Client Sample ID: S - 3 3'R

Project/Site: GADWALL 18 FED COM #002H

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 3'R

Client: H & R Enterprises

# Lab Sample ID: 890-5662-8 Matrix: Solid

-		
Method: SW846 8015B NM - Dies	el Range Organics (DRO) (GC)	
Analyte	Result Qualifier	RL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/27/23 09:35	11/27/23 14:08	1
Diesel Range Organics (Over C10-C28)	53.0		49.7		mg/Kg		11/27/23 09:35	11/27/23 14:08	1
Oll Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/27/23 09:35	11/27/23 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/27/23 09:35	11/27/23 14:08	1
o-Terphenyl	111		70 - 130				11/27/23 09:35	11/27/23 14:08	1

#### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Chloride	69.6		4.99		mg/Kg				11/22/23 08:17	1

#### Client Sample ID: S - 4 0-1'

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sam	ple	De	oth:	0-1'
oun		20	Pui.	•

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 15:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				11/22/23 14:02	11/23/23 15:58	1
1,4-Difluorobenzene (Surr)	83		70 - 130				11/22/23 14:02	11/23/23 15:58	1
		Qualifier	RL	MDL	11		- ·		
Analyte	Result	Qualifier	RL	МП	11		- ·		
						D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg	<u>D</u>	Prepared	Analyzed 11/23/23 15:58	Dil Fac 1
Total BTEX 							Prepared		Dil Fac
 Method: SW846 8015 NM - Die	sel Range Organ			MDL		<u>D</u>	Prepared		Dil Fac
 Method: SW846 8015 NM - Die	sel Range Organ	<mark>ics (DRO) (</mark> Qualifier	GC)		mg/Kg			11/23/23 15:58	1
Method: SW846 8015 NM - Die Analyte	sel Range Organ Result <a href="https://www.selimetric.com"></a>	ics (DRO) ( Qualifier U	GC)		mg/Kg Unit			11/23/23 15:58 Analyzed	1
Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - Die	sel Range Organ Result <49.6	ics (DRO) ( Qualifier U	GC)		mg/Kg Unit mg/Kg			11/23/23 15:58 Analyzed	1
Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - Di Analyte	sel Range Organ Result <49.6	ics (DRO) ( Qualifier U unics (DRO) Qualifier	GC) <u>RL</u> 49.6 (GC)	MDL	mg/Kg Unit mg/Kg	D	Prepared	Analyzed           11/27/23         14:30	1 Dil Fac
Method: SW846 8015 NM - Die Analyte Total TPH	sel Range Organ Result <49.6 iesel Range Orga Result	ics (DRO) ( Qualifier U unics (DRO) Qualifier	GC)	MDL	mg/Kg Unit mg/Kg Unit	D	Prepared	Analyzed           11/27/23 14:30           Analyzed	1 Dil Fac

	Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg	11/27/23 09:35	11/27/23 14:30	1
	Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	1-Chlorooctane	96		70 - 130	_	11/27/23 09:35	11/27/23 14:30	1
l	o-Terphenyl	102		70 - 130		11/27/23 09:35	11/27/23 14:30	1

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Matrix: Solid

		Client	: Sample R	Results	;				
Client: H & R Enterprises Project/Site: GADWALL 18 FED CC	0M #002H							Job ID: 890 SDG: Eddy Cor	
Client Sample ID: S - 4 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 0-1'							Lab Sar	nple ID: 890- Matri	• <b>5662-</b> ix: Soli
Method: EPA 300.0 - Anions, Ion	• •	-				_			
Analyte Chloride		Qualifier		MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 11/22/23 08:37	Dil Fa
Client Sample ID: S - 4 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 2'							Lab Sam	ple ID: 890-5 Matri	662-1 ix: Soli
Method: SW846 8021B - Volatile									
Analyte		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil F
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 16:18	
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 16:18	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 16:18	
n-Xylene & p-Xylene	< 0.00396	U	0.00396		mg/Kg		11/22/23 14:02	11/23/23 16:18	
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 16:18	
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/22/23 14:02	11/23/23 16:18	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
4-Bromofluorobenzene (Surr)	79		70 - 130				11/22/23 14:02	11/23/23 16:18	
1,4-Difluorobenzene (Surr)	82		70 - 130				11/22/23 14:02	11/23/23 16:18	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/23/23 16:18	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Total TPH	<49.8	U	49.8		mg/Kg			11/27/23 14:52	
Method: SW846 8015B NM - Dies			(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 14:52	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 14:52	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 14:52	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
1-Chlorooctane	99		70 - 130				11/27/23 09:35	11/27/23 14:52	
o-Terphenyl	105		70 - 130				11/27/23 09:35	11/27/23 14:52	
Method: EPA 300.0 - Anions, Ion	Chromatogram	ohy - Soluble	•						
Analyte		Qualifier	RL	мы	Unit	D	Prepared	Analyzed	Dil F

AnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride77.65.00mg/Kg11/22/23 08:431

#### Client Sample ID: S - 4 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 3'R

Method: SW846 8021B - Volatile Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/23 14:02	11/23/23 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				11/22/23 14:02	11/23/23 17:41	1
1,4-Difluorobenzene (Surr)	73		70 - 130				11/22/23 14:02	11/23/23 17:41	1
Method: TAL SOP Total BTEX - 1 Analyte Total BTEX Method: SW846 8015 NM - Diese	<b>Result</b> <0.00398	Qualifier U	RL 0.00398	MDL	Unit mg/Kg	<u> </u>	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
								11/27/23 15:35	
Total TPH	<49.6	U	49.6		mg/Kg			11/21/20 10:00	1
Total TPH Method: SW846 8015B NM - Dies					mg/Kg			11/2//20 10:00	
-	sel Range Orga			MDL	mg/Kg Unit	 D	Prepared	Analyzed	
_ Method: SW846 8015B NM - Dies	sel Range Orga	unics (DRO) Qualifier	(GC)	MDL		D	Prepared 11/27/23 09:35		1
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	sel Range Orga Result	nics (DRO) Qualifier U	(GC) RL	MDL	Unit	D	<u> </u>	Analyzed	1 Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga 	unics (DRO) Qualifier U	(GC) 	MDL	Unit mg/Kg	D	11/27/23 09:35	Analyzed 11/27/23 15:35	1 Dil Fac

Surrogate	%Recovery Q	ualifier L	imits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	7	0 - 130	-	11/27/23 09:35	11/27/23 15:35	1
o-Terphenyl	97	7	0 - 130		11/27/23 09:35	11/27/23 15:35	1
Method: EPA 300.0 - Anions, Ion C	hromatography	y - Soluble					

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.3	5.04	mg/Kg			11/22/23 08:50	1

#### Client Sample ID: S - 5 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 0-1'

Method: SW846 8021B - Volatile C	rganic Comp	ounds (GC)	1						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/22/23 14:02	11/23/23 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130				11/22/23 14:02	11/23/23 18:01	1

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Lab Sample ID: 890-5662-12

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-11

Matrix: Solid

5

Matrix: Solid

# **Client Sample Results**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Job ID: 890-5662-1 SDG: Eddy County NM

#### Client Sample ID: S - 5 0-1'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

# Lab Sample ID: 890-5662-12

Matrix: Solid

5

Sample Depth: 0-1'

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	85		70 - 130				11/22/23 14:02	11/23/23 18:01	
Method: TAL SOP Total BTEX - To	otal BTEX Calo	ulation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/23/23 18:01	
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/27/23 15:58	
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 15:58	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 15:58	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 15:58	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	94		70 - 130				11/27/23 09:35	11/27/23 15:58	
p-Terphenyl	99		70 - 130				11/27/23 09:35	11/27/23 15:58	-
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solub	le						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.0		4.96		mg/Kg			11/22/23 08:57	
lient Sample ID: S - 5 2'								ple ID: 890-5	000 4

# Sample Depth: 2'R

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/22/23 14:02	11/23/23 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				11/22/23 14:02	11/23/23 18:22	1
1,4-Difluorobenzene (Surr)	82		70 - 130				11/22/23 14:02	11/23/23 18:22	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/23/23 18:22	1
Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
,									

# Client Sample ID: S - 5 2'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 2'R

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		11/27/23 09:35	11/27/23 16:19	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		11/27/23 09:35	11/27/23 16:19	1
Oll Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		11/27/23 09:35	11/27/23 16:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/27/23 09:35	11/27/23 16:19	1
o-Terphenyl	103		70 - 130				11/27/23 09:35	11/27/23 16:19	1

#### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		5.03		mg/Kg			11/22/23 09:03	1

#### Client Sample ID: S - 6 0-1'

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sam	nle	De	oth:	0-1'
Cam		DC	pui.	0-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/23 14:02	11/23/23 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				11/22/23 14:02	11/23/23 18:42	1
1,4-Difluorobenzene (Surr)	83		70 - 130				11/22/23 14:02	11/23/23 18:42	1
Method: TAL SOP Total BTEX	- Total BTEX Cal	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/23/23 18:42	1
- Method: SW846 8015 NM - Die	sel Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			11/27/23 16:42	1
Method: SW846 8015B NM - D	iesel Range Orga	nics (DRO)	(GC)						
	• •		· · ·	MDI	Unit	D	Prepared	Analyzed	D!!
	Result	Qualifier	RL		Unit		Fiepaieu	Analyzeu	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.1		RL 50.1	MDL	mg/Kg		11/27/23 09:35	11/27/23 16:42	1

Diesel Range Organics (Over 50.1 11/27/23 16:42 <50.1 U mg/Kg 11/27/23 09:35 1 C10-C28) Oll Range Organics (Over C28-C36) <50.1 U 50.1 11/27/23 09:35 11/27/23 16:42 mg/Kg 1 Limits Dil Fac %Recovery Qualifier Prepared Analyzed Surrogate 70 - 130 11/27/23 09:35 1-Chlorooctane 97 11/27/23 16:42 1 o-Terphenyl 103 70 - 130 11/27/23 09:35 11/27/23 16:42 1

## Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-13

Lab Sample ID: 890-5662-14

Matrix: Solid

Matrix: Solid

		Client	Sample F	Results	5				
Client: H & R Enterprises			-					Job ID: 890	
Project/Site: GADWALL 18 FED CC	DM #002H							SDG: Eddy Co	unty NN
Client Sample ID: S - 6 0-1 Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 0-1'	•						Lab Sam	ple ID: 890-5 Matri	662-14 x: Solic
_ Method: EPA 300.0 - Anions, Ion		-							
Analyte		Qualifier		MDL		D	Prepared	Analyzed 11/22/23 09:10	Dil Fac
Chloride	66.8		4.97		mg/Kg			11/22/23 09:10	
Client Sample ID: S - 6 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 2'							Lab Sam	ple ID: 890-5 Matri	662-18 x: Solic
Method: SW846 8021B - Volatile									
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 19:03	
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 19:03	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 19:03	
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 19:03	
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 19:03	
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 19:03	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130				11/22/23 14:02	11/23/23 19:03	
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130				11/22/23 14:02	11/23/23 19:03	-
Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/23/23 19:03	
 Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GO	2)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.5	U	50.5		mg/Kg			11/27/23 17:04	
_ Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO) (0	C)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<50.5	U	50.5		mg/Kg		11/27/23 09:35	11/27/23 17:04	
(GRO)-C6-C10					-				
Diesel Range Organics (Over	<50.5	U	50.5		mg/Kg		11/27/23 09:35	11/27/23 17:04	
C10-C28) Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/27/23 09:35	11/27/23 17:04	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	104		70 - 130				11/27/23 09:35	11/27/23 17:04	
o-Terphenyl	109		70 - 130				11/27/23 09:35	11/27/23 17:04	
Method: EPA 300.0 - Anions, Ion	Chromatogra	ohy - Soluble							
						_			

Method: EPA 300.0 - Anions, Ion C	hromatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.9	5.05	mg/Kg			11/22/23 09:29	1

# Client Sample ID: S - 6 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 3'R

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 19:23
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 19:23
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 19:23
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/23 14:02	11/23/23 19:23
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 19:23
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/23 14:02	11/23/23 19:23
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed
4-Bromofluorobenzene (Surr)	85		70 - 130				11/22/23 14:02	11/23/23 19:23
1,4-Difluorobenzene (Surr)	83		70 - 130				11/22/23 14:02	11/23/23 19:23
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/23/23 19:23
Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
			50.0		mg/Kg			11/27/23 17:28

Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 17:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 17:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 09:35	11/27/23 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/27/23 09:35	11/27/23 17:28	1
o-Terphenyl	105		70 - 130				11/27/23 09:35	11/27/23 17:28	1

	Method: EPA 300.0 - Anions, Ion Cl	hromatograp	hy - Soluble	•						
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	65.0		5.04		mg/Kg			11/22/23 09:36	1

#### Client Sample ID: S - 7 0-1' Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35 Sample Depth: 0-1'

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/22/23 14:02	11/23/23 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				11/22/23 14:02	11/23/23 19:43	1

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Lab Sample ID: 890-5662-17

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-16

Matrix: Solid

Dil Fac

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

Dil Fac

Matrix: Solid

# **Client Sample Results**

Job ID: 890-5662-1 SDG: Eddy County NM

Lab Sample ID: 890-5662-17

#### Client Sample ID: S - 7 0-1'

Project/Site: GADWALL 18 FED COM #002H

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 0-1'

Client: H & R Enterprises

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82		70 - 130				11/22/23 14:02	11/23/23 19:43	1
Method: TAL SOP Total BTEX - To	otal BTEX Calo	ulation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/23/23 19:43	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	83.9		49.9		mg/Kg			11/27/23 17:51	1
Method: SW846 8015B NM - Diese	al Range Orga	nics (DRO)	(60)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/27/23 09:35	11/27/23 17:51	1
(GRO)-C6-C10									
Diesel Range Organics (Over	83.9		49.9		mg/Kg		11/27/23 09:35	11/27/23 17:51	1
C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/27/23 09:35	11/27/23 17:51	1
					0 0				
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/27/23 09:35	11/27/23 17:51	1
o-Terphenyl	106		70 - 130				11/27/23 09:35	11/27/23 17:51	1
Method: EPA 300.0 - Anions, Ion (	Chromatograp	hy - Solubl	le						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.0		5.00		mg/Kg			11/22/23 09:56	1

Date Received: 11/17/23 13:35

Sample Depth: 2'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/22/23 14:02	11/23/23 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130				11/22/23 14:02	11/23/23 20:04	1
1,4-Difluorobenzene (Surr)	111		70 - 130				11/22/23 14:02	11/23/23 20:04	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/23/23 20:04	1
Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.7		49.6		mg/Kg			11/27/23 18:12	

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Matrix: Solid

#### Client Sample ID: S - 7 2'

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 2'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		11/27/23 09:35	11/27/23 18:12	1
Diesel Range Organics (Over C10-C28)	58.7		49.6		mg/Kg		11/27/23 09:35	11/27/23 18:12	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/27/23 09:35	11/27/23 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/27/23 09:35	11/27/23 18:12	1
o-Terphenyl	110		70 - 130				11/27/23 09:35	11/27/23 18:12	1

#### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.6	5.03	mg/Kg			11/22/23 10:02	1

#### Client Sample ID: S - 7 3'R

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sam		Do	nth.	סיכ
Sam	Die	De	DUIT.	SR

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/22/23 14:02	11/23/23 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				11/22/23 14:02	11/23/23 20:24	1
1,4-Difluorobenzene (Surr)	58	S1-	70 - 130				11/22/23 14:02	11/23/23 20:24	1
Analyte Total BTEX		Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/23/23 20:24	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg				1
Method: SW846 8015 NM - Dies									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Total TPH	57.0		49.5		mg/Kg			11/27/23 18:33	Dil Fac
	57.0		10.0					11/2//20 10:00	Dil Fac
Method: SW846 8015B NM - Die		inics (DRO)						11/2//20 10:00	1
Method: SW846 8015B NM - Die	esel Range Orga	i <mark>nics (DRO)</mark> Qualifier		MDL	Unit	D	Prepared	Analyzed	Dil Fac
	esel Range Orga	Qualifier	(GC)	MDL		<u>D</u>	Prepared 11/27/23 09:35		1
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	esel Range Orga Result	Qualifier	(GC)	MDL	Unit	<u>D</u>	<u> </u>	Analyzed	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-5662-19

Matrix: Solid

Job ID: 890-5662-1

# **Client Sample Results**

Client: H & R Enterprises
Chern. H & R Enterprises
Project/Site: GADWALL 18 FED COM #002H

Job ID: 890-5662-1 SDG: Eddy County NM

Client Sample ID: S - 7 3'R Date Collected: 11/17/23 00:00							Lab Sam	ple ID: 890-5 Matri	662-19 x: Solid
Date Received: 11/17/23 13:35 Sample Depth: 3'R									
– Method: EPA 300.0 - Anions, Ion C Analyte		o <mark>hy - Soluble</mark> Qualifier	e RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.8		4.99		mg/Kg			11/22/23 10:09	1
Client Sample ID: TT - 1         0-1'           Date Collected: 11/17/23 00:00         0           Date Received: 11/17/23 13:35         0           Sample Depth: 0-1'         0							Lab Sam	ple ID: 890-5 Matri	662-20 x: Solid
_ Method: SW846 8021B - Volatile O	rganic Comp	ounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 20:45	
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 20:45	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 20:45	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/23 14:02	11/23/23 20:45	
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/23 14:02	11/23/23 20:45	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/23 14:02	11/23/23 20:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/22/23 14:02	11/23/23 20:45	1
1,4-Difluorobenzene (Surr)	77		70 - 130				11/22/23 14:02	11/23/23 20:45	1
Method: TAL SOP Total BTEX - To	tal BTEX Calo	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/23/23 20:45	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (O	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.7		49.8		mg/Kg			11/27/23 18:54	1
_ Method: SW846 8015B NM - Diese	I Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 18:54	1
Diesel Range Organics (Over C10-C28)	50.7		49.8		mg/Kg		11/27/23 09:35	11/27/23 18:54	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/27/23 09:35	11/27/23 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/27/23 09:35	11/27/23 18:54	1
o-Terphenyl	106		70 - 130				11/27/23 09:35	11/27/23 18:54	1
Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Soluble	•						
Amelute	Popult	Qualifier	RL	мы	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quanner			Unit		riepaieu	Analyzeu	Dirrac

