# SITE INFORMATION

# **Report Type: Closure Report**

General Site Infor	rmation:									
Site:		Medano VA St	Medano VA State #002							
Company:		EOG Resource	EOG Resources							
Section, Townshi	ip and Range	Unit E	Sec. 16	T 23S	R 31E					
County:		Eddy County,	NM							
GPS:			32.30613			-103.	78976			
Surface Owner:		State of New M	lexico							
Release Data:										
Date Released:		6/5/2008								
Type Release:		Produced Water								
Source of Contam	ination:	Main Produced Water Line								
Fluid Released:		100 bbls.								
Fluids Recovered:		0 bbls.								
Official Communi	ication:									
Name:	James Kennedy				Clair Gonzales					
Company:	EOG Resources				Tetra Tech					
Address:	5509 Champions Dr	r			901 West Wall Street					
		Suite 100								
City:	Midland, TX 79706	Midland, Texas 79701								
Phone number:	432-686-7016				432-687-8634					
Fax:										
Email:	James.Kennedy@	eogresources.com clair.gonzales@tetratech.com					ch.com			

Site Characterization	
Depth to Groundwater:	128.64' below ground surface (bgs)
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)									
Benzene	Total BTEX	TPH (GRO+DRO+MRO)	Chlorides						
10 mg/kg	50 mg/kg	2,500 mg/kg	20,000 mg/kg						



February 10, 2021

Bradford Billings Hydrologist District 2 Artesia Oil Conservation Division Santa Fe, NM 87505

#### Re: Closure Report EOG Resources Medano VA State #002 Unit E, Section 16, Township 23 South, Range 31 East Eddy County, New Mexico 2RP-187

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to submit this closure report for review. The EOG Medano VA State #002 (API No. 30-015-26382) is located in the Public Land Survey System (PLSS) Unit E, Section 16, Township 23 South, Range 31 East, Eddy County, New Mexico (Site). The Site coordinates are 32.30613°, -103.78976°. The site location is shown on Figures 1 and 2.

#### Background

According to the State of New Mexico C-141 Initial Report, the release occurred on June 5, 2008 due to a rupture at the main produced water line located at approximately 0.11 miles west of the Site. The release consisted of 100 barrels (bbls.) of produced water and affected an area of approximately 125 feet (ft) by 10-feet. During immediate response actions, the line was isolated, the well was shut down. No free fluids were recovered. The initial C-141 report was submitted on June 18, 2008 and approved by the NMOCD on July 10, 2008. The release was subsequently assigned the Remediation Permit (RP) number 2RP-187. The C-141 forms are included in Appendix A.

#### Site Characterization

A site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances, and the site is in a low karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 17, approximately 1-mile West of the site, and has a reported depth to groundwater of 128.64 feet below ground surface. Site characterization data is included in Appendix B.

#### Regulatory



A risk-based evaluation was performed for the site per the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO+DRO+MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 20,000 mg/kg.

#### **Summary of Remediation Activities**

On August 13, 2008, Yates Petroleum Corporation (Yates) conducted a soil investigation to delineate the release footprint horizontally and vertically. Three (3) samples were taken (GS/Comp-001, GS/Comp-002 and GS/Comp-003) and analyzed for BTEX (50 ppm) and TPH (5,000 ppm). The summary report, included on Appendix C, shows all the samples below RRALs for BTEX and TPH. Yates submitted a new C-141 form on June 18, 2008 including the closure report, but they were denied by the NMOCD on May 13, 2015 because the samples were not analyzed by chloride. The denied C-141 form and the closure report are included in Appendix C.

#### **Soil Assessment and Analytical Results**

On February 2, 2021, Tetra Tech personnel were on site to evaluate and sample the release area. The formerly impacted area was identified from the description in the C-141, the aerial imagery and the figure enclosed on the closure report. A total of three (3) auger holes (AH-1, AH-2, and AH-3) were advanced to total depths ranging from surface to 4.5' below ground surface (bgs.) Soils were field screened for salinity using an Extech EC400 ExStik to determine sampling intervals. A total of fifteen (15) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples analyzed exceeded the Site RRAL for chloride (20,000 mg/kg), TPH (20,000 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg). In addition, all the samples were also below the 600 mg/kg chloride and 100 mg/kg TPH reclamation standards.



#### Conclusion

Based on the laboratory results and remediation activities performed, EOG requests closure of this spill issue. The final C-141 initial reports are enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted, TETRA TECH

alos

Clair Gonzales, P.G. Senior Project Manager Tetra Tech, Inc.

# Figures

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# Tables

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#### Table 1 EOG Medano VA State #002 Eddy County, New Mexico

Samala		Comple	Soil Status		TPH (mg/kg)			Domesmo	Taluana	Ethlybergene	Vulene		Chlorida	
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	2/2/2021	0-1	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<9.90
	"	1-1.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	10.7
AH-1	"	2-2.5	Х	-	-	-	-	-	-	-	-	-	-	10.5
	"	3-3.5	Х	-	-	-	-	-	-	-	-	-	-	11.8
	"	4-4.5	Х	-	-	-	-	-	-	-	-	-	-	10.3
	2/2/2021	1.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<9.94
	"	1-1.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<10.0
AH-2	"	2-2.5	Х	-	-	-	-	-	-	-	-	-	-	10.2
	"	3-3.5	Х	-	-	-	-	-	-	-	-	-	-	10.0
	"	4-4.5	Х	-	-	-	-	-	-	-	-	-	-	11.1
	2/2/2021	1.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<9.94
	"	1-1.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<10.0
AH-3	"	2-2.5	Х	-	-	-	-	-	-	-	-	-	-	<9.92
	"	3-3.5	Х	-	-	-	-	-	-	-	-	-	-	11.0
	"	4-4.5	Х	-	-	-	-	-	-	-	-	-	-	10.1