RL

0.00199

Method: SW846 8021B - Volatile Organic Compounds (GC)

Result Qualifier

<0.00199 U

# Client Sample ID: TT - 1 2'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Analyte

Benzene

D

Prepared

11/27/23 10:51

MDL Unit

mg/Kg

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-21

Analyzed

11/28/23 06:13

Matrix: Solid

Dil Fac

1

		-							
Toluene	<0.00199	U	0.00199		mg/Kg		11/27/23 10:51	11/28/23 06:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/27/23 10:51	11/28/23 06:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/27/23 10:51	11/28/23 06:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/27/23 10:51	11/28/23 06:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/27/23 10:51	11/28/23 06:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				11/27/23 10:51	11/28/23 06:13	1
1,4-Difluorobenzene (Surr)	113		70 - 130				11/27/23 10:51	11/28/23 06:13	1
Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/23 06:13	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (0	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/23 10:39	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/27/23 17:59	11/28/23 10:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		11/27/23 17:59	11/28/23 10:39	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/27/23 17:59	11/28/23 10:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130				11/27/23 17:59	11/28/23 10:39	1
o-Terphenyl	124		70 - 130				11/27/23 17:59	11/28/23 10:39	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy - Soluble	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.6		5.03		mg/Kg			11/22/23 10:22	1
lient Sample ID: TT - 1 3'							Lab Sam	ple ID: 890-5	662-22
ate Collected: 11/17/23 00:00								Matri	x: Solid
ate Received: 11/17/23 13:35 ample Depth: 3'									
· · ·	Organia Comm	oundo (CC)							
Method: SW846 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/Kg		11/27/23 10:51	11/28/23 06:33	1
					5.5				

4-Bromofluorobenzene (Surr)	99		70 - 130		11/27/23 10:51	11/28/23 06:33	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00399	U	0.00399	mg/Kg	11/27/23 10:51	11/28/23 06:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	11/27/23 10:51	11/28/23 06:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg	11/27/23 10:51	11/28/23 06:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	11/27/23 10:51	11/28/23 06:33	1
Toluene	<0.00200	U	0.00200	mg/Kg	11/27/23 10:51	11/28/23 06:33	1
Benzene	<0.00200	U	0.00200	mg/Kg	11/27/23 10:51	11/28/23 06:33	1

# **Client Sample Results**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Client Sample ID: TT - 1 3'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 3'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130				11/27/23 10:51	11/28/23 06:33	1
Method: TAL SOP Total BTEX - To	otal BTEX Calo	ulation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/23 06:33	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			11/28/23 11:45	1
Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 11:45	
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 11:45	
Oll Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		11/27/23 17:59	11/28/23 11:45	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130	11/27/23 17:59	11/28/23 11:45	1
o-Terphenyl	133	S1+	70 - 130	11/27/23 17:59	11/28/23 11:45	1

Method: EPA 300.0 - Anions,	Ion Chromatography - Soluble	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.6	5.04	mg/Kg			11/22/23 10:28	1

#### Client Sample ID: TT - 1 4'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 4'

Lab Sample ID: 890-5662-23 Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/27/23 10:51	11/28/23 06:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				11/27/23 10:51	11/28/23 06:54	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/27/23 10:51	11/28/23 06:54	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	ulation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		mg/Kg			11/28/23 06:54	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5 U	50.5	mg/Kg			11/28/23 12:08	1

Eurofins Carlsbad

Matrix: Solid

Job ID: 890-5662-1

SDG: Eddy County NM

Lab Sample ID: 890-5662-22

# Client Sample ID: TT - 1 4'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sam	ole	Der	oth:	4'	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 12:08	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 12:08	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/27/23 17:59	11/28/23 12:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130				11/27/23 17:59	11/28/23 12:08	1
o-Terphenyl	130		70 - 130				11/27/23 17:59	11/28/23 12:08	1

#### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.0	5.03	mg/Kg			11/22/23 10:35	1

#### Client Sample ID: TT - 2 0-1'

#### Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 0-1'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/27/23 10:51	11/28/23 07:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				11/27/23 10:51	11/28/23 07:14	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX			70 - 130			_	11/27/23 10:51	11/28/23 07:14	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX	- Total BTEX Calo			MDI		_			1
1,4-Difluorobenzene (Surr)	- Total BTEX Calo	Qualifier	70 - 130	MDL	Unit mg/Kg	D	11/27/23 10:51 Prepared	11/28/23 07:14 Analyzed 11/28/23 07:14	1 Dil Fac
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Calc Result <0.00402 esel Range Organ	Qualifier U ics (DRO) (	RL 0.00402		mg/Kg		Prepared	Analyzed	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00402 esel Range Organ Result	Qualifier U ics (DRO) ( Qualifier	RL 0.00402	MDL	mg/Kg Unit	<u>D</u>		Analyzed 11/28/23 07:14 Analyzed	1 Dil Fac 1 Dil Fac
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00402 esel Range Organ	Qualifier U ics (DRO) ( Qualifier	RL 0.00402		mg/Kg		Prepared	Analyzed	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.1	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402 GC) RL 50.1		mg/Kg Unit		Prepared	Analyzed 11/28/23 07:14 Analyzed	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.1	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402 GC) RL 50.1		mg/Kg Unit mg/Kg		Prepared	Analyzed 11/28/23 07:14 Analyzed	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.1	Qualifier U ics (DRO) ( Qualifier U nics (DRO) Qualifier	RL 0.00402 GC) RL 50.1	MDL	mg/Kg Unit mg/Kg	D	Prepared Prepared	Analyzed 11/28/23 07:14 Analyzed 11/28/23 12:30	1 Dil Fac

Oll Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg	11/27/23 17:59	11/28/23 12:30	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130		11/27/23 17:59	11/28/23 12:30	1
o-Terphenyl	130		70 - 130		11/27/23 17:59	11/28/23 12:30	1

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-23

Lab Sample ID: 890-5662-24

Matrix: Solid

Matrix: Solid

		Clien	t Sample R	Results	i				
Client: H & R Enterprises								Job ID: 890	
Project/Site: GADWALL 18 FED CON	/I #002H							SDG: Eddy Co	unty Nr
Client Sample ID: TT - 2 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35 Sample Depth: 0-1'							Lab Sam	ple ID: 890-5 Matri	662-24 ix: Soli
Method: EPA 300.0 - Anions, Ion C	hromatogra	ohy - Solubl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	69.8		5.02		mg/Kg			11/23/23 08:57	
Client Sample ID: TT - 2 2' late Collected: 11/17/23 00:00 late Received: 11/17/23 13:35							Lab Sam	ple ID: 890-5 Matri	662-2 ix: Soli
ample Depth: 2'									
Method: SW846 8021B - Volatile O Analyte	•	ounds (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199		0.00199		mg/Kg		11/27/23 10:51	11/28/23 07:35	
Toluene	< 0.00199		0.00199		mg/Kg		11/27/23 10:51	11/28/23 07:35	
Ethylbenzene	< 0.00199		0.00199				11/27/23 10:51	11/28/23 07:35	
m-Xylene & p-Xylene	< 0.00199		0.00398		mg/Kg		11/27/23 10:51	11/28/23 07:35	
o-Xylene	< 0.00398		0.00398		mg/Kg		11/27/23 10:51	11/28/23 07:35	
Xylenes, Total	<0.00199		0.00398		mg/Kg mg/Kg		11/27/23 10:51	11/28/23 07:35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
4-Bromofluorobenzene (Surr)	105		70 - 130				11/27/23 10:51	11/28/23 07:35	
1,4-Difluorobenzene (Surr)	108		70 - 130				11/27/23 10:51	11/28/23 07:35	
Method: TAL SOP Total BTEX - Tot	tal BTEX Cal	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/23 07:35	
Method: SW846 8015 NM - Diesel I			GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Total TPH	<50.4	U	50.4		mg/Kg			11/28/23 12:52	
Method: SW846 8015B NM - Diese Analyte		nics (DRO) Qualifier	(GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics	<50.4		50.4		mg/Kg		11/27/23 17:59	11/28/23 12:52	
(GRO)-C6-C10 Diesel Range Organics (Over	<50.4		50.4						
C10-C28)	<b>~</b> 50.4	0	00.4		mg/Kg		11/27/23 17:59	11/28/23 12:52	
Oll Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/27/23 17:59	11/28/23 12:52	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1-Chlorooctane	137	S1+	70 - 130				11/27/23 17:59	11/28/23 12:52	
o-Terphenyl	124		70 - 130				11/27/23 17:59	11/28/23 12:52	
- Method: EPA 300.0 - Anions, Ion C	hromatograp	ohy - Solubl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F

Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 11/23/23 09:17 4.99 Chloride 70.4 mg/Kg

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# Client Sample ID: TT - 2 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Sample Depth: 3'R

Analyte

Chloride

	Organic Comp	ounas (GC	/						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/27/23 10:51	11/28/23 07:55	
Toluene	<0.00200	U	0.00200		mg/Kg		11/27/23 10:51	11/28/23 07:55	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/27/23 10:51	11/28/23 07:55	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/27/23 10:51	11/28/23 07:55	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/27/23 10:51	11/28/23 07:55	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/27/23 10:51	11/28/23 07:55	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	108		70 - 130				11/27/23 10:51	11/28/23 07:55	·
1,4-Difluorobenzene (Surr)	112		70 - 130				11/27/23 10:51	11/28/23 07:55	
		sulation							
Method: TAL SUP Total BIEX - I	OLAI DIEN CAI	Julation							
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Method: TAL SOP Total BTEX - T Analyte Total BTEX		Qualifier	RL	MDL	Unit mg/Kg	<u> </u>	Prepared	Analyzed 11/28/23 07:55	Dil Fa
Analyte Total BTEX Method: SW846 8015 NM - Diese	Result <0.00399	Qualifier U ics (DRO) (	0.00399		mg/Kg	<u>D</u>	Prepared	11/28/23 07:55	
Analyte Total BTEX Method: SW846 8015 NM - Diese	Result <0.00399	Qualifier U	0.00399 GC) RL	MDL	mg/Kg	D	Prepared Prepared		
Analyte	Result <0.00399	Qualifier U ics (DRO) ( Qualifier	0.00399		mg/Kg			11/28/23 07:55	
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH	Result <0.00399 I Range Organ Result <49.7	Qualifier U ics (DRO) ( Qualifier U	0.00399 GC) RL 49.7		mg/Kg Unit			11/28/23 07:55 Analyzed	Dil Fa
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	I Range Organ Result <0.00399 I Range Organ <pre></pre>	Qualifier U ics (DRO) ( Qualifier U	0.00399 GC) RL 49.7		mg/Kg Unit mg/Kg			11/28/23 07:55 Analyzed	Dil Fa
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	I Range Organ Result <0.00399 I Range Organ <pre></pre>	Qualifier U ics (DRO) ( Qualifier U nics (DRO) Qualifier	0.00399 GC) RL 49.7	MDL	mg/Kg Unit mg/Kg	D	Prepared	Analyzed           11/28/23 07:55	Dil Fa
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result <0.00399 I Range Organ Result <49.7 Sel Range Orga Result	Qualifier U ics (DRO) ( Qualifier U mics (DRO) Qualifier U	0.00399 GC) RL 49.7 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit	D	Prepared	Analyzed           11/28/23 07:55           Analyzed           11/28/23 13:14           Analyzed	Dil Fac
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	I Range Organ Result <49.7 Sel Range Orga Result <49.7	Qualifier U ics (DRO) ( Qualifier U mics (DRO) Qualifier U	0.00399 GC) <u>RL</u> 49.7 (GC) <u>RL</u> 49.7	MDL	Unit mg/Kg Unit mg/Kg	D	Prepared Prepared 11/27/23 17:59	Analyzed           11/28/23 07:55           Analyzed           11/28/23 13:14           Analyzed           11/28/23 13:14	Dil Fac
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	I Range Organ Result <49.7 Sel Range Orga Result <49.7	Qualifier U ics (DRO) ( Qualifier U mics (DRO) Qualifier U U	0.00399 GC) <u>RL</u> 49.7 (GC) <u>RL</u> 49.7	MDL	Unit mg/Kg Unit mg/Kg	D	Prepared Prepared 11/27/23 17:59	Analyzed           11/28/23 07:55           Analyzed           11/28/23 13:14           Analyzed           11/28/23 13:14	Dil Fac
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result           <0.00399	Qualifier U ics (DRO) ( Qualifier U Qualifier U U U Qualifier	0.00399 GC) RL 49.7 (GC) RL 49.7 49.7 49.7 49.7 Limits	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 11/27/23 17:59 11/27/23 17:59 11/27/23 17:59 Prepared	Analyzed           11/28/23 07:55           Analyzed           11/28/23 13:14           Analyzed           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14	Dil Fac
Analyte Total BTEX Method: SW846 8015 NM - Diese Analyte	Result           <0.00399	Qualifier U ics (DRO) ( Qualifier U mics (DRO) Qualifier U U U	0.00399 GC) RL 49.7 (GC) RL 49.7 49.7 49.7	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 11/27/23 17:59 11/27/23 17:59 11/27/23 17:59	Analyzed           11/28/23 07:55           Analyzed           11/28/23 13:14           Analyzed           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14           11/28/23 13:14	Dil Fau

RL

5.00

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

73.8

Job ID: 890-5662-1 SDG: Eddy County NM

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Released to Imaging: 1/10/2024 9:41:59 AM

Dil Fac

1

Analyzed

11/23/23 09:23

Lab Sample ID: 890-5662-26 Matrix: Solid

Project/Site: GADWALL 18 FED COM #002H

#### Job ID: 890-5662-1 SDG: Eddy County NM

# Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: H & R Enterprises

		DED4	DED74	Percent Surrogate Recovery (Accept
ah Oamala ID	Olivert Osmala ID	BFB1	DFBZ1	
Lab Sample ID 190-5662-1	Client Sample ID S - 1 0-1'	(70-130) 81	(70-130) 87	
890-5662-1 MS		124		
	S - 1 0-1'	124	109	
90-5662-1 MSD	S - 1 0-1'		106	
890-5662-2	S - 1 2'	81	82	
890-5662-3	S - 1 3'R	101	56 S1-	
890-5662-4	S - 2 0-1'	102	72	
90-5662-5	S-2 2'R	84	78	
90-5662-6	S - 3 0-1'	102	54 S1-	
90-5662-7	S - 3 2'	85	80	
390-5662-8	S-3 3'R	103	78	
90-5662-9	S - 4 0-1'	90	83	
390-5662-10	S-4 2'	79	82	
390-5662-11	S - 4 3'R	94	73	
90-5662-12	S - 5 0-1'	83	85	
90-5662-13	S - 5 2'	86	82	
00-5662-14	S - 6 0-1'	87	83	
0-5662-15	S - 6 2'	106	57 S1-	
90-5662-16	S-6 3'R	85	83	
0-5662-17	S - 7 0-1'	85	82	
0-5662-18	S - 7 2'	159 S1+	111	
0-5662-19	S - 7 3'R	85	58 S1-	
0-5662-20	TT - 1 0-1'	88	77	
90-5662-21	TT - 1 2'	90	113	
0-5662-22	TT - 1 3'	99	114	
90-5662-23	TT - 1 4'	103	108	
90-5662-24	TT - 2 0-1'	101	110	
90-5662-25	TT - 2 2'	105	108	
90-5662-26	TT-2 3'R	108	112	
CS 880-67647/1-A	Lab Control Sample	100	104	
.CS 880-67739/1-A	Lab Control Sample	95	104	
.CSD 880-67647/2-A	Lab Control Sample Dup	116	97	
CSD 880-67739/2-A	Lab Control Sample Dup	93	104	
/B 880-67330/5-A	Method Blank	55 70	87	
/IB 880-67586/5-A	Method Blank	98	07 144 S1+	
/IB 880-67647/5-A	Method Blank	98 75	85	
/IB 880-67739/5-A	Method Blank	75 107	ەت 152 S1+	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC) Matrix: Solid

#### Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) (70-130) Lab Sample ID **Client Sample ID** 890-5662-1 S - 1 0-1' 97 101 890-5662-1 MS S - 1 0-1' 109 100 890-5662-1 MSD S-1 0-1' 106 98

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Prep Type: Total/NA 5 6

Prep Type: Total/NA

Client: H & R Enterprises

#### Job ID: 890-5662-1 SDG: Eddy County NM

Prep Type: Total/NA

## Project/Site: GADWALL 18 FED COM #002H Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

		1CO1	OTPH1	Percent Surrogate Recovery (Accepta
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5662-2	S - 1 2'	102	107	
890-5662-3	S - 1 3'R	98	102	
890-5662-4	S - 2 0-1'	99	104	
890-5662-5	S-2 2'R	97	101	
890-5662-6	S - 3 0-1'	104	110	
890-5662-7	S-3 2'	93	99	
390-5662-8	S-3 3'R	104	111	
890-5662-9	S - 4 0-1'	96	102	
390-5662-10	S - 4 2'	99	105	
390-5662-11	S-4 3'R	93	97	
90-5662-12	S - 5 0-1'	94	99	
90-5662-13	S-5 2'	97	103	
390-5662-14	S - 6 0-1'	97	103	
90-5662-15	S-6 2'	104	109	
90-5662-16	S-6 3'R	98	105	
90-5662-17	S - 7 0-1'	100	106	
0-5662-18	S - 7 2'	105	110	
90-5662-19	S - 7 3'R	111	116	
90-5662-20	TT - 1 0-1'	100	106	
90-5662-21	TT - 1 2'	136 S1+	124	
390-5662-21 MS	TT - 1 2'	140 S1+	113	
90-5662-21 MSD	TT - 1 2'	163 S1+	130	
90-5662-22	TT - 1 3'	146 S1+	133 S1+	
90-5662-23	TT - 1 4'	145 S1+	130	
0-5662-24	TT-2 0-1'	143 S1+	130	
90-5662-25	TT-2 2'	137 S1+	124	
90-5662-26	TT-2 3'R	142 S1+	124	
CS 880-67701/2-A	Lab Control Sample	100	110	
.CS 880-67795/2-A	Lab Control Sample	84	86	
CSD 880-67701/3-A	Lab Control Sample Dup	91	100	
_CSD 880-67795/3-A	Lab Control Sample Dup	94	100	
MB 880-67701/1-A	Method Blank	101	110	
MB 880-67795/1-A	Method Blank	172 S1+	163 S1+	

#### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67330/5-A							Client Sa	mple ID: Metho	d Blank
Matrix: Solid								Prep Type: "	Total/NA
Analysis Batch: 67637								Prep Batcl	h: 67330
	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
Toluene	<0.00200		0.00200		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
o-Xylene	< 0.00200		0.00200		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
Xylenes, Total	< 0.00400		0.00400		mg/Kg		11/17/23 15:41	11/23/23 02:15	1
· · · · · · · · · · · · · · · · · · ·		-							
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130				11/17/23 15:41	11/23/23 02:15	1
1,4-Difluorobenzene (Surr)	87		70 - 130				11/17/23 15:41	11/23/23 02:15	1
Lab Sample ID: MB 880-67586/5-A							Client Sa	mple ID: Metho	d Blank
Matrix: Solid								Prep Type: *	
Analysis Batch: 67691								Prep Batcl	
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
Ethylbenzene	<0.00200		0.00200		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
m-Xylene & p-Xylene	<0.00400		0.00400		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
o-Xylene	< 0.00200		0.00200		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
Xylenes, Total	< 0.00400		0.00400		mg/Kg		11/22/23 17:00	11/27/23 11:54	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				11/22/23 17:00	11/27/23 11:54	1
1,4-Difluorobenzene (Surr)	144	S1+	70 - 130				11/22/23 17:00	11/27/23 11:54	1
Lab Sample ID: MB 880-67647/5-A							Client Sa	mple ID: Metho	d Blank
Matrix: Solid								Prep Type: <sup>-</sup>	Total/NA
Analysis Batch: 67637								Prep Batcl	
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
m-Xylene & p-Xylene	<0.00400		0.00400		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
o-Xylene	<0.00200		0.00200		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
Xylenes, Total	<0.00400		0.00400		mg/Kg		11/22/23 14:02	11/23/23 12:52	1
	MB	МВ							
Surrogate	%Recovery		Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130				11/22/23 14:02	11/23/23 12:52	1
	10								,

Job ID: 890-5662-1

SDG: Eddy County NM

11/22/23 14:02 11/23/23 12:52

1,4-Difluorobenzene (Surr)

70 - 130

85

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H Job ID: 890-5662-1 SDG: Eddy County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-670 Matrix: Solid	647/1-A						Client	Sample	D: Lab Co Bron 1	ontrol S Type: To	
Analysis Batch: 67637										Batch:	
Analysis Batch. 0/03/			Spike	1.05	LCS				%Rec	Daten.	0704
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Benzene			0.100	0.08825	duamor	mg/Kg		88	70 - 130		
Toluene			0.100	0.08105		mg/Kg		81	70 - 130		
Ethylbenzene			0.100	0.08802		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1826		mg/Kg		91	70 - 130		
o-Xylene			0.200	0.08873		mg/Kg		89	70 - 130 70 - 130		
0-Aylene			0.100	0.00075		iiig/itg		03	70 - 100		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								
Lab Sample ID: LCSD 880-6	7647/2-A					Clie	ent Sam	ple ID:	Lab Contro	l Sampl	e Dı
Matrix: Solid							-	•		ype: To	
Analysis Batch: 67637										Batch:	
,			Spike	LCSD	LCSD				%Rec		RF
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Lin
Benzene			0.100	0.08794		mg/Kg		88	70 - 130	0	
Toluene			0.100	0.08186		mg/Kg		82	70 - 130	1	
Ethylbenzene			0.100	0.09482		mg/Kg		95	70 - 130	7	
m-Xylene & p-Xylene			0.200	0.1982		mg/Kg		99	70 - 130	8	
o-Xylene			0.100	0.09609		mg/Kg		96	70 - 130	8	
о-хуюне			0.100	0.09009		mg/rtg		90	70 - 150	0	
	LCSD	LCSD									
Surrogato	% Pacovary	Qualifier	Limite								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	% <b>Recovery</b> 116 97	Qualifier	Limits 70 - 130 70 - 130								
	116	Qualifier	70 - 130								
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I	116 97	Qualifier	70 - 130					Cli	ent Sample	e ID: S -	1 0-
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	116 97	Qualifier	70 - 130					Cli		e ID: S - īype: To	
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I	116 97	Qualifier	70 - 130					Cli	Prep 1		tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid	116 97 MS	<u>Qualifier</u> Sample	70 - 130	MS	MS			Cli	Prep 1	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid	116 97 MS Sample		70 - 130 70 - 130		MS Qualifier	Unit	D	Cli %Rec	Prep 1 Prep	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637	116 97 MS Sample	Sample Qualifier	70 - 130 70 - 130 Spike			- <mark>Unit</mark> mg/Kg	D		Prep 1 Prep %Rec	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte	116 97 MS Sample Result	Sample Qualifier U	70 - 130 70 - 130 Spike Added	Result			D	%Rec	Prep 1 Prep %Rec Limits	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene	116 97 MS Sample Result <0.00200	Sample Qualifier U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990	<b>Result</b> 0.08620		mg/Kg	<u>D</u>	%Rec 87	Prep 1 Prep %Rec Limits 70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene	116 97 MS Sample Result <0.00200 <0.00200	Sample Qualifier U U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990	<b>Result</b> 0.08620 0.08046		mg/Kg mg/Kg	D_	<b>%Rec</b> 87 81	Prep 1 Prep %Rec Limits 70 - 130 70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene	116 97 MS Sample Result <0.00200 <0.00200 <0.00200	Sample Qualifier U U U U	70 - 130 70 - 130 Spike Added 0.0990 0.0990 0.0990	Result           0.08620           0.08046           0.09142		mg/Kg mg/Kg mg/Kg	<u>D</u>	<b>%Rec</b> 87 81 92	Prep 1           Prep           %Rec           Limits           70 - 130           70 - 130           70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200	Sample Qualifier U U U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.0990 0.198	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 87 81 92 95	Prep 1           Prep           %Rec           Limits           70 - 130           70 - 130           70 - 130           70 - 130           70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200	Sample Qualifier U U U U U U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.0990 0.198	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	<u> </u>	%Rec 87 81 92 95	Prep 1           Prep           %Rec           Limits           70 - 130           70 - 130           70 - 130           70 - 130           70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200 MS	Sample Qualifier U U U U U U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.0990 0.198 0.0990	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 87 81 92 95	Prep 1           Prep           %Rec           Limits           70 - 130           70 - 130           70 - 130           70 - 130           70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 MS %Recovery	Sample Qualifier U U U U U U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.198 0.0990 Limits	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 87 81 92 95	Prep 1           Prep           %Rec           Limits           70 - 130           70 - 130           70 - 130           70 - 130           70 - 130	Type: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	116           97           MS           Result           <0.00200	Sample Qualifier U U U U U U U	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         1.108         70 - 130	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 87 81 92 95 90	Prep 1 Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: To Batch:	tal/N 6764
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I	116           97           MS           Result           <0.00200	Sample Qualifier U U U U U U U	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         1.108         70 - 130	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 87 81 92 95 90	Prep 7 Prep 7 %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	ype: To Batch:  ∋ ID: S -	tal/N 6764
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid	116           97           MS           Result           <0.00200	Sample Qualifier U U U U U U U	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         1.108         70 - 130	Result           0.08620           0.08046           0.09142           0.1877		mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 87 81 92 95 90	Prep 1 Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: To         Batch:	tal/N 6764  1 0- tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 MS %Recovery 124 109 MSD	Sample Qualifier U U U U U MS Qualifier	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         0.198         70 - 130         70 - 130	Result           0.08620           0.08046           0.09142           0.1877           0.08952		mg/Kg mg/Kg mg/Kg mg/Kg	<u> </u>	%Rec 87 81 92 95 90	Prep 1 Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 Prep 1 Prep 1 Prep 1	ype: To Batch:  ∋ ID: S -	tal/N 6764  1 0- tal/N 6764
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <i>Sample</i> Sample	Sample Qualifier U U U U MS Qualifier	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.198         0.0990         0.130         70 - 130         70 - 130         Spike	Result 0.08620 0.08046 0.09142 0.1877 0.08952 MSD	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 87 81 92 95 90	Prep 1 Prep 2 %Rec Limits 70 - 130 70 - 190 %Rec	Jupe: To         Batch:         Batch:         Jup: S -         Type: To         Batch:	tal/N 6764  1 0- tal/N 6764 
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 %Recovery 124 109 MSD Sample Result	Sample Qualifier U U U U MS Qualifier Sample Qualifier	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.198 0.0990 0.198 0.0990 <i>Limits</i> 70 - 130 70 - 130 70 - 130	Result           0.08620           0.08046           0.09142           0.1877           0.08952	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 87 81 92 95 90 Cli	Prep 1 Prep %Rec Limits 70 - 130 70 - 190 %Rec Limits	Type: To Batch:          Batch:         Batch:         Selic:         Selic:	1 0- tal/N 6764 
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene	116           97           MS           Result           <0.00200	Sample Qualifier U U U U U MS Qualifier U	70 - 130         70 - 130         70 - 130         Spike         Added         0.0990         0.0990         0.198         0.0990         0.198         0.0990         0.198         70 - 130         70 - 130         70 - 130         Spike         Added         0.101	Result           0.08620           0.08046           0.09142           0.1877           0.08952             MSD           Result           0.07547	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg <b>Unit</b> mg/Kg		%Rec           87           81           92           95           90           Cli           %Rec           75	Prep 1 Prep 2 %Rec Limits 70 - 130 70 - 130 Prep 1 Prep 3 %Rec Limits 70 - 130	Pype: To Batch: Batch: D: S - Type: To Batch: RPD 13	tal/N 6764 1 0- tal/N 6764 RF Lin
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 890-5662-1 I Matrix: Solid Analysis Batch: 67637 Analyte	116 97 MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 %Recovery 124 109 MSD Sample Result	Sample Qualifier U U U U U MS Qualifier U U	70 - 130 70 - 130 <b>Spike</b> Added 0.0990 0.0990 0.198 0.0990 0.198 0.0990 <i>Limits</i> 70 - 130 70 - 130 70 - 130	Result           0.08620           0.08046           0.09142           0.1877           0.08952	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 87 81 92 95 90 Cli	Prep 1 Prep %Rec Limits 70 - 130 70 - 190 %Rec Limits	Type: To Batch:          Batch:         Batch:         Selic:         Selic:	tal/N 6764 

Job ID: 890-5662-1 SDG: Eddy County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-5662-1	MSD									Clie	ent Sample		
Matrix: Solid											Prep Ty		
Analysis Batch: 67637												Batch:	
	Sample		•	Spike	MSD						%Rec		RP
Analyte	Result		lifier	Added		Qualifi				%Rec	Limits	RPD	Lim
m-Xylene & p-Xylene	<0.00400	U		0.202	0.1711		mg/Kg			85	70 - 130	9	
o-Xylene	<0.00200	U		0.101	0.08172		mg/Kg			81	70 - 130	9	3
	MSD	MSE	)										
Surrogate	%Recovery	Qua	lifier	Limits									
4-Bromofluorobenzene (Surr)	127			70 - 130									
1,4-Difluorobenzene (Surr)	106			70 - 130									
Lab Sample ID: MB 880-6773	39/5-4									Client S	ample ID: N	lethod	Blan
Matrix: Solid											Prep Ty		
Analysis Batch: 67691												Batch:	
Analysis Baton. crocr		мв	МВ								Trop	Baton.	
Analyte	R		Qualifier	RI	L	MDL U	Jnit	D	P	repared	Analyze	d	Dil Fa
Benzene		0200		0.00200			ng/Kg	_		7/23 10:51	11/27/23 2		
Toluene		0200		0.00200			ng/Kg			7/23 10:51	11/27/23 2		
Ethylbenzene		0200		0.00200			ng/Kg			7/23 10:51	11/27/23 2		
m-Xylene & p-Xylene		0200		0.00200			ng/Kg			7/23 10:51	11/27/23 2		
p-Xylene		0200		0.00400						7/23 10:51	11/27/23 2		
Xylenes, Total		0200		0.00200			ng/Kg ng/Kg			7/23 10:51	11/27/23 2		
vienes, iotai	<0.0	0400	0	0.00400	5	1	ng/Kg		11/2	1123 10.31	11/21/23 2	5.29	
Surrogate	%Reco	MB	MB Qualifier	Limits					D	repared	Analyze	d	Dil F
4-Bromofluorobenzene (Surr)		107	Quanner	70 - 130	_					7/23 10:51	11/27/23 2		0111
1,4-Difluorobenzene (Surr)			S1+	70 - 130						7/23 10:51	11/27/23 2		
		102	0,1	10-100						//20 /0.0/	11/21/20 2	0.20	
Lab Sample ID: LCS 880-677	739/1-A							С	lient	Sample	ID: Lab Co	ntrol S	amp
Matrix: Solid											Prep Ty		
Analysis Batch: 67691												Batch:	
				Spike	LCS	LCS					%Rec		
Analyte				Added	Result	Qualifi	ier Unit		D	%Rec	Limits		
Benzene				0.100	0.07740		mg/Kg			77	70 - 130		
Toluene				0.100	0.08015		mg/Kg			80	70 - 130		
Ethylbenzene				0.100	0.07775		mg/Kg			78	70 - 130		
m-Xylene & p-Xylene				0.200	0.1674		mg/Kg			84	70 - 130		
p-Xylene				0.100	0.08023		mg/Kg			80	70 - 130		
				0.100	0.00020		mynty			00	10-100		
	LCS	LCS	1										
Surrogate	%Recovery	Qua	lifier	Limits									
4-Bromofluorobenzene (Surr)	95			70 - 130									
1,4-Difluorobenzene (Surr)	101			70 - 130									
	7700/0 4						~		0		ah Osata I	0	
							C	ient	Sam	iple ID: L	ab Control		
-	//39/2-A										Prep Ty	-	
Matrix: Solid	113912-A										Pren	Batch:	6773
Matrix: Solid	1139/Z-A												
Matrix: Solid Analysis Batch: 67691	//39/2-A			Spike		LCSD					%Rec		RF
Matrix: Solid Analysis Batch: 67691 <sup>Analyte</sup>				Added	Result	LCSD Qualifi			D	%Rec	%Rec Limits	RPD	RF Lin
Matrix: Solid Analysis Batch: 67691 <sup>Analyte</sup>	- <u></u>			<b>Added</b> 0.100	<b>Result</b> 0.07679	Qualifi	ier <u>Unit</u> mg/Kg		<u>D</u>	%Rec	%Rec		RF Lin
Matrix: Solid Analysis Batch: 67691 Analyte Benzene				Added 0.100 0.100	Result	Qualifi			<u>D</u>		%Rec Limits	RPD	RF Lin
Matrix: Solid Analysis Batch: 67691 Analyte Benzene Toluene				<b>Added</b> 0.100	<b>Result</b> 0.07679	Qualifi	mg/Kg		<u>D</u>	77	%Rec Limits 70 - 130	<b>RPD</b> 1	RF Lin
Lab Sample ID: LCSD 880-6 Matrix: Solid Analysis Batch: 67691 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene				Added 0.100 0.100	<b>Result</b> 0.07679 0.07762	Qualifi	mg/Kg mg/Kg		<u>D</u>	77	%Rec Limits 70 - 130 70 - 130	<b>RPD</b> 1 3	RF Lim

Project/Site: GADWALL 18 FED COM #002H

Client: H & R Enterprises

#### Job ID: 890-5662-1 SDG: Eddy County NM

Prep Type: Total/NA

Prep Batch: 67701

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-67701/1-/ Matrix: Solid							Chefft 3a	mple ID: Metho Prep Type: 1	
Analysis Batch: 67684								Prep Batch	
	мв	мв							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/27/23 08:00	11/27/23 08:18	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/27/23 08:00	11/27/23 08:18	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 08:00	11/27/23 08:18	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/27/23 08:00	11/27/23 08:18	1
o-Terphenyl	110		70 _ 130				11/27/23 08:00	11/27/23 08:18	1

# Matrix: Solid

#### Analysis Batch: 67684

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	829.3	mg/Kg		83	70 - 130	
Diesel Range Organics (Over	1000	855.5	mg/Kg		86	70 - 130	
C10-C28)							

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	110		70 - 130

#### Lab Sample ID: LCSD 880-67701/3-A Matrix: Solid

Analysis Batch: 67684	
Analyte	
Gasoline Range Organics	 

#### Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 67701

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	857.2		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	862.4		mg/Kg		86	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 890-5662-1 MS

Lab Sample ID: 890-5662-1 MSD

Lab Sample ID: MB 880-67795/1-A

Analysis Batch: 67684

Gasoline Range Organics

Diesel Range Organics (Over

Analysis Batch: 67684

Gasoline Range Organics

**Diesel Range Organics (Over** 

Matrix: Solid

(GRO)-C6-C10

C10-C28)

Surrogate

o-Terphenyl

Analyte

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

Matrix: Solid

1-Chlorooctane

Matrix: Solid

(GRO)-C6-C10

Analyte

# **QC Sample Results**

MS MS

MSD MSD

859.2

994.1

Result Qualifier

879.8

1006

Result Qualifier

Unit

mg/Kg

mg/Kg

Unit

mg/Kg

mg/Kg

Spike

Added

1010

1010

Limits

70 - 130

70 - 130

Spike

Added

1010

1010

Limits

70 - 130

70 - 130

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Sample Sample

<50.1 U

<50.1 U

109

100

%Recovery

MS MS Qualifier

Sample Sample

<50.1 U

<50.1 U

106

98

%Recovery

MSD MSD

Qualifier

**Result Qualifier** 

Result Qualifier

Job ID: 890-5662-1 SDG: Eddy County NM

Prep Type: Total/NA

Prep Batch: 67701

Client Sample ID: S - 1 0-1'