Not Analyzed

(-)

Exceeded RRALs

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# Photos

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# EOG Resources Medano VA State #002 Eddy County, New Mexico



View of Release Area - View North



**TETRA TECH** 

# EOG Resources Medano VA State #002 Eddy County, New Mexico



View of Release Area - View West



View of Release Area – View East

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# Appendix A

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District I 1625 N. French District II	Dr., Hobbs, N	M 88240	St Energy Mi	ate of nerals	New Mcx and Natura	ico l Resources			Form C-141 Revised October 10, 2003	
301 W. Grand . <u>District [1]</u>	Avenue, Artes	ia, NM 88210	3	Oil (	Conse	rvation Div	vision			Submit 2 Copies to appropriate
000 Rio Brazos District IV	s Road, Azlec,	NM 87410	_	1220	Sout	h St. Franc	is Dr.			with Rule 116 on back
220 S. St. Fran	icis Dr., Santa	Fe, NM 8750	5 	S	anta F	e, NM 875	05			side of form
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n SEB 08	192534	<u>58</u>		0	PER/	TOR			🛛 Initic	al Report 🔲 Final Repor
Name of Co	mpany			OGRID Nur	nber	Contact Robert Ash	54			
Address	ieum Corpo	1411011		23775		Telephone 1	No,			
104 S. 4 <sup>TH</sup> S	Street					505-748-14	71			
Facility Nar Medano VA	me State #2			30-015-2638	2	Well	10			
Suefeee Ou				Mineral (	Juner				Louse	No
Surface Ow	ner			State	2 WIIGI				VO-01	20
				LOC		N OF PEI	FASE			
Unit Letter	Section	Township	Range	Feet from the	North	/South Line	Feet from the	East/V	/est Line	County
E	10	2 <b>3</b> 5	316	1960		North	000		A 621	Ennà
	L			Latitude 32.	30613	Longitude	103.78976			
				NAT	URE	OF REL	EASE			
Type of Relea	ase					Volume of Release Volume Recovered				
Source of Re	lease					Date and Hour of Occurrence Date and Hour of Discovery				
<u>Main water li</u> Was Immedi	ne un Nation Gi					6/5/2008, /	AM Whom?		6/5/2008	<u>, AM</u>
was minicula		X	Yes 🗌	No 🗌 Not R	cquired	Mike Brate	her/NMOCD Di	strict II,(	Voicemail	)
By Whom?						Date and H	lour			
Was a Water	course Reach	ed?	unent			If YES, Vo	lume Impacting	the Wate	rcourse.	
If a Watercov	irse was Impa	acted, Descr	Yes 🛛 ibe Fully.*	No		N/A				
N/A	ra of Deabler	and Dama	-	Tuluu #		····-			<b></b> ,	
Describe Cau Main produce	se of Probler e water line v	n and Keme vast of Med:	ana Actior ano VA Sta	ite #2 ruptured. 1	solated	line, shut dow	n well(s), called	vácuum	truck and	repaired line.
Describe Area	a Affected an	d Cleimup /	Action Tak	en.*				• •	• • • • •	
for TPH/BTE	X and chlorid	des (for refe	rence purp	oses). If initial a	nalytice	d results for T	PH& BTEX are	over RR	AL's a wo	ork plan will be submitted. If
initial analytic Water: >100'	cal results to:	r 1 PFI & B ( 25'), Wellho	ad Protec	tion Area: No, I	listance	on, C-141 wil e to Surface V	l be submitted to Vater Body: >10	00', SIT	E RANK	ING IS 0.
hereby certif	fy that the ini	formation gi	ven above	is true and comp	lete to t	he best of my	knowledge and u	nderstan	d that purs	suant to NMOCD rules and
public health	or the enviro	nment. The	acceptance	e of a C-141 repo	ort by th	e NMÓCD m	arked as "Final R	eport" de	pes not rel	ieve the operator of hability
should their of the environ	perations have	ve failed to a tition_NMC	adequately CD accept	investigate and r. lance of a C-141	emediat report d	te contaminati locs not relieve	on that pose a thr	cat to gro	ound wate.	r, surface water, human health
ederal, state,	or local laws	and/or regu	lations.							
	()	$\mathcal{L}$					<u>OIL CON</u>	<u>SERV</u>	ATION	DIVISION
Signature:	· Robert Ash	·		Approved by	District Supervis		Re Fin an	mediation Actions to be completed and al C-141 submitted with confirmation alyses/documentation on or before the		
Titlas Massia						A MARATINI Det	7-10-00		uninstian	Dute Q-19-Ad
LING: FULLOU	пленциякеди	. <u> </u>		Approvat Dat	DELINEATION R	EQUIREI	2 until			
e-mail Addres	ss: boba@yp	cnm.com		· . ·		Conditions i c	ontamination reaches 1 a site specific accep	table level.	As	Attached
Date: Wednes	day, June 18	, 2008	Pho	one: 505-748-147	<u>'I</u> ,	/ithin 20 -	varranted, a work plat	n may be re	quired.	2RP-187
ttach Addit	ional Sheets	s If Necess	агу		a fi	remediation wor nalized and subn	k plan based on delin	neation sho	ould be	'Notify OCD 48 hours prior to

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Page 3

Oil Conservation Division

Incident ID		
District RP		
Facility ID		
Application ID		

Page 16 of 62

# 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.

Received by OCD: 3/7/2022 2	2:29:52 PM tota of Now Mariaa			Page 17 of 62
roim C-141			Incident ID	
Page 4	Oil Conservation Division		District RP	
			Facility ID	
			Application ID	
I hereby certify that the inform regulations all operators are rec public health or the environmen failed to adequately investigate addition, OCD acceptance of a and/or regulations. Printed Name:	ation given above is true and complete to the b quired to report and/or file certain release notifi nt. The acceptance of a C-141 report by the OC and remediate contamination that pose a threa C-141 report does not relieve the operator of re- TF. Kennedy	est of my knowledge a ications and perform co CD does not relieve the t to groundwater, surfa esponsibility for comp Title: Date:	nd understand that purs prrective actions for rele e operator of liability sh- ace water, human health liance with any other fe	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
email:	U	Telephone:		
OCD Only Received by:		Date:		

Page 6

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.