%Rec

Limits

70 - 130

70 - 130

%Rec

85

95

94

Prepared

11/27/23 17:59

11/27/23 17:59

D

# 7

Client	Sampl	e ID: S	- 1	0-1
	Prep	Type: 1	<b>Tota</b>	I/N/
	Prep	Type: 1	<b>fota</b>	I/N/

<b>-</b>	
'NA	
701	
RPD	
imit	
20	

20

1

1

Dil Fac

1

		Prep	Batch:	6770
		%Rec		RP
D	%Rec	Limits	RPD	Lim
_	83	70 - 130	2	2

70 - 130

Client Sample ID	: Method	Blank

Prep Type: Total/NA
Prep Batch: 67795

Analyzed

11/28/23 08:05

11/28/23 08:05

Prep Type: Total/NA

Prep Batch: 67795

**Client Sample ID: Lab Control Sample** 

Analysis Batch: 67801								Prep Batcl	n: 67795
	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/27/23 17:59	11/28/23 08:05	1
	MB	MR							

	MB	MB	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	172	S1+	70 - 130
o-Terphenyl	163	S1+	70 - 130

#### Lab Sample ID: LCS 880-67795/2-A Matrix: Solid Analysis Batch: 67801

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1062		mg/Kg		106	70 - 130	 
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1037		mg/Kg		104	70 - 130	
C10-C28)								

**Released to Imaging: 1/10/2024 9:41:59 AM** 

11/29/2023

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

ab Sample ID: LCS 880-67	795/2-A						Client	Sample	ID: Lab Co	ontrol Sa	ample
Matrix: Solid										ype: Tot	
Analysis Batch: 67801										Batch:	
_		LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	84		70 - 130								
p-Terphenyl	86		70 - 130								
Lab Sample ID: LCSD 880-6	37795/3_A					Clie	nt Sam	nle ID: I	Lab Control		
Matrix: Solid	1110010-A					onei	in our			ype: Tot	
Analysis Batch: 67801										Batch:	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	1038		mg/Kg		104	70 - 130	2	20
GRO)-C6-C10											
Diesel Range Organics (Over			1000	1006		mg/Kg		101	70 - 130	3	20
C10-C28)											
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
I-Chlorooctane	94		70 - 130								
o-Terphenyl	102		70 - 130								
Lab Sample ID: 890-5662-2	1 MS							Clie	ent Sample		
Matrix: Solid										ype: Tot	
Analysis Batch: 67801										Batch:	67795
		Sample	Spike	MS			_		%Rec		
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics GRO)-C6-C10	<49.9	U	991	906.3		mg/Kg		89	70 - 130		
0100-010	<49.9	U F1	991	1265		malla		125	70 - 130		
Diesel Range Organics (Over	.5.0		221	120.1		ma/na					
			551	1205		mg/Kg		120			
		146	551	1203		mg/Kg		120			
Diesel Range Organics (Over C10-C28)		MS		1205		mg/Kg		120			
C10-C28)	%Recovery	Qualifier	Limits	1203		nig/Kg		120			
C10-C28) Surrogate -Chlorooctane	<b>%Recovery</b> 140		Limits 70 - 130	1203		ing/Kg		120			
C10-C28) Surrogate I-Chlorooctane	%Recovery	Qualifier	Limits	1203		ing/Kg		120			
C10-C28) Surrogate 1-Chlorooctane p-Terphenyl	%Recovery 	Qualifier	Limits 70 - 130	1203		ing/Kg			ant Sample	ID: TT -	1 2'
	%Recovery 	Qualifier	Limits 70 - 130	1205		mg/⊼g			ent Sample Prep T		
C10-C28) Surrogate 1-Chlorooctane p-Terphenyl Lab Sample ID: 890-5662-2' Matrix: Solid	%Recovery 	Qualifier	Limits 70 - 130	1205		mg/⊼g			Prep T	ype: Tot	tal/NA
C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-5662-24	<u>%Recovery</u> 140 113 1 MSD	Qualifier	Limits 70 - 130	MSD	MSD	mg/⊼g			Prep T		tal/NA
C10-C28) Surrogate (-Chlorooctane -Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801	%Recovery 140 113 1 MSD Sample	Qualifier S1+	<u>Limits</u> 70 - 130 70 - 130	MSD	MSD Qualifier	mg/⊼g Unit	D		Prep T Prep	ype: Tot	tal/NA 67795
C10-C28) Surrogate 1-Chlorooctane 5-Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte	%Recovery 140 113 1 MSD Sample	Qualifier S1+ Sample Qualifier	Limits 70 - 130 70 - 130 Spike	MSD			D	Clie	Prep T Prep %Rec	ype: Tot Batch: (	tal/NA 67795 RPD
C10-C28) Surrogate (I-Chlorooctane D-Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte Gasoline Range Organics GRO)-C6-C10	%Recovery 140 113 1 MSD Sample Result <49.9	Qualifier S1+ Sample Qualifier U	Limits 70 - 130 70 - 130 <b>Spike</b> Added 991	MSD Result 1088	Qualifier	Unit mg/Kg	<u> </u>	Clie <u>%Rec</u> 107	Prep T Prep %Rec Limits 70 - 130	Type: Tot         Batch:         (0)         RPD         18	tal/NA 67795 RPD Limit 20
C10-C28) Surrogate (-Chlorooctane -Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over	%Recovery 140 113 1 MSD Sample Result	Qualifier S1+ Sample Qualifier U	Limits 70 - 130 70 - 130 Spike Added	MSD Result	Qualifier	Unit	D	Clie %Rec	Prep T Prep %Rec Limits	ype: Tot         Batch:         RPD	tal/NA 67795 RPD Limit
C10-C28) Surrogate I-Chlorooctane D-Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over	%Recovery 140 113 1 MSD Sample Result <49.9	Qualifier S1+ Sample Qualifier U	Limits 70 - 130 70 - 130 <b>Spike</b> Added 991	MSD Result 1088	Qualifier	Unit mg/Kg	D_	Clie <u>%Rec</u> 107	Prep T Prep %Rec Limits 70 - 130	Type: Tot         Batch:         (0)         RPD         18	tal/NA 67795 RPD Limit 20
C10-C28) Surrogate 1-Chlorooctane p-Terphenyl Lab Sample ID: 890-5662-2' Matrix: Solid	%Recovery 140 113 1 MSD Sample Result <49.9	Qualifier S1+ Sample Qualifier U U F1	Limits 70 - 130 70 - 130 <b>Spike</b> Added 991	MSD Result 1088	Qualifier	Unit mg/Kg	<u>D</u>	Clie <u>%Rec</u> 107	Prep T Prep %Rec Limits 70 - 130	Type: Tot         Batch:         (0)         RPD         18	tal/NA 67795 RPD Limit 20
C10-C28) Surrogate I-Chlorooctane D-Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over	%Recovery 140 113 140 140 140 49.9 <49.9	Qualifier S1+ Sample Qualifier U U F1 MSD	Limits 70 - 130 70 - 130 <b>Spike</b> Added 991	MSD Result 1088	Qualifier	Unit mg/Kg	<u> </u>	Clie <u>%Rec</u> 107	Prep T Prep %Rec Limits 70 - 130	Type: Tot         Batch:         (0)         RPD         18	tal/NA 67795 RPD Limit 20
C10-C28) Surrogate C-Chlorooctane C-Terphenyl Lab Sample ID: 890-5662-24 Matrix: Solid Analysis Batch: 67801 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	%Recovery 140 113 140 140 140 49.9 <49.9 <49.9 %Recovery	Qualifier S1+ Sample Qualifier U U F1 MSD	Limits 70 - 130 70 - 130 <b>Spike</b> Added 991	MSD Result 1088	Qualifier	Unit mg/Kg	<u>D</u>	Clie <u>%Rec</u> 107	Prep T Prep %Rec Limits 70 - 130	Type: Tot         Batch:         (0)         RPD         18	tal/NA 67795 RPD Limit 20

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H Job ID: 890-5662-1 SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography

Matrix: Solid								Client S	Sample ID: I Prep	Method Type: S	
Analysis Batch: 67628											
Analyta		MB MB		RL			D	Duonouod	A ma hum		Dil Fac
Analyte Chloride		esult Qualifier <5.00 U		5.00	MDL Unit mg/K	a	<u> </u>	Prepared	Analyz		1 DII Fac
-		0.00 0		0.00	ing/it	9			11/22/20 (	//.10	
Lab Sample ID: LCS 880-67442/2-A							Clier	nt Sample	e ID: Lab Co	ontrol S	Sample
Matrix: Solid									Prep	Type: S	Soluble
Analysis Batch: 67628											
Analysis			Spike Added		LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte			250	255.8		mg/Kg		102	90 - 110		
			200	200.0		ing/itg		102	001110		
Lab Sample ID: LCSD 880-67442/3-	A					Cli	ent Sa	mple ID:	Lab Contro	I Samp	le Dup
Matrix: Solid									Prep	Type: S	Soluble
Analysis Batch: 67628											
			Spike		LCSD				%Rec		RPD
Analyte			Added		Qualifier	Unit	D		Limits	RPD	Limit
Chloride			250	258.4		mg/Kg		103	90 - 110	1	20
Lab Sample ID: 890-5662-4 MS								Cli	ient Sample	ID: S -	2 0-1'
Matrix: Solid										Type: S	
Analysis Batch: 67628											
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	91.7		248	339.3		mg/Kg		100	90 _ 110		
-											
-								CI	iont Comple		2.0.4
Lab Sample ID: 890-5662-4 MSD								Cli	ient Sample		
Lab Sample ID: 890-5662-4 MSD Matrix: Solid								Cli		ID: S - Type: S	
Lab Sample ID: 890-5662-4 MSD	Sample	Sample	Spike	MSD	MSD			Cli			
Lab Sample ID: 890-5662-4 MSD Matrix: Solid		Sample Qualifier	Spike Added		MSD Qualifier	Unit	D		Prep		Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628			-		Qualifier	- <mark>Unit</mark> mg/Kg	<u>D</u>		Prep %	Type: S	Soluble RPD
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride	Result		Added	Result	Qualifier		<u>D</u>	<b>%Rec</b>	Prep           %Rec           Limits           90 - 110	Type: S	RPD Limit
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS	Result		Added	Result	Qualifier		D	<b>%Rec</b>	Prep %Rec Limits 90 - 110	Type: S 	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid	Result		Added	Result	Qualifier		<u>D</u>	<b>%Rec</b>	Prep %Rec Limits 90 - 110	Type: S	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS	Result 91.7	Qualifier	Added 248	Result 339.7	Qualifier		<u>D</u>	<b>%Rec</b>	Prep %Rec Limits 90 - 110 nt Sample II Prep	Type: S 	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628	Result 91.7 Sample	Qualifier	Added 248 Spike	Result 339.7 MS	Qualifier	mg/Kg		<sup>%</sup> Rec 100 Clien	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec	Type: S 	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid	Result 91.7 Sample Result	Qualifier	Added 248 Spike Added	Result 339.7 MS Result	Qualifier	mg/Kg	D	<sup>%</sup> Rec 100 Clien	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits	Type: S 	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte	Result 91.7 Sample	Qualifier	Added 248 Spike	Result 339.7 MS	Qualifier	mg/Kg		%Rec 100 Clien %Rec	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec	Type: S 	RPD Limit 20 0-1'
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD	Result 91.7 Sample Result	Qualifier	Added 248 Spike Added	Result 339.7 MS Result	Qualifier	mg/Kg		%Rec           100           Clien           %Rec           104	Prep %Rec Limits 90 - 110 mt Sample II %Rec Limits 90 - 110 mt Sample II	RPD         0           D: S - 6         Type: S	RPD Limit 20 0-1' Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid	Result 91.7 Sample Result	Qualifier	Added 248 Spike Added	Result 339.7 MS Result	Qualifier	mg/Kg		%Rec           100           Clien           %Rec           104	Prep %Rec Limits 90 - 110 mt Sample II %Rec Limits 90 - 110 mt Sample II	RPD           0           0: S - 6           Type: S	RPD Limit 20 0-1' Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD	Result 91.7 Sample Result 66.8	Qualifier Sample Qualifier	Added 248 Spike Added 249	Result 339.7 MS Result 324.1	Qualifier MS Qualifier	mg/Kg		%Rec           100           Clien           %Rec           104	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep	RPD         0           D: S - 6         Type: S	RPD Limit 20 0-1' Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628	Result 91.7 Sample Result 66.8 Sample	Qualifier Sample Qualifier Sample	Added 248 Spike Added 249 Spike	Result 339.7 MS Result 324.1	Qualifier MS Qualifier MSD	Unit mg/Kg	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec	RPD           0           D: S - 6           Type: S	RPD Limit 20 0-1' Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628 Analyte	Result 91.7 Sample Result Sample Result	Qualifier Sample Qualifier	Added 248 Spike Added 249 Spike Added	Result 339.7 MS Result 324.1 MSD Result	Qualifier MS Qualifier MSD Qualifier	Unit Unit		%Rec           100           Clien           %Rec           104           Clien           %Rec	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits	RPD           0           0: S - 6           Type: S           0           0: S - 6           Type: S           0           0: S - 6           Type: S	RPD Limit 20 0-1' Soluble RPD Limit
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628	Result 91.7 Sample Result 66.8 Sample	Qualifier Sample Qualifier Sample	Added 248 Spike Added 249 Spike	Result 339.7 MS Result 324.1	Qualifier MS Qualifier MSD Qualifier	Unit mg/Kg	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec	RPD           0           D: S - 6           Type: S	RPD Limit 20 0-1' Soluble
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628 Analyte	Result 91.7 Sample Result Sample Result	Qualifier Sample Qualifier Sample	Added 248 Spike Added 249 Spike Added	Result 339.7 MS Result 324.1 MSD Result	Qualifier MS Qualifier MSD Qualifier	Unit Unit	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> <li>%Rec 103</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits	RPD         0           D: S - 6         Type: S           D: S - 6         Type: S           D: S - 6         Type: 1	Oluble           RPD           Limit           20           0-1'           Soluble           0-1'           Soluble           Limit           Limit           20           Limit           Limit           Soluble           RPD           Limit           20
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride	Result 91.7 Sample Result Sample Result	Qualifier	Added 248 Spike Added 249 Spike Added	Result 339.7 MS Result 324.1 MSD Result	Qualifier MS Qualifier MSD Qualifier	Unit Unit	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> <li>%Rec 103</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110	RPD         0           D: S - 6         Type: S           D: S - 6         Type: S           D: S - 6         Type: 1	RPD Limit 20 0-1' Soluble 0-1' Soluble RPD Limit 20
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628 Analysis Batch: 67628 Analyte Chloride Lab Sample ID: MB 880-67651/1-A	Result 91.7 Sample Result Sample Result	Qualifier	Added 248 Spike Added 249 Spike Added	Result 339.7 MS Result 324.1 MSD Result	Qualifier MS Qualifier MSD Qualifier	Unit Unit	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> <li>%Rec 103</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110	RPD         0           D: S - 6         Type: S           D: S - 6         Type: S           D: Method         1	RPD Limit 20 0-1' Soluble 0-1' Soluble RPD Limit 20
Lab Sample ID: 890-5662-4 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MS Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: 890-5662-14 MSD Matrix: Solid Analysis Batch: 67628 Analyte Chloride Lab Sample ID: MB 880-67651/1-A Matrix: Solid	Result 91.7 Sample Result Sample Result	Qualifier	Added 248 Spike Added 249 Spike Added	Result 339.7 MS Result 324.1 MSD Result	Qualifier MS Qualifier MSD Qualifier	Unit Unit	D	<ul> <li>%Rec 100</li> <li>Clien</li> <li>%Rec 104</li> <li>Clien</li> <li>%Rec 103</li> </ul>	Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110 mt Sample II Prep %Rec Limits 90 - 110	RPD         0           D: S - 6         Type: S           D: S - 6         Type: S           D: Method         1	RPD Limit 20 0-1' Soluble 0-1' Soluble RPD Limit 20