<b><u>Closure Report Attachment Checklist</u>: Each of the following it</b>	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 must be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate OD	C 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 and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the co- accordance with 19.15.29.13 NMAC including notification to the C	ete to the best of my knowledge and understand that pursuant to OCD rules in release notifications and perform corrective actions for releases which f a C-141 report by the OCD does not relieve the operator of liability mediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in DCD when reclamation and re-vegetation are complete.
Printed Name:	1 itle:
Signature: James F. Jennedy	Date:
email:	Telephone:
OCD Only OCD	3/7/2022
Received by:	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and/	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible /or regulations.
Closure Approved by: Ashley Maxwell	3/17/2023 Date:
Printed Name: Ashley Maxwell	Title: Environmental Specialist

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# Appendix B

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2RP-187





# New Mexico NFHL Data







FEMA Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

nmflood.org is made possible through a collaboration with NMDHSEM, EDAC, and FEMA This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information. Resejyed by OCD: 3/7/2022 2:29:52 PM



USGS Home Contact USGS Search USGS

National Water Information System: Mapper



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USGS Home Contact USGS Search USGS



National Water Information System: Web Interface USGS Water Resources

 Data Category:
 Geographic Area:

 Groundwater
 V

♥ G0

Click to hideNews Bulletins

Introducing The Next Generation of USGS Water Data for the Nation
 Full News

Groundwater levels for New Mexico

Click to hide state-specific text

\* IMPORTANT: Next Generation Station Page

#### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 321809103481801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 321809103481801 23S.31E.17.31141

Eddy County, New Mexico Latitude 32°18'11.3", Longitude 103°48'23.4" NAD83 Land-surface elevation 3,326.00 feet above NGVD29 The depth of the well is 354 feet below land surface. This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Rustler Formation (312RSLR) local aquifer.

#### **Output formats**

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water- level approval status
1959-02-04		D	62610		3215.16	NGVD29	3	Z			А
1959-02-04		D	62611		3216.80	NAVD88	3	Z			A
1959-02-04		D	72019	110.84			3	Z			А
1987-10-15		D	62610		3214.80	NGVD29	1	Z			A
1987-10-15		D	62611		3216.44	NAVD88	1	Z			А
1987-10-15		D	72019	111.20			1	Z			A
1992-11-04		D	62610		3216.32	NGVD29	1	S			А
1992-11-04		D	62611		3217.96	NAVD88	1	S			A
1992-11-04		D	72019	109.68			1	S			А
2013-01-16	23:30 UTC	m	62610		3197.36	NGVD29	3	S	USGS	S	A
2013-01-16	23:30 UTC	m	62611		3199.00	NAVD88	3	S	USGS	S	A
2013-01-16	23:30 UTC	m	72019	128.64			3	S	USGS	S	А

Explanation					
Section	Code	Description			
Water-level date-time accuracy	D	Date is accurate to the Day			
Water-level date-time accuracy	m	Date is accurate to the Minute			
Parameter code	62610	Groundwater level above NGVD 1929, feet			
Parameter code	62611	Groundwater level above NAVD 1988, feet			
Parameter code	72019	Depth to water level, feet below land surface			
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988			
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929			
Status	1	Static			
Status	3	Above			
Method of measurement	S	Steel-tape measurement.			
Method of measurement	Z	Other.			
Measuring agency		Not determined			

Rottins Units Wategoria - 399 92/029/09/16/09/16/2016 site\_no=321809103481801&agency\_cd=USGS&format=html

Section	Code	Description
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication Processing and review completed.

Questions about sites/data? Feedback on this web site Automated retrievals <u>Help</u> Tello Data Tips Explanation of terms Subscribe for system changes News

Accessibility FOIA Privacy Policies and Notices U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for New Mexico: Water Levels URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2021-02-09 11:21:56 EST 0.57 0.29 nadww02

USA.gov

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# Appendix C

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

# State of New Mexico

Energy Minerals and Natural Resources AUG 29 2003

Form C-141 Revised October 10, 2003

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

OCD-ARTESIA

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

# **Release Notification and Corrective Action**

	OPER	ATOR	Initial Report	🛛 Final Report
Name of Company	OGRID Number	Contact		
Yates Petroleum Corporation	25575	Robert Asher		
Address		Telephone No.		
104 S. 4 <sup>TH</sup> Street		505-748-1471	. ·	
Facility Name	API Number	Facility Type	Order Number	
Medano VA State #2	30-015-26382	Well	2RP-187	
Surface Owner	Mineral Owner	•	Lease No.	
State	State		VO-0120	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	16	23S ·	31E	1980	North	660	West	Eddy
		1						•

Latitude 32.30613 Longitude 103.78976

#### NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Produced Water	100 B/PW	0 B/PW
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Main water line	6/5/2008, AM	6/5/2008, AM
Was Immediate Notice Given?	If YES, To Whom?	
Yes No Not Require	d Mike Bratcher/NMOCD District	II,(Voicemail)
By Whom?	Date and Hour	
Bob Asher/YPC Environmental Department	6/5/2008, PM	
Was a Watercourse Reached?	If YES, Volume Impacting the W	atercourse.
🗌 Yes 🛛 No	N/A	
If a Watercourse was Impacted, Describe Fully.*		
N/A		
Describe Cause of Problem and Remedial Action Taken.*		
Main produce water line west of Medano VA State #2 ruptured. Isolated	d line, shut down well(s). called vacuu	m truck and repaired line.
Describe Area Affected and Cleanup Action Taken.*		· · · · · · · · · · · · · · · · · · ·
An approximate area of 125' X 10'. No produced water to recover. Ver	tical and horizontal delineation will be	e made and analysis ran for TPH/BTEX. If
initial analytical results for TPH & BTEX are over RRAL's a work plan	will be submitted. If initial analytical	results for TPH & BTEX are under RRAL's
a Final Report, C-141 will be submitted to the OCD requesting closure.	Depth to Ground Water: >100' (ap)	prox. 168' per New Mexico Office of the
State Engineer), Wellhead Protection Area: No, Distance to Surface	Water Body: >1000', SITE RANKI	NG IS 0. Yates Petroleum Corporation
requests closure.		
I hereby certify that the information given above is true and complete to	the best of my knowledge and underst	and that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release	notifications and perform corrective a	ctions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by the	he NMOCD marked as "Final Report"	does not relieve the operator of liability
should their operations have failed to adequately investigate and remedia	the contamination that pose a threat to	ground water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of respon	sibility for compliance with any other
tederal, state, or local laws and/or regulations.		
$\frown$	<u>OIL CONSER</u>	VATION DIVISION
Signature: 200 V		<b>DENICH</b> SIBILS
Di tul Diaman Daharit Ashan	Approved by District Supervisor:	
Printed Name: Robert Asher		
Title Device merced at Device the sent	AND ALA	ALA
Title: Environmental Regulatory Agent	Approval Date: 70	Expiration Date: // //
E weit Address hehe@ween som	Conditions of Ammunul	
E-mail Address. boba(dypenm.com	Conditions of Approval:	Attached
Data: Wednasday, August 27, 2009 Dhong: 505, 749, 1471	YW helpare -	A(I)
Date: weanesday, August 27, 2008 Phone: 505-748-1471		
Attach Additional Sheets If Necessary	chlooly says	lm = 2RP - 187
	Constitute O Majo	

Released to Imaging: 3/17/2023 9:40:03 AM

#### Received by OCD: 3/7/2022 2:29:52 PM

MARTIN YATES, III 1912-1985

FRANK W. YATES 1936-1986



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118 TELEPHONE (575) 748-1471

AUG 2 9 2008

S.P. YATES CHAIRMAN EMERITUS

JOHN A. YATES CHAIRMAN OF THE BOARD

FRANK YATES, JR. PRESIDENT

PEYTON YATES

JOHN A. YATES, JR. DIRECTOR

August 27, 2008

Mr. Mike Bratcher NMOCD District II 1301 W. Grand Ave. Artesia, NM 88210

RE: Medano VA State #2 2RP-187 30-015-26382 Section 16, T23S-R31E Eddy County, New Mexico

Dear Mr. Bratcher,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on June 5, 2008. Vertical/horizontal delineation was conducted on August 13, 2008 and sent to an OCD approved laboratory (enclosed diagram and results). The depth to ground water is greater than 100' (168' per the New Mexico Office of the State Engineer) and the site ranking score is zero (0), RRAL's for BTEX is 50 ppm and TPH is 5000 ppm, the enclosed analytical results are below the Recommended Remediation Action Levels. Yates Petroleum Corporation requests closure.

Thank you.

YATES PETROLEUM CORPORATION

Robert Asher Environmental Regulatory Agent

Enclosure(s)
/rca

RANDY G. PATTERSON SECRETARY Received by OCD: 3/7/2022 2:29:52 PM District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico			
Energy Minerals and Natural Resources	ALIO	<u> </u>	0000
	AUG	۲9	Xiii

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

Page 29 of 62

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

OCD-ARTESIA

Release Notification	on and C	Corrective	Action
----------------------	----------	------------	--------

	OPER	ATOR	Initial Report	🛛 Final Report
Name of Company	OGRID Number	Contact		
Yates Petroleum Corporation	25575	Robert Asher		
Address		Telephone No.		
104 S. 4 <sup>TH</sup> Street		505-748-1471		
Facility Name	API Number	Facility Type	Order Number	
Medano VA State #2	30-015-26382	Well	2RP-187	
Surface Owner	Mineral Owner	r	Lease No.	
State	State		VO-0120	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	16	238	31E	1980	North	660	West	Eddy

Latitude 32.30613 Longitude 103.78976

NATURE	OF RELEASE		
Type of Release	Volume of Release	Volume Reco	vered
Produced Water	100 B/PW	0 B/PW	
Source of Release	Date and Hour of Occurrence	Date and Hou	ir of Discovery
Main water line	6/5/2008, AM	6/5/2008, AM	
Was Immediate Notice Given?	If YES, To Whom?	- /	
	Mike Bratcher/NMOCD District I	I,(Voicemail)	
By Whom?	Date and Hour		
Bob Asher/YPC Environmental Department	6/5/2008, PM		
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	atercourse.	
Yes 🛛 No	N/A		
If a Watercourse was Impacted, Describe Fully.*			
<u>N/A</u>			
Describe Cause of Problem and Remedial Action Taken.*			
Main produce water line west of Medano VA State #2 ruptured. Isolated	line, shut down well(s), called vacuu	m truck and repai	ired line.
Describe Area Affected and Cleanup Action Taken.*			
An approximate area of 125' X 10'. No produced water to recover. Vert	ical and horizontal delineation will be	e made and analy:	sis ran for TPH/BTEX. If
initial analytical results for TPH & BTEX are over RRAL's a work plan	will be submitted. If initial analytical	results for TPH a	& BTEX are under RRAL's
a Final Report, C-141 will be submitted to the OCD requesting closure.	Depth to Ground Water: >100' (app	prox. 168' per N	ew Mexico Office of the
State Engineer), Wellhead Protection Area: No, Distance to Surface	water Body: >1000', SITE RANKI	NG IS 0. Yates	Petroleum Corporation
requests closure.		. 1.1.	
I nereby certify that the information given above is true and complete to t	the best of my knowledge and unders	tand that pursuant	t to NMOCD rules and
regulations all operators are required to report and/or file certain release r	NMOCD marked as "Eight Denget"	ctions for releases	s which may endanger
public health or the environment. The acceptance of a C-141 report by the	te NMOCD marked as "Final Report"	does not relieve	the operator of hability
should their operations have failed to adequately investigate and remedia	te containination that pose a tireat to	ground water, su	liance water, numan nearth
faderal state or local laws and/or regulations	loes not relieve the operator of respon	isionity for comp	mance with any other
rederal, state, or local laws and/or regulations.	OUL CONSER		Maron
$\bigcirc$	<u>OIL CONSER</u>	VATION DI	VISION
Signature: ( /cl. ( )l.			
Printed Name: Robert Asher	Approved by District Supervisor:		
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date	
E-mail Address: boba@ypcnm.com	Conditions of Approval:		
		· A	Attached
Date: Wednesday, August 27, 2008 Phone: 505-748-1471			
Attach Additional Chapta If Nagagamy	·		