Client: H & R Enterprises

#### Job ID: 890-5662-1 SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography

Project/Site: GADWALL 18 FED COM #002H

Lab Sample ID: LCS 880-67651 Matrix: Solid	1/2-A						Clien	t Sample	e ID: Lab Co Prep	ontrol S Type: S	
Analysis Batch: 67652										.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			Spike	LCS	LCS				%Rec		
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Chloride			250	252.5		mg/Kg		101	90 - 110		
-											
Lab Sample ID: LCSD 880-676 Matrix: Solid	51/3-A					Cli	ent San	nple ID:	Lab Contro Prep	l Sampl Type: S	-
Analysis Batch: 67652										.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
-			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	252.7		mg/Kg		101	90 - 110	0	20
Lab Sample ID: 890-5662-1 MS	5							Cli	ent Sample	ID: S -	1 0-1'
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 67652											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	65.5		252	313.4		mg/Kg		99	90 - 110		
- Lab Sample ID: 890-5662-1 MS Matrix: Solid	SD							Cli	ent Sample Prep	ID: S - Type: S	
Analysis Batch: 67652											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chloride	65.5		252	316.1		mg/Kg		100	90 - 110	1	20
			252	316.1		mg/Kg			Sample ID: I		Blank
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661	/1-A	MB MB	252			mg/Kg		Client S	Sample ID: I Prep	Method Type: S	Blank oluble
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte	/1-A 	esult Qualifier	252	RL	MDL Unit		F		Sample ID: I Prep Analyz	Method Type: S	Blank oluble Dil Fac
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661	/1-A 		252		MDL Unit		<u> </u>	Client S	Sample ID: I Prep	Method Type: S	Blank oluble Dil Fac
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid	/1-A 	esult Qualifier	252	RL				Client S	Sample ID: I Prep 	Method Type: S ed 07:05	Blank oluble Dil Fac
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid	/1-A 	esult Qualifier		<b>RL</b> 5.00	mg/K			Client S	Sample ID: I Prep Analyz 11/23/23 ( e ID: Lab Co Prep	Method Type: S ed 07:05	Blank oluble Dil Fac 1 ample
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661	/1-A 	esult Qualifier		RL 5.00	LCS	g	Clien	Client S Prepared	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec	Method Type: S ed 07:05	Blank oluble Dil Fac 1 ample
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte	/1-A 	esult Qualifier	Spike Added	RL 5.00 LCS Result	mg/K	g <u>Unit</u>		Client S Prepared t Sample	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits	Method Type: S ed 07:05	Blank oluble Dil Fac 1 ample
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte	/1-A 	esult Qualifier		RL 5.00	LCS	g	Clien	Client S Prepared	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec	Method Type: S ed 07:05	Blank oluble Dil Fac 1 ample
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754	/1-A 	esult Qualifier	Spike Added	RL 5.00 LCS Result	LCS	g - <mark>Unit</mark> mg/Kg	Clien	Client S Prepared t Sample	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro	Method Type: S ed D7:05 Dontrol S Type: S	Blank oluble Dil Fac 1 ample oluble e Dup
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid	/1-A 	esult Qualifier	Spike Added	RL 5.00 LCS Result	LCS	g - <mark>Unit</mark> mg/Kg	Clien	Client S Prepared t Sample	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro	Method Type: S ed D7:05 Dontrol S Type: S	Blank oluble Dil Fac 1 ample oluble e Dup
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid	/1-A 	esult Qualifier	Spike Added 250	RL           5.00           LCS           Result           257.9	LCS Qualifier	g - <mark>Unit</mark> mg/Kg	Clien	Client S Prepared t Sample	Sample ID: I Prep 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro Prep	Method Type: S ed D7:05 Dontrol S Type: S	Blank oluble Dil Fac 1 ample oluble
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid	/1-A 	esult Qualifier	Spike Added	RL           5.00           LCS           Result           257.9           LCSD	LCS	g - <mark>Unit</mark> mg/Kg	Clien	Client S Prepared t Sample	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro	Method Type: S ed D7:05 Dontrol S Type: S	Blank oluble Dil Fac 1 ample oluble e Dup oluble RPD
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analysis Batch: 67661 Analyte	/1-A 	esult Qualifier	Spike Added 250 Spike	RL           5.00           LCS           Result           257.9           LCSD	LCS Qualifier	g - Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID:	Sample ID: I Prep 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Method Type: S ed Difference ontrol S Type: S I Sampl Type: S	Blank oluble Dil Fac 1 ample oluble e Dup oluble RPD Limit
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride	/1-A 	esult Qualifier	Spike Added 250 Spike Added	RL 5.00 LCS Result 257.9 LCSD Result	LCS Qualifier	g Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID: 1 <u>%Rec</u> 104	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits 90 - 110 %Rec Limits 90 - 110	Method Type: S ed D7:05 Dontrol S Type: S I Sampl Type: S RPD 1	Blank oluble Dil Fac 1 ample oluble e Dup oluble RPD Limit 20
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: 890-5662-24 M	/1-A 	esult Qualifier	Spike Added 250 Spike Added	RL 5.00 LCS Result 257.9 LCSD Result	LCS Qualifier	g Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID: 1 <u>%Rec</u> 104	Sample ID: I Prep Analyz 11/23/23 ( 2 ID: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 t Sample IE	Method Type: S ed D7:05 Dontrol S Type: S I Sampl Type: S RPD 1 2: TT - 2	Blank oluble Dil Fac 1 ample oluble RPD Limit 20 0-1'
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: 890-5662-24 M Matrix: Solid	/1-A 	esult Qualifier	Spike Added 250 Spike Added	RL 5.00 LCS Result 257.9 LCSD Result	LCS Qualifier	g Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID: 1 <u>%Rec</u> 104	Sample ID: I Prep Analyz 11/23/23 ( 2 ID: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 t Sample IE	Method Type: S ed D7:05 Dontrol S Type: S I Sampl Type: S RPD 1	oluble Dil Fac 1 ample oluble e Dup oluble RPD Limit 20 0-1'
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: 890-5662-24 M	/1-A 	Qualifier           55.00         U	Spike Added 250 Spike Added 250	RL           5.00           LCS           Result           257.9           LCSD           Result           260.2	LCS Qualifier Qualifier	g Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID: 1 <u>%Rec</u> 104	Sample ID: I Prep Analyz 11/23/23 ( Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 t Sample IE Prep	Method Type: S ed D7:05 Dontrol S Type: S I Sampl Type: S RPD 1 2: TT - 2	Blank oluble Dil Fac 1 ample oluble e Dup oluble RPD Limit 20 0-1'
Chloride Lab Sample ID: MB 880-67543/ Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCS 880-67543 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: LCSD 880-6754 Matrix: Solid Analysis Batch: 67661 Analyte Chloride Lab Sample ID: 890-5662-24 M Matrix: Solid	/1-A 	Qualifier           55.00         U	Spike Added 250 Spike Added	RL           5.00           LCS           Result           257.9           LCSD           Result           260.2           MS	LCS Qualifier	g Unit mg/Kg Cli	Clien D ent Sar	Client S Prepared t Sample <u>%Rec</u> 103 nple ID: 1 <u>%Rec</u> 104	Sample ID: I Prep Analyz 11/23/23 ( 2 ID: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 t Sample IE	Method Type: S ed D7:05 Dontrol S Type: S I Sampl Type: S RPD 1 2: TT - 2	Blank oluble Dil Fac 1 ample oluble e Dup oluble RPD Limit 20 0-1'

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Job ID: 890-5662-1 SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography

Sample Sample Spike MSD MSD %Rec		: TT - 2 ſype: So	t Sample ID Prep 1	Client							SD	.ab Sample ID: 890-5662-24 M Aatrix: Solid Analysis Batch: 67661
	RPD		%Rec				MSD	MSD	Spike	Sample	Sample	Analysis Batch. 07001
Chloride 69.8 251 326.7 mg/Kg 102 90.110 0	Limit	RPD	Limits	%Rec	D	Unit	Qualifier	Result	Added	Qualifier	Result	nalyte
	20	0	90 - 110	102		mg/Kg		326.7	251		69.8	hloride

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#### Job ID: 890-5662-1 SDG: Eddy County NM

**GC VOA** 

#### Prep Batch: 67330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67330/5-A	Method Blank	Total/NA	Solid	5035	
ep Batch: 67586					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 880-67586/5-A	Method Blank	Total/NA	Solid	5035	
nalysis Batch: 67637					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Total/NA	Solid	8021B	67647
890-5662-2	S - 1 2'	Total/NA	Solid	8021B	67647
890-5662-3	S - 1 3'R	Total/NA	Solid	8021B	67647
890-5662-4	S - 2 0-1'	Total/NA	Solid	8021B	67647
890-5662-5	S-2 2'R	Total/NA	Solid	8021B	67647
390-5662-6	S - 3 0-1'	Total/NA	Solid	8021B	67647
890-5662-7	S - 3 2'	Total/NA	Solid	8021B	67647
390-5662-8	S - 3 3'R	Total/NA	Solid	8021B	67647
390-5662-9	S - 4 0-1'	Total/NA	Solid	8021B	67647
390-5662-10	S - 4 2'	Total/NA	Solid	8021B	67647
390-5662-11	S - 4 3'R	Total/NA	Solid	8021B	67647
890-5662-12	S - 5 0-1'	Total/NA	Solid	8021B	67647
390-5662-13	S - 5 2'	Total/NA	Solid	8021B	67647
390-5662-14	S - 6 0-1'	Total/NA	Solid	8021B	67647
390-5662-15	S - 6 2'	Total/NA	Solid	8021B	67647
890-5662-16	S-6 3'R	Total/NA	Solid	8021B	67647
390-5662-17	S - 7 0-1'	Total/NA	Solid	8021B	67647
390-5662-18	S - 7 2'	Total/NA	Solid	8021B	67647
390-5662-19	S - 7 3'R	Total/NA	Solid	8021B	67647
890-5662-20	TT - 1 0-1'	Total/NA	Solid	8021B	67647
MB 880-67330/5-A	Method Blank	Total/NA	Solid	8021B	67330
MB 880-67647/5-A	Method Blank	Total/NA	Solid	8021B	67647
LCS 880-67647/1-A	Lab Control Sample	Total/NA	Solid	8021B	67647
LCSD 880-67647/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67647
890-5662-1 MS	S - 1 0-1'	Total/NA	Solid	8021B	67647
890-5662-1 MSD	S - 1 0-1'	Total/NA	Solid	8021B	67647

#### Prep Batch: 67647

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Total/NA	Solid	5035	
890-5662-2	S - 1 2'	Total/NA	Solid	5035	
890-5662-3	S - 1 3'R	Total/NA	Solid	5035	
890-5662-4	S - 2 0-1'	Total/NA	Solid	5035	
890-5662-5	S-2 2'R	Total/NA	Solid	5035	
890-5662-6	S - 3 0-1'	Total/NA	Solid	5035	
890-5662-7	S-3 2'	Total/NA	Solid	5035	
890-5662-8	S-3 3'R	Total/NA	Solid	5035	
890-5662-9	S - 4 0-1'	Total/NA	Solid	5035	
890-5662-10	S - 4 2'	Total/NA	Solid	5035	
890-5662-11	S - 4 3'R	Total/NA	Solid	5035	
890-5662-12	S - 5 0-1'	Total/NA	Solid	5035	
890-5662-13	S - 5 2'	Total/NA	Solid	5035	
890-5662-14	S-6 0-1'	Total/NA	Solid	5035	

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# GC VOA (Continued)

#### Prep Batch: 67647 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-15	S - 6 2'	Total/NA	Solid	5035	
890-5662-16	S-6 3'R	Total/NA	Solid	5035	
890-5662-17	S - 7 0-1'	Total/NA	Solid	5035	
890-5662-18	S - 7 2'	Total/NA	Solid	5035	
890-5662-19	S-7 3'R	Total/NA	Solid	5035	
890-5662-20	TT - 1 0-1'	Total/NA	Solid	5035	
MB 880-67647/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67647/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67647/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5662-1 MS	S - 1 0-1'	Total/NA	Solid	5035	
890-5662-1 MSD	S - 1 0-1'	Total/NA	Solid	5035	

#### Analysis Batch: 67691

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-21	TT - 1 2'	Total/NA	Solid	8021B	67739
890-5662-22	TT - 1 3'	Total/NA	Solid	8021B	67739
890-5662-23	TT - 1 4'	Total/NA	Solid	8021B	67739
890-5662-24	TT - 2 0-1'	Total/NA	Solid	8021B	67739
890-5662-25	TT - 2 2'	Total/NA	Solid	8021B	67739
890-5662-26	TT - 2 3'R	Total/NA	Solid	8021B	67739
MB 880-67586/5-A	Method Blank	Total/NA	Solid	8021B	67586
MB 880-67739/5-A	Method Blank	Total/NA	Solid	8021B	67739
LCS 880-67739/1-A	Lab Control Sample	Total/NA	Solid	8021B	67739
LCSD 880-67739/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67739

#### Prep Batch: 67739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-21	TT - 1 2'	Total/NA	Solid	5035	
890-5662-22	TT - 1 3'	Total/NA	Solid	5035	
890-5662-23	TT - 1 4'	Total/NA	Solid	5035	
890-5662-24	TT - 2 0-1'	Total/NA	Solid	5035	
890-5662-25	TT - 2 2'	Total/NA	Solid	5035	
890-5662-26	TT - 2 3'R	Total/NA	Solid	5035	
MB 880-67739/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67739/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67739/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

#### Analysis Batch: 67774

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Total/NA	Solid	Total BTEX	
890-5662-2	S - 1 2'	Total/NA	Solid	Total BTEX	
890-5662-3	S - 1 3'R	Total/NA	Solid	Total BTEX	
890-5662-4	S - 2 0-1'	Total/NA	Solid	Total BTEX	
890-5662-5	S-2 2'R	Total/NA	Solid	Total BTEX	
890-5662-6	S - 3 0-1'	Total/NA	Solid	Total BTEX	
890-5662-7	S - 3 2'	Total/NA	Solid	Total BTEX	
890-5662-8	S-3 3'R	Total/NA	Solid	Total BTEX	
890-5662-9	S - 4 0-1'	Total/NA	Solid	Total BTEX	
890-5662-10	S-4 2'	Total/NA	Solid	Total BTEX	
890-5662-11	S - 4 3'R	Total/NA	Solid	Total BTEX	
890-5662-12	S - 5 0-1'	Total/NA	Solid	Total BTEX	

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#### Job ID: 890-5662-1 SDG: Eddy County NM

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

#### GC VOA (Continued)

#### Analysis Batch: 67774 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-13	S - 5 2'	Total/NA	Solid	Total BTEX	
890-5662-14	S - 6 0-1'	Total/NA	Solid	Total BTEX	
890-5662-15	S - 6 2'	Total/NA	Solid	Total BTEX	
890-5662-16	S-6 3'R	Total/NA	Solid	Total BTEX	
890-5662-17	S - 7 0-1'	Total/NA	Solid	Total BTEX	
890-5662-18	S - 7 2'	Total/NA	Solid	Total BTEX	
890-5662-19	S-7 3'R	Total/NA	Solid	Total BTEX	
890-5662-20	TT - 1 0-1'	Total/NA	Solid	Total BTEX	
890-5662-21	TT - 1 2'	Total/NA	Solid	Total BTEX	
890-5662-22	TT - 1 3'	Total/NA	Solid	Total BTEX	
890-5662-23	TT - 1 4'	Total/NA	Solid	Total BTEX	
890-5662-24	TT - 2 0-1'	Total/NA	Solid	Total BTEX	
890-5662-25	TT - 2 2'	Total/NA	Solid	Total BTEX	
890-5662-26	TT - 2 3'R	Total/NA	Solid	Total BTEX	

#### GC Semi VOA

#### Analysis Batch: 67684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-2	S - 1 2'	Total/NA	Solid	8015B NM	67701
890-5662-3	S - 1 3'R	Total/NA	Solid	8015B NM	67701
890-5662-4	S - 2 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-5	S-2 2'R	Total/NA	Solid	8015B NM	67701
890-5662-6	S - 3 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-7	S-3 2'	Total/NA	Solid	8015B NM	67701
890-5662-8	S - 3 3'R	Total/NA	Solid	8015B NM	67701
890-5662-9	S - 4 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-10	S-4 2'	Total/NA	Solid	8015B NM	67701
890-5662-11	S - 4 3'R	Total/NA	Solid	8015B NM	67701
890-5662-12	S - 5 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-13	S-5 2'	Total/NA	Solid	8015B NM	67701
890-5662-14	S - 6 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-15	S - 6 2'	Total/NA	Solid	8015B NM	67701
890-5662-16	S-6 3'R	Total/NA	Solid	8015B NM	67701
890-5662-17	S - 7 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-18	S - 7 2'	Total/NA	Solid	8015B NM	67701
890-5662-19	S-7 3'R	Total/NA	Solid	8015B NM	67701
890-5662-20	TT - 1 0-1'	Total/NA	Solid	8015B NM	67701
MB 880-67701/1-A	Method Blank	Total/NA	Solid	8015B NM	67701
LCS 880-67701/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67701
LCSD 880-67701/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67701
890-5662-1 MS	S - 1 0-1'	Total/NA	Solid	8015B NM	67701
890-5662-1 MSD	S - 1 0-1'	Total/NA	Solid	8015B NM	67701

#### Prep Batch: 67701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-2	S - 1 2'	Total/NA	Solid	8015NM Prep	
890-5662-3	S - 1 3'R	Total/NA	Solid	8015NM Prep	
890-5662-4	S - 2 0-1'	Total/NA	Solid	8015NM Prep	

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#### Job ID: 890-5662-1 SDG: Eddy County NM

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

## GC Semi VOA (Continued)

#### Prep Batch: 67701 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-5	S-2 2'R	Total/NA	Solid	8015NM Prep	
890-5662-6	S - 3 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-7	S - 3 2'	Total/NA	Solid	8015NM Prep	
890-5662-8	S-3 3'R	Total/NA	Solid	8015NM Prep	
890-5662-9	S - 4 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-10	S - 4 2'	Total/NA	Solid	8015NM Prep	
890-5662-11	S - 4 3'R	Total/NA	Solid	8015NM Prep	
890-5662-12	S - 5 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-13	S-5 2'	Total/NA	Solid	8015NM Prep	
890-5662-14	S - 6 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-15	S-6 2'	Total/NA	Solid	8015NM Prep	
890-5662-16	S-6 3'R	Total/NA	Solid	8015NM Prep	
890-5662-17	S - 7 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-18	S - 7 2'	Total/NA	Solid	8015NM Prep	
890-5662-19	S-7 3'R	Total/NA	Solid	8015NM Prep	
890-5662-20	TT - 1 0-1'	Total/NA	Solid	8015NM Prep	
MB 880-67701/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67701/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67701/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5662-1 MS	S - 1 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-1 MSD	S - 1 0-1'	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 67795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-21	TT - 1 2'	Total/NA	Solid	8015NM Prep	
890-5662-22	TT - 1 3'	Total/NA	Solid	8015NM Prep	
890-5662-23	TT - 1 4'	Total/NA	Solid	8015NM Prep	
890-5662-24	TT - 2 0-1'	Total/NA	Solid	8015NM Prep	
890-5662-25	TT-2 2'	Total/NA	Solid	8015NM Prep	
890-5662-26	TT - 2 3'R	Total/NA	Solid	8015NM Prep	
MB 880-67795/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67795/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5662-21 MS	TT - 1 2'	Total/NA	Solid	8015NM Prep	
890-5662-21 MSD	TT - 1 2'	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 67801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-21	TT - 1 2'	Total/NA	Solid	8015B NM	67795
890-5662-22	TT - 1 3'	Total/NA	Solid	8015B NM	67795
890-5662-23	TT - 1 4'	Total/NA	Solid	8015B NM	67795
890-5662-24	TT - 2 0-1'	Total/NA	Solid	8015B NM	67795
890-5662-25	TT - 2 2'	Total/NA	Solid	8015B NM	67795
890-5662-26	TT - 2 3'R	Total/NA	Solid	8015B NM	67795
MB 880-67795/1-A	Method Blank	Total/NA	Solid	8015B NM	67795
LCS 880-67795/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67795
LCSD 880-67795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67795
890-5662-21 MS	TT - 1 2'	Total/NA	Solid	8015B NM	67795
890-5662-21 MSD	TT - 1 2'	Total/NA	Solid	8015B NM	67795