\* Attach Additional Sheets If Necessary

#### Released to Imaging: 3/17/2023 9:40:03 AM

Report Date: August 22, 2008 30-015-26382

Work Order: 8081526 Medona VA State #2 Page Number: 1 of 1 Eddy Co., NM

# Summary Report

Robert Asher Yates Petroleum Corp. 105 South 4th South Artesia, NM, 88210

Report Date: August 22, 2008

# Work Order: 8081526

Project Location:Eddy Co., NMProject Name:Medona VA State #2Project Number:30-015-26382

			$\operatorname{Date}$	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
170823	GS/Comp001	soil	2008-08-13	12:52	2008-08-15
170824	GS/Comp002	soil	2008-08-13	13:06	2008-08-15
170825	GS/Comp003	soil	2008-08-13	13:20	2008-08-15

			TPH DRO	TPH GRO		
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
170823 - GS/Comp001	<0.0100	< 0.0100	< 0.0100	< 0.0100	<50.0	<1.00
170824 - GS/Comp002	< 0.0100	< 0.0100	< 0.0100	< 0.0100	456	<1.00
170825 - GS/Comp003	0.0253	0.0333	< 0.0100	0.0231	78.6	1.05

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.



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Received by OCD: 3/7/2022 2:29:52 PM	Release Area (6/5/2008 & 7/2/2008)			Pump	o Jack		
	Buried Pipe	Line	Medo	ona VA S	State #2 Well P	ad Lease Road	
			•			~_	
				Pu	mp Jack		
	Г		Med	ona VA	State #4 Well F	Pad	
	Le	ase Road					
Sample ID Sample	Date Sample Type	Denth	BTFX	GRO			
GS/Comp-001 8/13/2	2008 Grab/Auger	1'	<0.04	<1.0	<50.0	<51.0	
GS/Comp-002 8/13/2	2008 Grab/Auger	2'	<0.04	<1.0	456.0	456.0	-
GS/Comp-003 8/13/2	2008 Grab/Auger	3'	0.0817	1.05	78.6	79.7	
Site Ranking is Zero (0	). Depth to Ground W	vater >1	uu (appro)	x. 168'	). All results	are ppm.	
	Medona V	A Stat	e #2		Sample [	EXHIBIT Diagram (N	ot to Scale)
PETROLEUM	Section 16 Eddy Co	R31E Prepar Environm A			ed by Rob ental Regu ugust 27, 2	ert Asher latory Agent 2008	
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## New Mexico Office of the State Engineer Point of Diversion Summary

# Back

		(	quar quar	ter:	5 a 5 a	re 1=NW 2 re bigges	ene 3=sv t to sma	N 4=SE) allest)	)
POD Number	Tws H	Rng	Sec	qq	q	Zone	х	Y	
C 03351 PODI	235 .	31F	04.	4 1	4				
Driller Licence:	421 GLENN	'S W	ATEF	R WEI	ĹL	SERVICE			
Driller Name:	GLENN, CLAN	RK A	Δ.				Sc	ource:	Shallow
Drill Start Date:	11/20/2007					Drill	. Finish	Date:	11/20/2007
Log File Date:	12/04/2007					PCW F	Received	Date:	
Pump Type:						Pipe Di	scharge	Size:	
Casing Size:	6.63					Est	imated Y	lield:	25
Depth Well:	320						Depth V	Nater:	168
Water Bearing St	ratification	ns:	1	ľop		Bottom	De	escrip	tion
			2	240		265	Ot	her/U	nknown
Casing	Perforation	ns:	3	[op		Bottom			
			]	L52		304			

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# Appendix D

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Received by OCD: 3/7/2022 2:29:52 PM

# 🔅 eurofins

# Environment Testing America

# ANALYTICAL REPORT

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

# Laboratory Job ID: 890-122-1

Client Project/Site: Medano VA State #002

# For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

VRAMER

Authorized for release by: 2/8/2021 2:24:36 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS **Review your project** results through Total Access Have a Question? Ask-The Expert Visit us at:

www.eurofinsus.com/Env Released to Imaging: 3/17/2023 9:40:03 AM

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Page 35 of 62

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	7
Surrogate Summary	12
QC Sample Results	13
QC Association Summary	17
Lab Chronicle	20
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	28

# **Definitions/Glossary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002 Job ID: 890-122-1

Quali	fiers
-------	-------

Qualifiers		
GC VOA		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		4
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	5
%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	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

# Job ID: 890-122-1

Page 37 of 62

#### Job ID: 890-122-1

#### Laboratory: Eurofins Xenco, Carlsbad

#### Narrative

Job Narrative 890-122-1

#### Receipt

The samples were received on 2/2/2021 3:45 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.6°C

#### GC VOA

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.