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#### Job ID: 890-5662-1 SDG: Eddy County NM
# **QC Association Summary**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H Job ID: 890-5662-1

SDG: Eddy County NM

# GC Semi VOA

# Analysis Batch: 67840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
90-5662-1	S - 1 0-1'	Total/NA	Solid	8015 NM	
90-5662-2	S - 1 2'	Total/NA	Solid	8015 NM	
390-5662-3	S - 1 3'R	Total/NA	Solid	8015 NM	
890-5662-4	S - 2 0-1'	Total/NA	Solid	8015 NM	
890-5662-5	S-2 2'R	Total/NA	Solid	8015 NM	
890-5662-6	S - 3 0-1'	Total/NA	Solid	8015 NM	
390-5662-7	S - 3 2'	Total/NA	Solid	8015 NM	
890-5662-8	S-3 3'R	Total/NA	Solid	8015 NM	
890-5662-9	S - 4 0-1'	Total/NA	Solid	8015 NM	
390-5662-10	S - 4 2'	Total/NA	Solid	8015 NM	
390-5662-11	S-4 3'R	Total/NA	Solid	8015 NM	
390-5662-12	S - 5 0-1'	Total/NA	Solid	8015 NM	
390-5662-13	S-5 2'	Total/NA	Solid	8015 NM	
390-5662-14	S - 6 0-1'	Total/NA	Solid	8015 NM	
890-5662-15	S - 6 2'	Total/NA	Solid	8015 NM	
390-5662-16	S-6 3'R	Total/NA	Solid	8015 NM	
390-5662-17	S - 7 0-1'	Total/NA	Solid	8015 NM	
90-5662-18	S - 7 2'	Total/NA	Solid	8015 NM	
90-5662-19	S - 7 3'R	Total/NA	Solid	8015 NM	
90-5662-20	TT - 1 0-1'	Total/NA	Solid	8015 NM	
390-5662-21	TT - 1 2'	Total/NA	Solid	8015 NM	
390-5662-22	TT - 1 3'	Total/NA	Solid	8015 NM	
90-5662-23	TT - 1 4'	Total/NA	Solid	8015 NM	
390-5662-24	TT - 2 0-1'	Total/NA	Solid	8015 NM	
390-5662-25	TT - 2 2'	Total/NA	Solid	8015 NM	
890-5662-26	TT - 2 3'R	Total/NA	Solid	8015 NM	

# HPLC/IC

# Leach Batch: 67442

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-4	S - 2 0-1'	Soluble	Solid	DI Leach	
890-5662-5	S-2 2'R	Soluble	Solid	DI Leach	
890-5662-6	S - 3 0-1'	Soluble	Solid	DI Leach	
890-5662-7	S - 3 2'	Soluble	Solid	DI Leach	
890-5662-8	S-3 3'R	Soluble	Solid	DI Leach	
890-5662-9	S - 4 0-1'	Soluble	Solid	DI Leach	
890-5662-10	S-4 2'	Soluble	Solid	DI Leach	
890-5662-11	S - 4 3'R	Soluble	Solid	DI Leach	
890-5662-12	S - 5 0-1'	Soluble	Solid	DI Leach	
890-5662-13	S - 5 2'	Soluble	Solid	DI Leach	
890-5662-14	S - 6 0-1'	Soluble	Solid	DI Leach	
890-5662-15	S-6 2'	Soluble	Solid	DI Leach	
890-5662-16	S-6 3'R	Soluble	Solid	DI Leach	
890-5662-17	S - 7 0-1'	Soluble	Solid	DI Leach	
890-5662-18	S - 7 2'	Soluble	Solid	DI Leach	
890-5662-19	S-7 3'R	Soluble	Solid	DI Leach	
890-5662-20	TT - 1 0-1'	Soluble	Solid	DI Leach	
890-5662-21	TT - 1 2'	Soluble	Solid	DI Leach	
890-5662-22	TT - 1 3'	Soluble	Solid	DI Leach	
890-5662-23	TT - 1 4'	Soluble	Solid	DI Leach	

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# **QC Association Summary**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

# HPLC/IC (Continued)

# Leach Batch: 67442 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 880-67442/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67442/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67442/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5662-4 MS	S - 2 0-1'	Soluble	Solid	DI Leach	
890-5662-4 MSD	S - 2 0-1'	Soluble	Solid	DI Leach	
890-5662-14 MS	S - 6 0-1'	Soluble	Solid	DI Leach	
890-5662-14 MSD	S - 6 0-1'	Soluble	Solid	DI Leach	

# Leach Batch: 67543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-5662-24	TT - 2 0-1'	Soluble	Solid	DI Leach		
890-5662-25	TT-2 2'	Soluble	Solid	DI Leach		
890-5662-26	TT - 2 3'R	Soluble	Solid	DI Leach		
MB 880-67543/1-A	Method Blank	Soluble	Solid	DI Leach		
LCS 880-67543/2-A	Lab Control Sample	Soluble	Solid	DI Leach		
LCSD 880-67543/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach		
890-5662-24 MS	TT - 2 0-1'	Soluble	Solid	DI Leach		
890-5662-24 MSD	TT - 2 0-1'	Soluble	Solid	DI Leach		

# Analysis Batch: 67628

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5662-4	S - 2 0-1'	Soluble	Solid	300.0	67442
890-5662-5	S-2 2'R	Soluble	Solid	300.0	67442
890-5662-6	S - 3 0-1'	Soluble	Solid	300.0	67442
890-5662-7	S-3 2'	Soluble	Solid	300.0	67442
890-5662-8	S-3 3'R	Soluble	Solid	300.0	67442
890-5662-9	S - 4 0-1'	Soluble	Solid	300.0	67442
890-5662-10	S - 4 2'	Soluble	Solid	300.0	67442
890-5662-11	S - 4 3'R	Soluble	Solid	300.0	67442
890-5662-12	S - 5 0-1'	Soluble	Solid	300.0	67442
890-5662-13	S - 5 2'	Soluble	Solid	300.0	67442
890-5662-14	S - 6 0-1'	Soluble	Solid	300.0	67442
890-5662-15	S-6 2'	Soluble	Solid	300.0	67442
890-5662-16	S-6 3'R	Soluble	Solid	300.0	67442
890-5662-17	S - 7 0-1'	Soluble	Solid	300.0	67442
890-5662-18	S - 7 2'	Soluble	Solid	300.0	67442
890-5662-19	S - 7 3'R	Soluble	Solid	300.0	67442
890-5662-20	TT - 1 0-1'	Soluble	Solid	300.0	67442
890-5662-21	TT - 1 2'	Soluble	Solid	300.0	67442
890-5662-22	TT - 1 3'	Soluble	Solid	300.0	67442
890-5662-23	TT - 1 4'	Soluble	Solid	300.0	67442
MB 880-67442/1-A	Method Blank	Soluble	Solid	300.0	67442
LCS 880-67442/2-A	Lab Control Sample	Soluble	Solid	300.0	67442
LCSD 880-67442/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67442
890-5662-4 MS	S - 2 0-1'	Soluble	Solid	300.0	67442
890-5662-4 MSD	S - 2 0-1'	Soluble	Solid	300.0	67442
890-5662-14 MS	S - 6 0-1'	Soluble	Solid	300.0	67442
890-5662-14 MSD	S - 6 0-1'	Soluble	Solid	300.0	67442

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# Job ID: 890-5662-1 SDG: Eddy County NM

# **QC Association Summary**

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H Job ID: 890-5662-1

SDG: Eddy County NM

# HPLC/IC

# Leach Batch: 67651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-1	S - 1 0-1'	Soluble	Solid	DI Leach	
890-5662-2	S - 1 2'	Soluble	Solid	DI Leach	
890-5662-3	S - 1 3'R	Soluble	Solid	DI Leach	
MB 880-67651/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67651/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67651/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5662-1 MS	S - 1 0-1'	Soluble	Solid	DI Leach	
890-5662-1 MSD	S - 1 0-1'	Soluble	Solid	DI Leach	

# Analysis Batch: 67652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-5662-1	S - 1 0-1'	Soluble	Solid	300.0	67651	
890-5662-2	S - 1 2'	Soluble	Solid	300.0	67651	
890-5662-3	S - 1 3'R	Soluble	Solid	300.0	67651	
MB 880-67651/1-A	Method Blank	Soluble	Solid	300.0	67651	
LCS 880-67651/2-A	Lab Control Sample	Soluble	Solid	300.0	67651	
LCSD 880-67651/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67651	
890-5662-1 MS	S - 1 0-1'	Soluble	Solid	300.0	67651	
890-5662-1 MSD	S - 1 0-1'	Soluble	Solid	300.0	67651	

# Analysis Batch: 67661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5662-24	TT - 2 0-1'	Soluble	Solid	300.0	67543
890-5662-25	TT - 2 2'	Soluble	Solid	300.0	67543
890-5662-26	TT - 2 3'R	Soluble	Solid	300.0	67543
MB 880-67543/1-A	Method Blank	Soluble	Solid	300.0	67543
LCS 880-67543/2-A	Lab Control Sample	Soluble	Solid	300.0	67543
LCSD 880-67543/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67543
890-5662-24 MS	TT - 2 0-1'	Soluble	Solid	300.0	67543
890-5662-24 MSD	TT - 2 0-1'	Soluble	Solid	300.0	67543

Project/Site: GADWALL 18 FED COM #002H

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-1 Matrix: Solid

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Client Sample ID: S - 1 0-1'

Client: H & R Enterprises

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 13:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 13:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 10:51	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 10:51	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67651	11/22/23 15:00	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67652	11/22/23 18:37	СН	EET MID

# Lab Sample ID: 890-5662-2

Lab Sample ID: 890-5662-3

Lab Sample ID: 890-5662-4

Matrix: Solid

Matrix: Solid

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Client Sample ID: S - 1 2'

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 13:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 11:56	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67651	11/22/23 15:00	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67652	11/22/23 18:56	СН	EET MID

# Client Sample ID: S - 1 3'R Date Collected: 11/17/23 00:00

# Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 13:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 13:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 12:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 12:18	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67651	11/22/23 15:00	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67652	11/22/23 19:03	СН	EET MID

# Client Sample ID: S - 2 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 14:15	SM	EET MID

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Matrix: Solid

# Client Sample ID: S - 2 0-1' Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			67840	11/27/23 12:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 12:40	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 07:38	SMC	EET MID

# Client Sample ID: S - 2 2'R Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 14:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 14:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 13:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 13:02	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 07:57	SMC	EET MID

# Client Sample ID: S - 3 0-1'

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 14:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 14:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 13:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 13:24	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 08:04	SMC	EET MID

# Client Sample ID: S - 3 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 13:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 13:46	SM	EET MID

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Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-4 Matrix: Solid

Lab Sample ID: 890-5662-5

> 11 12 13

# Lab Sample ID: 890-5662-6

Lab Sample ID: 890-5662-7

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

# Lab Chronicle

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

# Client Sample ID: S - 3 2' Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 08:11	SMC	EET MID

# Client Sample ID: S - 3 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 15:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 15:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 14:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 14:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 08:17	SMC	EET MID

# Client Sample ID: S - 4 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 15:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 14:30	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 08:37	SMC	EET MID

# Client Sample ID: S - 4 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Lab Sample ID: 890-5662-10 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 16:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 16:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 14:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 14:52	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 08:43	SMC	EET MID

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Job ID: 890-5662-1 SDG: Eddy County NM Lab Sample ID: 890-5662-7 Matrix: Solid Prepared or Analyzed Analyst Lab EET MID

# Lab Sample ID: 890-5662-9 Matrix: Solid

Lab Sample ID: 890-5662-8

Released to Imaging: 1/10/2024 9:41:59 AM

Project/Site: GADWALL 18 FED COM #002H

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

3'R

Batch

Method

5035

8021B

Total BTEX

8015NM Prep

8015B NM

DI Leach

300.0

300.0

0-1'

8015 NM

Client: H & R Enterprises

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Client Sample ID: S - 4

Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35

Client Sample ID: S - 5

Date Collected: 11/17/23 00:00

Date Received: 11/17/23 13:35

Initial

Amount

5.02 g

5 mL

10.09 g

1 uL

4.96 g

50 mL

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

50 mL

50 mL

Batch

67647

67637

67774

67840

67701

67684

67442

67628

67628

Number

Dil

1

1

1

1

1

Factor

Run

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-11

Analyst

EL

MNR

SM

SM

ткс

SM

SA

SMC

SMC

Lab Sample ID: 890-5662-13

Lab Sample ID: 890-5662-14

Prepared

or Analyzed

11/22/23 14:02

11/23/23 17:41

11/23/23 17:41

11/27/23 15:35

11/27/23 09:35

11/27/23 15:35

11/20/23 15:01

11/22/23 08:50

11/22/23 08:57

Matrix: Solid

Lab

EET MID

EET MID

EET MID

EET MID

EET MID

EET MID

FFT MID

EET MID

EET MID

Matrix: Solid

Lab Sample ID: 890-5662-12 Matrix: Solid

Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Prep	5035			4.95 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 18:01	MNR	EET MID
Analysis	Total BTEX		1			67774	11/23/23 18:01	SM	EET MID
Analysis	8015 NM		1			67840	11/27/23 15:58	SM	EET MID
Prep	8015NM Prep			10.01 g	10 mL	67701	11/27/23 09:35	ТКС	EET MID
Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 15:58	SM	EET MID
Leach	DI Leach			5.04 g	50 mL	67442	11/20/23 15:01	SA	EET MID

## Client Sample ID: S - 5 2' Date Collected: 11/17/23 00:00

Analysis

# Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 18:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 18:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 16:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 16:19	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 09:03	SMC	EET MID

50 mL

1

# Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 18:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 18:42	SM	EET MID

**Eurofins Carlsbad** 

Client Sample ID: S - 6 0-1'

Matrix: Solid

Analysis

300.0

Soluble

Date Received	. 11/1//23 13:3	5								
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			67840	11/27/23 16:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 16:42	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	67442	11/20/23 15:01	SA	EET MID

50 mL

1

50 mL

67628

# 2' Client Sample ID: S - 6 Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	l Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 19:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 19:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 17:04	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 09:29	SMC	EET MID

### Client Sample ID: S - 6 3'R

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 19:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 19:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 17:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 17:28	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 09:36	SMC	EET MID

## **Client Sample ID: S - 7** 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch	ch Dil Initial Final Batch	Prepared						
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 19:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 19:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 17:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 17:51	SM	EET MID

**Eurofins Carlsbad** 

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-14 Matrix: Solid

SMC

Lab Sample ID: 890-5662-15

Lab Sample ID: 890-5662-16

Lab Sample ID: 890-5662-17

11/22/23 09:10

EET MID

Matrix: Solid

Matrix: Solid

Matrix: Solid

Client: H & R Enterprises

Matrix: Solid

Matrix: Solid

Matrix: Solid

9

Job ID: 890-5662-1 SDG: Eddy County NM

Lab Sample ID: 890-5662-17

Lab Sample ID: 890-5662-18

Lab Sample ID: 890-5662-19

# Client Sample ID: S - 7 0-1' Date Collected: 11/17/23 00:00

Project/Site: GADWALL 18 FED COM #002H

Date Received: 11/17/23 13:35	

2'

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 09:56	SMC	EET MID

# Client Sample ID: S - 7

Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 20:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 20:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 18:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 18:12	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 10:02	SMC	EET MID

# Client Sample ID: S - 7 3'R Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 20:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 20:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 18:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	67701	11/27/23 09:35	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 18:33	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 10:09	SMC	EET MID

# Client Sample ID: TT - 1 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Lab Sample ID: 890-5662-20 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	67647	11/22/23 14:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67637	11/23/23 20:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/23/23 20:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/27/23 18:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	67701	11/27/23 09:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67684	11/27/23 18:54	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 10:15	SMC	EET MID

**Eurofins Carlsbad** 

Initial

Amount

5.03 g

5 mL

10.03 g

1 uL

4.97 g

50 mL

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

50 mL

Batch

67739

67691

67774

67840

67795

67801

67442

67628

Number

Dil

1

1

1

1

1

Factor

Run

Batch

Method

5035

8021B

Total BTEX

8015NM Prep

8015B NM

DI Leach

300.0

3'

8015 NM

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

## Client Sample ID: TT - 1 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Prepared

or Analyzed

11/27/23 10:51

11/28/23 06:13

11/28/23 06:13

11/28/23 10:39

11/27/23 17:59

11/28/23 10:39

11/20/23 15:01

11/22/23 10:22

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-21

Analyst

MNR

MNR

SM

SM

ткс

SM

SA

SMC

Matrix: Solid

Lab

EET MID

Matrix: Solid

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# Lab Sample ID: 890-5662-22 Matrix: Solid

Lab Sample ID: 890-5662-23

Lab Sample ID: 890-5662-24

Date Collected: 11/17/23 00:00
Date Received: 11/17/23 13:35

**Client Sample ID: TT - 1** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	67739	11/27/23 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/28/23 06:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/28/23 06:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/28/23 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	67795	11/27/23 17:59	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 11:45	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 10:28	SMC	EET MID

## Client Sample ID: TT - 1 4' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	67739	11/27/23 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/28/23 06:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/28/23 06:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/28/23 12:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67795	11/27/23 17:59	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 12:08	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67442	11/20/23 15:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67628	11/22/23 10:35	SMC	EET MID

# Client Sample ID: TT - 2 0-1' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	67739	11/27/23 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/28/23 07:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/28/23 07:14	SM	EET MID

**Eurofins Carlsbad** 

# Released to Imaging: 1/10/2024 9:41:59 AM

Matrix: Solid

Initial

Amount

9.98 g

1 uL

4.98 g

50 mL

Final

Amount

10 mL

1 uL

50 mL

50 mL

Batch

67840

67795

67801

67543

67661

Number

Dil

1

1

1

Factor

Run

Batch

Туре

Prep

Analysis

Analysis

Analysis

Leach

Batch

Method

8015 NM

8015NM Prep

8015B NM

**DI Leach** 

300.0

Prep Type

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Lab

EET MID

EET MID

EET MID

EET MID

EET MID

Matrix: Solid

Matrix: Solid

Job ID: 890-5662-1 SDG: Eddy County NM

# Lab Sample ID: 890-5662-24 Matrix: Solid

Analyst

SM

TKC

SM

SA

СН

Lab Sample ID: 890-5662-25

Lab Sample ID: 890-5662-26

Prepared

or Analyzed

11/28/23 12:30

11/27/23 17:59

11/28/23 12:30

11/21/23 11:10

11/23/23 08:57

# Client Sample ID: TT - 2 2' Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	67739	11/27/23 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/28/23 07:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/28/23 07:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/28/23 12:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67795	11/27/23 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 12:52	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67543	11/21/23 11:10	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67661	11/23/23 09:17	CH	EET MID

# Client Sample ID: TT - 2 3'R Date Collected: 11/17/23 00:00 Date Received: 11/17/23 13:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	67739	11/27/23 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/28/23 07:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67774	11/28/23 07:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			67840	11/28/23 13:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	67795	11/27/23 17:59	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67801	11/28/23 13:14	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67543	11/21/23 11:10	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67661	11/23/23 09:23	CH	EET MID

# Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Job ID: 890-5662-1

# Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Ithority	Progra	m	Identification Number	Expiration Date
xas	NELAP	)	T104704400-23-26	06-30-24
The following analytes	are included in this report, but	the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
for which the agency	loes not offer certification.		, , , , , ,	t may molade analytee
• •		Matrix	Analyte	
for which the agency	loes not offer certification.		, , , , , ,	

Eurofins Carlsbad

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Project/Site: GADWALL 18 FED COM #002H

Client: H & R Enterprises

# Job ID: 890-5662-1 SDG: Eddy County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

# Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

**Released to Imaging: 1/10/2024 9:41:59 AM** 

# Sample Summary

Client: H & R Enterprises Project/Site: GADWALL 18 FED COM #002H

Job	ID:	890-5662-1

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5662-1	S - 1 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-2	S - 1 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-3	S - 1 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R
890-5662-4	S - 2 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-5	S-2 2'R	Solid	11/17/23 00:00	11/17/23 13:35	2'R
890-5662-6	S - 3 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-7	S-3 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-8	S-3 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R
890-5662-9	S - 4 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-10	S-4 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-11	S-4 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R
890-5662-12	S - 5 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-13	S-5 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'R
890-5662-14	S - 6 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-15	S - 6 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-16	S-6 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R
890-5662-17	S - 7 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-18	S - 7 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-19	S-7 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R
890-5662-20	TT - 1 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-21	TT - 1 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-22	TT - 1 3'	Solid	11/17/23 00:00	11/17/23 13:35	3'
890-5662-23	TT - 1 4'	Solid	11/17/23 00:00	11/17/23 13:35	4'
890-5662-24	TT - 2 0-1'	Solid	11/17/23 00:00	11/17/23 13:35	0-1'
890-5662-25	TT - 2 2'	Solid	11/17/23 00:00	11/17/23 13:35	2'
890-5662-26	TT - 2 3'R	Solid	11/17/23 00:00	11/17/23 13:35	3'R

Billice if differents     LfLC1 LULIVE     Monk Order Comments     Work Order Comments       Experiment     Correct CRA ENE RE-Y     Regarms     Vertical and the set of th
Company Name         CCTC_ERALE_LAT         Program.         USTPST         PRO         Brownfelds         RRP         Struct
Email Machine     Emportugi Level III     Eventuality     Errors     Detection       Email Machine     Bash     Cox, Statz PF     Detection     Detection       Email Machine     Bash     Cox, Statz PF     Detection     Detection       Detection     Bash     MaxrySS REQUEST     None: NO     DI Water: H       Detection     Detection     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     DI Water: H       None: NO     Diversion     MaxrySS REQUEST     None: NO     Di Water: H
Enail:     Introduct.     ED     ADaPT     Other:       City     Turn Around     Preservative     Preservative     Preservative       City     Transaction     Preservative     Preservative     Preservative       Due Date:     Due Date:     Preservative     Preservative       Nome: NO     Nome: NO     Cool: Cool     Preservative       Nome: NO     Nome: NO     Cool: Cool: Preservative     Nome: NO       Nome: NO     Nome: NO     Nome: NO     Cool: Cool: Preservative       Nome: NO     Nome: NO     Nome: NO     Cool: Cool: Preservative       Nome: NO     Nome: NO     Nome: NO     Cool: Cool: Preservative       Nome: NO     Nome: NO     No     No       No     No     No     No       No
Turn Acund     AnALYSIS REQUEST     Preservative       Bue Date:     Push     Pesh     Nome: NO       Due Date:     Push     Pesh     Nome: NO       Due Date:     Push     Pesh     Nome: NO       Due Date:     Pesh     Nome: NO     Coli Coal       In start the day received by stapm     Pesh     Pesh     Pesh       Nome: NO     Wetker:     Pesh     Pesh     Pesh       Nome: NO     Wetker:     Pesh     Pesh     Pesh       Nome: NO     Pesh     Pesh     Pesh     Pesh       Pesh     Pesh     Pesh
Recurst         Recurst         Record         Recor
Due Date:     Coor Cool       No     Vit starts the day received by       Include     Vit starts the day received by </td
In the lab, if received by 4.30pm         No       Wet ker:       Colspan="2">No         No       Wet ker:       Colspan="2">No         No       Wet ker:       Colspan="2">No         Ometer ID:       Proved       No
No     Wetter:     Cg/No     En       omterrib:     #////////////////////////////////////
Ometer L:     Construction       ration Fractor:     U. C.       ration Fractor:     U. Horison       Value     Value       Value <td< td=""></td<>
erature Reading:       1.2         reture reading:       1.3         ted Time       Depth       Grab/ cons       Fort         1.33       0-1       1/3405       X         1.33       2       X       X         1.37       1       1       1         1.43       1       1       1         1.43       2       1       1         1.43       2       1       1         1.41       1       1       1         1.41       1       1       1       1         1.41       1       1       1       1         2       2       1       1       1       1         2       2       1       1       1       1       1         2       2       1       1       1
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Time         Time         Graph         Graph         Graph         Comp         Cont
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3'K     1     1     1     1     1     1       3'K     1     1     1     1     1     1       9'I     1     1     1     1     1     1       1'I     1     1     1     1     1     1       2'I     1     1     1     1
3'K       1
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3'R     1     1       3'R     1       3'R     1       1'     1       2'     1
3'K     1     1     1     1     1       3RCRA     13PPM Texas 11     1     1     1     1       3RCRA     13PPM Texas 11     1     1     1     1       3RCRA     1     1     1     1     1
BRCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V
BRCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V       Trip/spip.ento.sRCRA Sh As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
BRCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V Trip/spip.eono.spc.Ra Sh As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631/245.1/7470/747
Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Date/Time

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C	S of	ients	sids RRC Superfund		Other:	Preservative Codes	None: NO DI Water: H <sub>2</sub> O	Cool: Cool MeOH: Me	HCL: HC HNO 3: HN H SO · H - NAOH· NA		NaHSO 4: NABIS	Na 25 203: NaSO 3	Zn Acetate+NaOH: Zn	NaOH+Ascorbic Acid: SAPC	Sample Comments										[  Sn U V Zn 7470 / 7471		Date/Time			
Work Order No:	www.xenco.com	Work Order Comments	Program: UST/PST PRP Brownfields	Reporting: Level III Level III PST/UST	õ		Nor		HCI	H,P	Nat	Na	Zu	NaC											Se Ag SiO <sub>2</sub> Na Sr 1 Hg: 1631 / 245.1 /	tions Arol negotiated.	Received by: (Signature)			
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-F296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199		lact luig	Cotera Enalgere	Report	Delive	ANALYSIS BEOLIEST						5	201	ł		×									Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K v Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Lotte: Signature of this document and relinquishment of samples constitutes availd purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco, the free dient if such losses are due to circumstances beyond the control of service. Standard Service and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of service. Standard Service, but not analyzed. These terms will be enforced unless previously regotiated of Eurofins Xenco, but not analyzed. These terms will be enforced unless previously regotiated.	Date/Time Relinquished by: (Signature)	17 17.235	र )	9
		Bill to: (if different)	Company Name:	Address:	Email:	Time Amind	utine Rush Code		TAT starts the day received by the lab if received by 4:300m	Т		Pal	ug:	ture:	Time Depth Grab/ # of ampled Comp Cont	3 R 1.296	1 1 1.0	124	0-1-	-b	3'8	C-1;	2.6	1 1 1 1-0	8RCRA 13PPM Texas 11 AI Sb / TCLP/SPLP6010 : 8RCRA Sb	hase order from client company to Eurofin iny responsibility for any losses or expense ge of \$5 for each sample submitted to Eur	nature)			
Environment Testing Xenco		Coller	N.	220		1.1001	Routine	du Cutu Due Date:	-	Voc No	eter	NO N/A	No N/A	Corrected Temperature:	Matrix Date Time	100									8RCR.	of service: Signature of this document and relinquishment of samples constitutes a valid purchase order from clier of service. Eurofins Xerco will be liable only for the cost of samples and shall not assume any responsibility for a of service. A minimum charge of \$5500 will be applied to each project and a charge of \$5 for each san	e) Received by: (Signature)	alour		
🐺 eurotins		Project Manager:	Company Name:	Address:	City, State ZIP:		Project Number:	Project Location: EO	Sampler's Name:		tact:	Ye		Total Containers:	Sample Identification	5-4 3'R			5.6 0-1	56 21	5-6 3'R	S-1 0-1	5-1 S	TT-1 0-1'	/ 6010 d(s) and Me	Votice: Signature of this document and reli of service. Eurofins Xenco will be llable only of Eurofins Xenco. A minimum charge of 58	Relinquished by: (Signature)	Firs fell	1	5

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ork Order No:	Work Order Comments	P Brownfields RRC Superfund	el III PST/UST TRRP Level IV	ADaPT 🔲 Other:	Preservative Codes		C001:C001 MEOH: ME HCL: HC HNO 3: HN H_250 4: H_2 NAOH: Na	H <sub>3</sub> PO 4: HP NaHSO 4: NABIS Na -S -OL - NASO -	Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	Sample Comments					SiO <sub>2</sub> Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471		(Signature) Date/Time	Revised Date: 08/25/2020 Rev 2020.2
Work Order No: www.xenco.com	Work	Program: UST/PST PRP	Reporting: Level II Level III	Deliverables: EDD	ANALYSIS REQUEST										r Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631	idard terms and conditions tances beyond the control rced unless previously negotiated.	Signature) Received by: (Signature)	
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carisbad, NM (575) 988-3199	laci (via				ANALYSI			2	EIDE X	BTE DHC					AI Sb As Ba Be B Cd Ca Cr Co Cu Fe I CRA Sb As Ba Be Cd Cr Co Cu Pb Mn M	is Xenco, its affiliates and subcontractors. It assigns star to incurred by the client if such losses are due to circums rofins Xenco, but not analyzed. These terms will be enfo	Date/Time Relinquished by: (Signature)	و
	Bill to: (if different)	Company Name:	Address: City, State ZIP:	Email:	Turn Around	Houtine Rush Code		Thermometer ID: 7 Pro 00 Delanateria	220	d Samoled Depth Grab/ # of	-6	4.	Q.1	3,2 1 1	I         I	tes a valid purchase order from client company to Eurofin II not assume any responsibility for any losses or expense yect and a charge of \$5 for each sample submitted to Eur	Received by: (Signature)	
Xenco	Project Manager: MCG [ [ ] 0/	Company Name:	Address: City, State ZIP:	1001	1 al ula 1		Project Location: 2200 M	Temp Blank:	Cooler Custody Seals: Tes No CA Correct Sample Custody Seals: Yes No CA Temper Total Containers: Correct	dentification Matrix	2011 Solt	-2- 		3'8	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Motice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Senco, its affiliates and subcontractors. It assigns standard terms and conditions of sencies. Eurofins Senco, will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of sences. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Senco, but not analyzed. These terms will be enforced unless previously negotiated.	Relinquished by: (Signature) Receive	

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Custody Seals Intact. Custody Seal No ∆ Yes ∆ No	Relinquished by	Relinquished by	Relinquished by	Empty Kit Relinquished by	Deliverable Requested I, II III, IV Other (specify)	Possible Hazard Identification Unconfirmed	Note. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matix being analyzed the samples must be shipped back to the Eurofins En accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the sign	S - 4 0-1' (890-5662-9)	S - 3 3'R (890-5662-8)	S - 3 2' (890-5662-7)	S - 3 0-1' (890-5662-6)	S - 2 2'R (890-5662-5)	S - 2 0-1' (890-5662-4)	S - 1 3'R (890-5662-3)	S - 1 2' (890-5662-2)	S - 1 0-1' (890-5662-1)		Sample Identification - Client ID (Lab ID)	Site	Project Name GADWALL 18 FEDCOM #002H	Email	Phone 432-704-5440(Tel)	State, Zip TX, 79701	City Midland	Address 1211 W Florida Ave	Company Eurofins Environment Testing South Centr	Client Contact Shipping/Receiving	Client Information (Sub Contract Lab)	<b>Eurotins Carlsbad</b> 1089 N Canal St Carlsbad, NM 88220 Phone. <i>575</i> -988-3199 Fax: 575-988-3199
	Date/Time	Date/Time	Date/Time <sup>.</sup>		Primary Deliverable Rank.		nment Testing South Cent ed above for analysis/test th Central LLC attention ir	11/17/23	11/17/23	11/17/23	11/17/23	11/17/23	11/17/23	11/17/23	11/17/23	11/17/23	N	Sample Date	SSOW#.	Project #: 89000108	WO #-	PO#		TAT Requested (days):	Due Date Requested 11/27/2023		Phone.	Sampler <sup>.</sup>	
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	Company	Company	Company				hip of method, samples mus l accreditations	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Preservation Code:	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=/2									ድ ፲	2	Chain of Custody Record
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2	70	R	Re		Special Instructions/	Sample Disposal ( A	accreated back	×	×	×	×	×	×	×	×	×	X	Perform MS/MS 8021B/5036FP_C		2008.201995/	NO)	9.3		) 49. j tus de la constante tus de la constante		Accreditations Required (See note): NELAP - Texas	rame	Jessica	orc
Cooler Temperature(s)	Received-by:	Received by	Received by		al Ins	le Di Retu	ditation X to th late re	×	×	×	×	×	×	×	×	×		Total_BTEX_GCV								ns Rec Texa:	r@et	نق	-
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						<b>tained long</b> Archive For	is forwa instruct 1s Envi												Other:	L EDA					Preservation Codes	Job # 890-5662-1	Page: Page 1 of 3	COC No <sup>-</sup> 890-1832	💸 eurofins
						igert <sub>)r</sub>	arded u lions w ronmei										1	Spec		ĂĂ	ice Di Water	MeOn Amchlor Ascorbic Acid	Nitric Acid NaHSO4	DH Acetat	vatio	662-1	1 of 3	, 832 1	rofi
						han 1	inder c II be pr nt Testi											ial In				cid		w.	1 Cod				ns
	Con	Con	Con			fee may be assessed if samples are retained longer than 1 month) t	on compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.											Special Instructions/Note:		N K : 9 H :			ποτ zzz	oz zoz					m
	Company	Company	Company			<b>nth)</b> Months	f-custo 1 Any 1th Cer										1	tions		Trizma other (specify)	- Acetone MICAA	H2SO4 TSP Dodecahydrate	P Na2045 Q - Na2SO3 R Na2S2O3	None AsNaO2	Hexane				Environment Testing
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# Eurofins Carlsbad