# **Detection Summary**

Page 38 of 62

Job ID: 890-122-1

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Client Sample ID: AH-01 0'-1'

No Detections.

Client Sample ID: AH-01	1'-1.5'					Lab	Sample I	D: 890-122-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	10.7		10.0		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-01	2'-2.5'					Lab	Sample I	D: 890-122-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	10.5		10.1		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-01	3'-3.5'					Lab	Sample I	D: 890-122-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	11.8		10.1		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-01	4'-4'.5'					Lab	Sample I	D: 890-122-5
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	10.3		9.94		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-02	0'-1'					Lab	Sample I	D: 890-122-6
No Detections.								
Client Sample ID: AH-02	1'-1.5'					Lab	Sample I	D: 890-122-7
No Detections.								
Client Sample ID: AH-02	2'-2.5'					Lab	Sample I	D: 890-122-8
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	10.2		10.1		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-02	3'-3.5'					Lab	Sample I	D: 890-122-9
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	10.0		9.90		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-02	4'-4.5'					Lab S	ample ID	: 890-122-10
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	11.1		10.0		mg/Kg	1	300.0	Soluble
Client Sample ID: AH-03	0'-1'					Lab S	Sample ID	): 890-122-11
No Detections.								
Client Sample ID: AH-03	1'-1.5'					Lab S	ample ID	: 890-122-12
No Detections.								
Client Sample ID: AH-03	2'-2.5'					Lab S	ample ID	: 890-122-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-122-1 5

Page 39 of 62

# **Detection Summary**

Job ID: 890-122-1

#### Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

Client Sample ID: A	AH-03 3'-3.5'					Lab Sample ID: 890-122-14				
Analyte Chloride	Result	Qualifier	<b>RL</b>	MDL	Unit ma/Ka	Dil Fac	D	Method 300.0	Prep Type	
Client Sample ID: A	AH-03 4'-4.5'					Lab	S	ample ID	: 890-122-15	
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
Chloride	10.1		10.1		mg/Kg	1	_	300.0	Soluble	

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Carlsbad

Page 6 of 28

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Client Sample ID: AH-01 0'-1' Date Collected: 02/02/21 10:30 Date Received: 02/02/21 15:45

Method: 8021B - Volatile O	lethod: 8021B - Volatile Organic Compounds (GC)												
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac				
Benzene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
Toluene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
Total BTEX	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
m-Xylene & p-Xylene	< 0.00402	U	0.00402		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 18:49	1				
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac				
1,4-Difluorobenzene	107		70 - 130				02/02/21 21:08	02/03/21 18:49	1				
4-Bromofluorobenzene (Surr)	103		70 - 130				02/02/21 21:08	02/03/21 18:49	1				

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

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Chloride	<9.90	U	9.90		mg/Kg				02/03/21 03:28	1

Method: TPH SW8015_MOD - SW846 8015B DRO									
Analyte	Result	Qualifier	RL	MDL	Unit				
Diesel Range Organics (DRO)	ND		50.0		mg/kg				
Gasoline Range Hydrocarbons (GRO)	ND		50.0		mg/kg				
Motor Oil Range Hydrocarbons (MRO)	ND		50.0		mg/kg				

Total TPH	ND	50.0	mg/kg	02/04/21 12:20	02/04/21 21:30	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	81	70 - 135		02/04/21 12:20	02/04/21 21:30	1
o-Terphenyl	91	70 - 135		02/04/21 12:20	02/04/21 21:30	1

#### Client Sample ID: AH-01 1'-1.5' Date Collected: 02/02/21 10:35 Date Received: 02/02/21 15:45

Method: 8021B - Volatile O	rganic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/02/21 21:08	02/03/21 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	105		70 - 130				02/02/21 21:08	02/03/21 19:56	1
4-Bromofluorobenzene (Surr)	106		70 - 130				02/02/21 21:08	02/03/21 19:56	1
Method: 300.0 - Anions, Io	n Chromatogra	aphy - Solu	ıble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		10.0		mg/Kg			02/03/21 03:45	1
_ Method: TPH SW8015_MO	D - SW846 801	5B DRO							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:34	1

Analyte	Result	Quanner		NIDL	Unit	-	Fiepaieu
Diesel Range Organics (DRO)	ND		50.0		mg/kg	 _	02/04/21 12:2

Eurofins Xenco, Carlsbad

Job ID: 890-122-1

#### Lab Sample ID: 890-122-1 Matrix: Solid

Prepared

02/04/21 12:20 02/04/21 21:30

02/04/21 12:20 02/04/21 21:30

02/04/21 12:20 02/04/21 21:30

D

Analyzed

Lab Sample ID: 890-122-2

**Dil Fac** 

Matrix: Solid

1

1

1

5 6

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Client Sample ID: AH-01 1'-1.5' Date Collected: 02/02/21 10:35 Date Received: 02/02/21 15:45