1089 N Canal St Carlsbad NM 88220

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**Chain of Custody Record** 

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Carlsbad NM 88220 Phone. 575-988-3199 Fax: 575-988-3199				ouy in		Ì																	Environment Testing	iting
Client Information (Sub Contract Lab)	Sampler			Lab PM Kramer Jessica	er Je	ssica	"						Carri	Carrier Tracking No(s)	king	Vo(s)				COC No 890-18	COC Nº 890-1832 2			
	Phone.			E-Mail Jessica Kramer@et.eurofinsus c	Ca Kr	amer	Øet.	euro	finsu	scom	3		State New	State of Origin. New Mexico	ŝ ŝ					Page Page	Page Page 2 of 3			
Company Eurofins Environment Testing South Centr					Accreditations Required (See note): NELAP - Texas	itation	s Req	uired	(See r	iote):										Job #-	Job # 890-5662-1			
Address 1211 W Florida Ave,	Due Date Requested 11/27/2023	đ							⊳	Anal	lysis	Rec	Requested	ē						Pres	Preservation Codes	≤ ges	n Hexane	
City Midland	TAT Requested (days)	ys):				<u>waadha</u>													n <del>a na na na</del> Salandali	אממ	HCL NaOH 7n Acetate	οz	I - None AsNaO2	
State, Zip TX, 79701					<u>kis II.</u> Mga	-4230-4394													teri ni sure Vanati san		Nitric Acid NaHSO4	σου	P Na2O4S Q Na2SO3 R Na2SO3	
Phone: 432-704-5440(Tel)	PO#				<u>)</u>	Bert B. All			трн	le									<del>egens er 'n</del> steur Milte	בסד אאלי	F - MeOH G Amchlor H - Ascorbic Acid		TSP Dodecahydrate	ie -
Email	WO #·				200120207	Willia des			p Fuli	Chlorie									St. adval. SS	: o :	I Ice J - DI Water	<<⊂		
Project Name: GADWALL 18 FEDCOM #002H	Project #: 89000108				-9404287240429				_S_Pre	EACH									tainer		K EDTA L EDA	N×	other (specify)	
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			Sample	Matrix	Itered MS/M	035FP_	TEX_GC	D_Caic	D_NM/8	GFM_28									umber	I				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	(C=comp, G=grab)	<u>م</u>	Field F Perfor	00.0000000	Total_E	8015MC	8015MC	300_OF									Total N		Special	Instr	Special Instructions/Note:	
	M	X	Preservation Code:	on Code:	$\bigotimes$													100 C	X	and the second				[]
S - 4 2' (890-5662-10)	11/17/23	Mountain		Solid		×	×	×	×	×									4	<u>na tendo</u>				
S - 4 3'R (890-5662-11)	11/17/23	Mountain		Solid		×	×	×	×	×									4	anteineteinen				
S - 5 0-1' (890-5662-12)	11/17/23	Mountain		Solid		×	×	×	×	×										n de la constilla				
S - 5 2' (890-5662-13)	11/17/23	Mountain		Solid		×	×	×	×	×									1000	anto-eterfiti				
S - 6 0-1' (890-5662-14)	11/17/23	Mountain		Solid		×	×	×	x	x									4	<u></u>				
S - 6 2' (890-5662-15)	11/17/23	Mountain		Solid		×	×	×	×	×										<u>terte anno 19</u>				
S - 6 3'R (890-5662-16)	11/17/23	Mountain		Solid		×	×	×	×	×									(4)	nyu china chi				
S - 7 0-1' (890-5662-17)	11/17/23	Mountain		Solid		×	×	×	×	×									( 1997) ( 1997)	otonoval				
S - 7 2' (890-5662-18)	11/17/23	Mountain		Solid		×	×	×	×	×										<u>1.4.93968</u>				
Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately.	Testing South Centri ove for analysis/tests/ tral_LLC attention im	al LLC places t /matrix being ar mediately If al	he ownership o lalyzed the sar l requested acc	of method anal nples must be preditations are	yte & a shippe currer	accred id back	tation te re	comp e Euro turn th	liance ofins E he sigr	nvirol ned C	our s Iment	ubcon Testir Cust	g Sou g Sou	iborat th Cei	ntral I to sa	This LC Ia	samp aborat npliar	le shi lory o	pmen othei Eurof	t is for Finstru Tins Er	rwarded under uctions will be nvironment Te	r chair provid esting	on our subcontract laboratories This sample shipment is forwarded under chain-of-custody. If the ronment Testing South Central LLC laboratory or other instructions will be provided Any changes to Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC	°
Possible Hazard Identification					S	]pi	e Di	soos	al ()	1 fee	maj	]ġ	ISSe	ssed	ifs	- me	les a		etain	ed h	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	1 1	ronth)	
Uncontitmed Deliverable Requested          IV Other (specify)	Primary Deliverable Rank	ahle Rank 2				Return To Client	Retu		Return To Client		Dist Regulirements		Disposal By Lab	osall	3y La	õ			Arci	Archive For	For		Months	
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Relinquished by:

Date/Time:

Company

Received by

Date/Time Date/Time

Cooler Temperature(s) °C and Other Remarks.

Ver 06/08/2021

Company

Custody Seals Intact. ∆ Yes ∆ No

Custody Seal No

# **Eurofins Carlsbad** 5 6

# 1089 N Canal St.

Carlsbad NM 88220 Phone. 575-988-3199

# **Chain of Custody Record**

**13** 14

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Date/Time Date/Time: Date/Time

> Company Company

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Received by *<i>deceived* 

Date/Time

Company

Company

Company

Ver: 06/08/2021

Cooler Temperature(s) °C and Other Remarks

Date

Time.

Date/Time Date/Time

Received by:

Custody Seals Intact: ∆ Yes ∆ No

Custody Seal No

Carlsbad NM 88220 Phone, 575-988-3199 Fax 575-988-3199					Ì		-															Environment Testing
ormation (Sub Contract Lab)	Sampler			Lab PM. Kramer Jessica	r Je	SSIC	ß						Ca	Carrier Tracking No(s)	ackin	g No(	s			<u>@ 0</u>	COC No: 890-1832 3	
Client Contact Shipping/Receiving	Phone			E-Mail Jessica Kramer@et.eurofinsus cc	aKra	ame	@e	euro	ofins	20	ă		N Sta	State of Origin. New Mexico	Drigin.	Ŭ				जू जू	<sup>Page:</sup> Page 3 of 3	
Company Eurofins Environment Testing South Centr				7 >	Accreditations Required (See note): NELAP - Texas	P -	1s Re	quired S	(See	note):			ŀ							<u>ي</u> 8	Job # 890-5662-1	
Address 1211 W Florida Ave, ,	Due Date Requested 11/27/2023									Anal	ysis		Requested	ste	▫					70	Preservation Codes	les M Hexane
City: Midland	TAT Requested (days):	/s):			lan halls a san ya a san san ya																B NaOH D Zn Acetate	N - None O AsNaO2
State Zip TX, 79701				Carlon dat		<u>in 1996 (1968)</u>														Salatita, etxe dh		P - Na2O4S Q Na2SO3 R - Na2S2O3
Phone: 432-704-5440(Tel)	PO #			84.5					трн										Er open St	ders della	F MeOH G Amchlor	S H2SO4 T TSP Dodecahydrate
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Project Name GADWALL 18 FEDCOM #002H	Project # 89000108				2009/00/00/20/20/20	ΈX			S Pre					··				·		tainer	L EDA	Y Trizma Z - other (specify)
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		Sample	Sample Type (C=comp.	Matrix (W-water S=solid, S=solid, d	form MS/M	1B/5035FP_	I_BTEX_GO	5MOD_Calc	5MOD_NM/8	ORGFM 28										al Number		
Sample Identification - Client ID (Lab ID)	Sample Date	2	<u></u>	Æ		802	<u></u>	4	÷	1 1	100	-	Surger Street	-		-					Special In	Special Instructions/Note
S - 7 3'R (890-5662-19)	11/17/23	Mountain		Solid	-5	~	<	< /	<	- -	1		. Sult			- Afe				·¥		
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TT - 2 0-1' (890-5662-24)	11/17/23	Mountain		Solid		×	×	×	×	$\overline{\mathbf{v}}$	-								****C.18			
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TT - 2 3'R (890-5662-26)	11/17/23	Mountain		Solid		×	×	×	×	×									and the second			
Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC	Testing South Centra ve for analysis/tests/ tral, LLC attention im	il, LLC places t matrix being ar mediately If al	he ownership of alyzed the sam I requested acc	f method analy nples must be s reditations are o	te & a hippec	ccred d bac It to d	litation k to the ate in	ne Eur Ne Eur	plianc ofins he sig	e upo Enviro Ined C	n our : mmen bhain c	subco t Test of Cus	ntract ing So tody a	labori buth C attestii	atorie entra ng to	s Th LLC said c	is san Iabor ompli	nple s ratory ance	hipm or ot to Eu	ent is her in rofins	ces the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody in ng analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any chan If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central	hain-of-custody If the rovided. Any changes to ing South Central LLC
Possible Hazard Identification					S		le Di	spo	sal (	A fe	e ma	٦¢	ass	esse	dif	sam	ples	are	₋reta	inec	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	month)
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Released to Imaging: 1/10/2024 9:41:59 AM

Job Number: 890-5662-1 SDG Number: Eddy County NM

List Source: Eurofins Carlsbad

# Login Sample Receipt Checklist

Client: H & R Enterprises

# Login Number: 5662 List Number: 1

Creator: Bruns, Shannon	
-------------------------	--

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Job Number: 890-5662-1 SDG Number: Eddy County NM

List Source: Eurofins Midland

List Creation: 11/20/23 10:41 AM

# Login Sample Receipt Checklist

Client: H & R Enterprises

# Login Number: 5662 List Number: 2 Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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

QUESTIONS

Action 299558

QUESTION	NS
Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
6001 Deauville Blvd, Ste 300N	Action Number:
Midland, TX 79706	299558
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

# QUESTIONS Drorogulaitaa

Frerequisites	
Incident ID (n#)	nAB1718137369
Incident Name	NAB1718137369 GADWALL 18 FEDERAL COM #003 @ 30-015-39964
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-39964] GADWALL 18 FEDERAL COM #003

# Location of Release Source

Please answer all the questions in this group.	
Site Name	Gadwall 18 Federal Com #003
Date Release Discovered	06/20/2017
Surface Owner	Federal

# Incident Details

Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	Νο
Has this release endangered or does it have a reasonable probability of endangering public health	Νο
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

# Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission Crude Oil Released (bbls) Details Not answered. Cause: Equipment Failure | Pump | Produced Water | Released: 20 BBL | Recovered: 4 BBL | Produced Water Released (bbls) Details Lost: 16 BBL Is the concentration of chloride in the produced water >10,000 mg/l No Condensate Released (bbls) Details Not answered. Natural Gas Vented (Mcf) Details Not answered. Natural Gas Flared (Mcf) Details Not answered. Other Released Details Not answered. Are there additional details for the questions above (i.e. any answer containing Not answered. Other, Specify, Unknown, and/or Fire, or any negative lost amounts)

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

QUESTIONS, Page 2

Page 96 of 102

Action 299558

[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS** (continued) Operator: OGRID: CIMAREX ENERGY CO. OF COLORADO 162683 6001 Deauville Blvd, Ste 300N Action Number: Midland, TX 79706 299558 Action Type:

QUESTIONS

Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values repo	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by Subsection A of 19.15.29.7	7 NMAC No	
Reasons why this would be considered a submission for a notific release	cation of a major Unavailable.	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or fla	aring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial	Response

The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for releat the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/03/2024

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

QUESTIONS, Page 3

Action 299558

Page 97 of 102

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
6001 Deauville Blvd, Ste 300N	Action Number:
Midland, TX 79706	299558
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Site Characterization	

**QUESTIONS** (continued)

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release ar	id the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 100 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 100 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	Νο

# Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.         Requesting a remediation plan approval with this submission       Yes         Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.         Have the lateral and vertical extents of contamination been fully delineated       Yes         Was this release entirely contained within a lined containment area       No         Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)       77         Chloride       (EPA 300.0 or SM4500 Cl B)       77         TPH (GRO+DRO+MRO)       (EPA SW-846 Method 8015M)       50.7         GRO+DRO       (EPA SW-846 Method 8015M)       50.7         BTEX       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0         Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12			
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.         Have the lateral and vertical extents of contamination been fully delineated       Yes         Was this release entirely contained within a lined containment area       No         Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)       77         Chloride       (EPA 300.0 or SM4500 Cl B)       77         TPH (GR0+DR0+MRO)       (EPA SW-846 Method 8015M)       50.7         GR0+DRO       (EPA SW-846 Method 8015M)       50.7         BTEX       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0	Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Have the lateral and vertical extents of contamination been fully delineated       Yes         Was this release entirely contained within a lined containment area       No         Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)       77         Chloride       (EPA 300.0 or SM4500 Cl B)       77         TPH (GRO+DRO+MRO)       (EPA SW-846 Method 8015M)       50.7         GRO+DRO       (EPA SW-846 Method 8015M)       50.7         BTEX       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0	Requesting a remediation plan approval with this submission	Yes	
Was this release entirely contained within a lined containment area       No         Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)       No         Chloride       (EPA 300.0 or SM4500 Cl B)       77         TPH (GRO+DRO+MRO)       (EPA SW-846 Method 8015M)       50.7         GRO+DRO       (EPA SW-846 Method 8015M)       50.7         BTEX       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0	Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination as	ssociated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)         Chloride       (EPA 300.0 or SM4500 Cl B)       77         TPH (GRO+DRO+MRO)       (EPA SW-846 Method 8015M)       50.7         GRO+DRO       (EPA SW-846 Method 8015M)       50.7         BTEX       (EPA SW-846 Method 8021B or 8260B)       0         Benzene       (EPA SW-846 Method 8021B or 8260B)       0	Have the lateral and vertical extents of contamination been fully delineated	Yes	
Chloride         (EPA 300.0 or SM4500 Cl B)         77           TPH (GRO+DRO+MRO)         (EPA SW-846 Method 8015M)         50.7           GRO+DRO         (EPA SW-846 Method 8015M)         50.7           BTEX         (EPA SW-846 Method 8021B or 8260B)         0           Benzene         (EPA SW-846 Method 8021B or 8260B)         0	Was this release entirely contained within a lined containment area	No	
TPH (GRO+DRO+MRO)         (EPA SW-846 Method 8015M)         50.7           GRO+DRO         (EPA SW-846 Method 8015M)         50.7           BTEX         (EPA SW-846 Method 8021B or 8260B)         0           Benzene         (EPA SW-846 Method 8021B or 8260B)         0	Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
GRO+DRO         (EPA SW-846 Method 8015M)         50.7           BTEX         (EPA SW-846 Method 8021B or 8260B)         0           Benzene         (EPA SW-846 Method 8021B or 8260B)         0	Chloride (EPA 300.0 or SM4500 Cl B)	77	
BTEX         (EPA SW-846 Method 8021B or 8260B)         0           Benzene         (EPA SW-846 Method 8021B or 8260B)         0	TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	50.7	
Benzene (EPA SW-846 Method 8021B or 8260B) 0	GRO+DRO (EPA SW-846 Method 8015M)	50.7	
	BTEX (EPA SW-846 Method 8021B or 8260B)	0	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation. the report must include a proposed remediation plan in accordance with 19.15.29.12	Benzene (EPA SW-846 Method 8021B or 8260B)	0	
which includes the anticipated timelines for beginning and completing the remediation.	which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,	
On what estimated date will the remediation commence 11/17/2023	On what estimated date will the remediation commence	11/17/2023	
On what date will (or did) the final sampling or liner inspection occur 11/17/2023	On what date will (or did) the final sampling or liner inspection occur	11/17/2023	
On what date will (or was) the remediation complete(d) 11/17/2023	On what date will (or was) the remediation complete(d)	11/17/2023	
What is the estimated surface area (in square feet) that will be reclaimed 0	What is the estimated surface area (in square feet) that will be reclaimed	0	
What is the estimated volume (in cubic yards) that will be reclaimed 0	What is the estimated volume (in cubic yards) that will be reclaimed	0	
What is the estimated surface area (in square feet) that will be remediated 0	What is the estimated surface area (in square feet) that will be remediated	0	
What is the estimated volume (in cubic yards) that will be remediated 0	What is the estimated volume (in cubic yards) that will be remediated	0	
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	These estimated dates and measurements are recognized to be the best guess or calculation at the ti	me of submission and may (be) change(u) over time as more remediation enorts are completed.	

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

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.

Action 299558

1 1010.(000) 410 0410 1 0.(000) 410 0402				
QUESTI	QUESTIONS (continued)			
Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683 Action Number: 299558 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)			
QUESTIONS				
Remediation Plan (continued)				
Please answer all the questions that apply or are indicated. This information must be provided to the	appropriate district office no later than 90 days after the release discovery date.			
This remediation will (or is expected to) utilize the following processes to remediate	/ reduce contaminants:			
(Select all answers below that apply.)				
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Not answered.			
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.			
(In Situ) Soil Vapor Extraction	Not answered.			
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.			
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.			
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.			
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.			
OTHER (Non-listed remedial process)	Yes			
Other Non-listed Remedial Process. Please specify	Assessment samples resulted in no need for remediation			
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efi which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,			
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	nowledge and understand that pursuant to OCD rules and regulations all operators are required uses which may endanger public health or the environment. The acceptance of a C-141 report by idequately investigate and remediate contamination that pose a threat to groundwater, surface does not relieve the operator of responsibility for compliance with any other federal, state, or			
I hereby agree and sign off to the above statement	Name: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/03/2024			

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 5

Action 299558

QUESTIONS (continued)		
Operator:	OGRID:	
CIMAREX ENERGY CO. OF COLORADO	162683	
6001 Deauville Blvd, Ste 300N	Action Number:	
Midland, TX 79706	299558	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
QUESTIONS		

# Deferral Requests Only

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of	the following items must be confirmed as part of any request for deferral of remediation.
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

QUESTIONS, Page 6

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Action 299558

QUESTIONS (continued)		
Operator:	OGRID:	
CIMAREX ENERGY CO. OF COLORADO	162683	
6001 Deauville Blvd, Ste 300N	Action Number:	
Midland, TX 79706	299558	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	299557
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/17/2023
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	400

**Remediation Closure Request** 

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.		
Requesting a remediation closure approval with this submission Yes		
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes	
What was the total surface area (in square feet) remediated	0	
What was the total volume (cubic yards) remediated	0	
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes	
What was the total surface area (in square feet) reclaimed	0	
What was the total volume (in cubic yards) reclaimed	0	
Summarize any additional remediation activities not included by answers (above)	No remediation or reclamation took place due to samples not resulting in any exceedances to the NMOCD spill rule. Will reclaim entire pad during P/A per normal operation	
	closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of	
to report and/or file certain release notifications and perform corrective actions for releas the OCD does not relieve the operator of liability should their operations have failed to a water, human health or the environment. In addition, OCD acceptance of a C-141 report		
1	Name: Laci Luig	

I hereby agree and sign off to the above statement	Name: Laci Luig Title: ES&H Specialist Email: DL_PermianEnvironmental@coterra.com Date: 01/03/2024
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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 7

Action 299558

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**QUESTIONS** (continued) Operator: OGRID: CIMAREX ENERGY CO. OF COLORADO 162683 6001 Deauville Blvd, Ste 300N Action Number: Midland, TX 79706 299558 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) QUESTIONS Reclamation Report

Only answer the questions in this group if all reclamation steps have been completed. Requesting a reclamation approval with this submission No

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

CONDITIONS

Action 299558

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
6001 Deauville Blvd, Ste 300N	Action Number:
Midland, TX 79706	299558
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

# CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation Closure approved. A complete and accurate reclamation report will need to be submitted. The reclamation report will need to address all of the requirements of 19.15.29.13 NMAC including pictures of the reclaimed area, and a proposed revegetation plan. Subsequent to the approval of a reclamation plan, a revegetation report will need to be submitted, including pictures of the revegetated areas, once the site meets the requirements for vegetation cover found in 19.15.29.13 D.(3) NMAC. Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used as long as the requirements of the surface owner provide equal or better protection of freshwater, human health and the environment.	1/10/2024