Method: TPH SW8015_MOD -	SW846 801	5B DRO (C	ontinued)		11	_	Durana	Ameliand	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared		
Gasoline Range Hydrocarbons (GRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:34	1
Motor OII Range Hydrocarbons (MRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:34	1
Iotal IPH	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 135				02/04/21 12:20	02/04/21 22:34	1
o-Terphenyl	92		70 - 135				02/04/21 12:20	02/04/21 22:34	1
Client Sample ID: AH-01 2	'-2.5'						Lab Sam	ple ID: 890-	-122-3
Date Collected: 02/02/21 10:40								Matrix	c: Solid
Date Received: 02/02/21 15:45									
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble	МП	Unit	<b>D</b>	Bronarad	Analyzod	Dil Eac
	10 5	Quaimer	10.1		ma/Ka		Flepaleu	02/03/21 03·50	
	10.5		10.1		mg/rtg			02/03/21 03.30	
Client Sample ID: AH-01 3	'-3.5'						Lab Sam	ple ID: 890	-122-4
Date Collected: 02/02/21 10:45								Matrix	c: Solid
Date Received: 02/02/21 15:45									
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble			_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.8		10.1		mg/Kg			02/03/21 03:56	1
Client Sample ID: AH-01 4	'-4'.5'						Lab Sam	ple ID: 890	-122-5
Date Collected: 02/02/21 10:50								Matrix	c: Solid
Date Received: 02/02/21 15:45									
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.3		9.94		mg/Kg			02/03/21 04:02	1
- Client Semple ID: AH 02.0	· 4·						Lob Som		122 6
Chefit Sample ID. An-02 0	-1						Lad Salli		-122-0
Date Collected: 02/02/21 11:05								Matrix	c: Solid
Date Received: 02/02/21 15:45									
Method: 8021B - Volatile Orga	nic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
m-Xvlene & p-Xvlene	<0.00402	U	0.00402		ma/Ka		02/02/21 21:08	02/03/21 20:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 20:19	1
0	0/ Da	0	Lineit -				<b>D</b> ue a	A	D# 5-
	%Recovery	Qualifier					Prepared		
1, <del>4</del> -DIIIU010DEIIZEIIE	105		10-130				02/02/21 21.08	02/03/21 20.19	1

02/02/21 21:08 02/03/21 20:19

Page 41 of 62

5 6

Job ID: 890-122-1

Matrix: Solid

Lab Sample ID: 890-122-2

Eurofins Xenco, Carlsbad

4-Bromofluorobenzene (Surr)

70 - 130

100

1

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Client Sample ID: AH-02 0'-1' Date Collected: 02/02/21 11:05 Date Received: 02/02/21 15:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			02/03/21 04:19	1
 Method: TPH SW8015_MOD - 3	SW846 801	5B DRO							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:55	1
Gasoline Range Hydrocarbons (GRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:55	1
Motor Oil Range Hydrocarbons (MRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:55	1
Total TPH	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 135				02/04/21 12:20	02/04/21 22:55	1
o-Terphenyl	86		70 - 135				02/04/21 12:20	02/04/21 22:55	1
Client Sample ID: AH-02 1	-1.5'						Lab Sam	ple ID: 890-	122-7
Date Collected: 02/02/21 11:10								Matrix	: Solid
Date Received: 02/02/21 15:45									

#### Method: 8021B - Volatile Organic Compounds (GC) Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Benzene <0.00199 U 0.00199 02/02/21 21:08 02/03/21 20:41 mg/Kg Ethylbenzene <0.00199 U 0.00199 mg/Kg 02/02/21 21:08 02/03/21 20:41 Toluene <0.00199 U 0.00199 mg/Kg 02/02/21 21:08 02/03/21 20:41 Total BTEX <0.00199 U 0.00199 mg/Kg 02/02/21 21:08 02/03/21 20:41 Xylenes, Total <0.00199 U 0.00199 mg/Kg 02/02/21 21:08 02/03/21 20:41 m-Xylene & p-Xylene <0.00398 U 0.00398 mg/Kg 02/02/21 21:08 02/03/21 20:41 o-Xylene <0.00199 U 0.00199 mg/Kg 02/02/21 21:08 02/03/21 20:41 Prepared Analyzed

Surrogate	%Recovery Qualifier	Limits
1,4-Difluorobenzene	107	70 - 130
4-Bromofluorobenzene (Surr)	103	70 - 130

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

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0 U	10.0	mg/Kg			02/03/21 04:24	1

#### Method: TPH SW8015\_MOD - SW846 8015B DRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:17	1
Gasoline Range Hydrocarbons (GRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:17	1
Motor Oil Range Hydrocarbons (MRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:17	1
Total TPH	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 135				02/04/21 12:20	02/04/21 23:17	1
o-Terphenyl	100		70 - 135				02/04/21 12:20	02/04/21 23:17	1

Dil Fac

1

1

1

1

1

1

1

1

1

Dil Fac

02/02/21 21:08 02/03/21 20:41

02/02/21 21:08 02/03/21 20:41

5

6

Job ID: 890-122-1

#### Lab Sample ID: 890-122-6 Matrix: Solid

**Released to Imaging: 3/17/2023 9:40:03 AM** 

	02							000 10.000	
lient Sample ID: AH-02 2 ate Collected: 02/02/21 11:15	'-2.5'						Lab Sam	ple ID: 890- Matrix	-122-8 c: Solid
ate Received: 02/02/21 15:45									
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solul	ble	MDI	11	<b>_</b>	Drenerad	Anolymod	
		Quaimer	RL			<u>D</u>	Prepared	Analyzeu 02/03/21 04:30	
Chionde	10.2		10.1		mg/ng			02/03/21 04:50	I
Client Sample ID: AH-02 3 Date Collected: 02/02/21 11:20 Date Received: 02/02/21 15:45	'-3.5'						Lab Sam	ple ID: 890 Matrix	-122-9 c: Solid
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		9.90		mg/Kg			02/03/21 04:36	1
Client Sample ID: AH-02 4 Date Collected: 02/02/21 11:25 Date Received: 02/02/21 15:45	'-4.5'						Lab Samp	le ID: 890-1 Matrix	22-10 : Solid
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.1		10.0		mg/Kg			02/03/21 04:42	1
Method: 8021B - Volatile Orga Analyte	nic Compo Result	unds (GC) Qualifier	RI	МП	Unit	п	Prepared	Analyzed	Dil Fac
Benzene	< 0.00199	U	0.00199		mg/Kg		02/02/21 21:08	02/03/21 21:03	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/02/21 21.08		1
LUIYIDEHZEHE							02/02/21 21.00	02/03/21 21:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/02/21 21:08	02/03/21 21:03 02/03/21 21:03	1 1 1
Toluene Total BTEX	<0.00199 <0.00199	U U	0.00199 0.00199		mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1
Toluene Total BTEX Xylenes, Total	<0.00199 <0.00199 <0.00199	U U U	0.00199 0.00199 0.00199		mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene	<0.00199 <0.00199 <0.00199 <0.00398	U U U U	0.00199 0.00199 0.00199 0.00398		mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199	U U U U U	0.00199 0.00199 0.00199 0.00398 0.00398		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199	U U U U U Qualifier	0.00199 0.00199 0.00199 0.00398 0.00199		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 0 1 Dil Fac
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1.4-Difluorobenzene	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199 %Recovery 105	U U U U Qualifier	0.00199 0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130		mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 <b>Prepared</b> 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03	1 1 1 1 1 1 2 <i>Dil Fac</i>
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199 <u>%Recovery</u> 105 100	U U U U Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130		mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 <b>Prepared</b> 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 1 2 <i>Dil Fac</i> 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)	<0.00199 <0.00199 <0.00398 <0.00398 <0.00199 %Recovery 105 100	U U U U Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130		mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 <u>Prepared</u> 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 1 <b>Dil Fac</b> 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion C	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199 %Recovery 105 100 hromatogra	U U U Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130		mg/Kg mg/Kg mg/Kg mg/Kg		02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 <b>Prepared</b> 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 1 <b>Dil Fac</b> 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion C Analyte	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199 %Recovery 105 100 hromatogra Result	U U U U Qualifier Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 ble <u>RL</u>	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 <b>Prepared</b> 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion C Analyte Chloride	<0.00199 <0.00199 <0.00398 <0.00398 <0.00199 <u>%Recovery</u> 105 100 hromatogra Result <9.94	U U U U Qualifier D Qualifier U	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 ble <u>RL</u> 9.94	MDL	mg/Kg mg/Kg mg/Kg mg/Kg <u>Unit</u> mg/Kg	<u>D</u>	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: TPH SW8015_MOD - Analyte	<ul> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00398</li> <li>&lt;0.00199</li> <li></li> <li>%Recovery</li> <li>105</li> <li>100</li> <li>hromatogra</li> <li>Result</li> <li>&lt;9.94</li> <li>SW846 801</li> <li>Result</li> </ul>	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 ble <u>RL</u> 9.94	<u>MDL</u>	mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: TPH SW8015_MOD - Analyte Diesel Bange Organics (DBO)	<ul> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00398</li> <li>&lt;0.00199</li> <li></li> <li><i>%Recovery</i></li> <li>105</li> <li>100</li> <li>hromatogra</li> <li>Result</li> <li>&lt;9.94</li> <li>SW846 801</li> <li>Result</li> <li>&lt;0.94</li> </ul>	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 70 - 130 ble <u>RL</u> 9.94	MDL	mg/Kg mg/Kg mg/Kg mg/Kg Unit Unit mg/Kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/03/21 04:47	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion C Analyte Chloride Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO)	<ul> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00398</li> <li>&lt;0.00199</li> <li></li> <li><i>%Recovery</i></li> <li><i>105</i></li> <li><i>100</i></li> <li>hromatogra</li> <li>Result</li> <li></li> <li></li></ul> <li></li>	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 70 - 130 ble <u>RL</u> 9.94 <u>RL</u> 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg Unit mg/kg mg/kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:08 Prepared 02/02/21 21:08	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/03/21 04:47	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene <i>Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)</i> Method: 300.0 - Anions, Ion Cl Analyte Chloride  Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Motor Oil Range Hydrocarbons (MRO)	<0.00199 <0.00199 <0.00199 <0.00398 <0.00199 <u>%Recovery</u> 105 100 hromatogra <u>Result</u> <9.94 SW846 801 <u>Result</u> ND ND	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 70 - 130 ble <u>RL</u> 9.94 <u>RL</u> 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg mg/kg mg/kg mg/kg	<u>D</u>	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:08 Prepared 02/02/21 21:20 02/04/21 12:20 02/04/21 12:20	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/04/21 23:38 02/04/21 23:38	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr) Method: 300.0 - Anions, Ion C Analyte Chloride Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Motor Oil Range Hydrocarbons (MRO) Total TPH	<0.00199 <0.00199 <0.00398 <0.00398 <0.00199 <u>%Recovery</u> 105 100 hromatogra Result <9.94 SW846 801 Result ND ND ND ND	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 ble <u>RL</u> 9.94 <u>RL</u> 50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg mg/kg mg/kg mg/kg mg/kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:20 02/04/21 12:20 02/04/21 12:20	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/04/21 23:38 02/04/21 23:38	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene  Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)  Method: 300.0 - Anions, Ion Cl Analyte Chloride  Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Motor Oil Range Hydrocarbons (MRO) Total TPH Surregeto	<0.00199 <0.00199 <0.00398 <0.00398 <0.00199 %Recovery 105 100 hromatogra Result <9.94 \$W846 801 Result ND ND ND	U U U U Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 70 - 130 ble <u>RL</u> 9.94 <u>RL</u> 50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg mg/kg mg/kg mg/kg	<u>D</u>	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:08 Prepared 02/04/21 12:20 02/04/21 12:20 02/04/21 12:20	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/04/21 23:38 02/04/21 23:38 02/04/21 23:38	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene  Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)  Method: 300.0 - Anions, Ion Cl Analyte Chloride  Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Motor Oil Range Hydrocarbons (MRO) Total TPH Surrogate 1-Chloreoctage	<ul> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00398</li> <li>&lt;0.00199</li> <li></li> <li><i>%Recovery</i></li> <li>105</li> <li>100</li> <li>hromatogra</li> <li>Result</li> <li></li> <li></li></ul>	U U U U Qualifier D D Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 70 - 130 ble <u>RL</u> 9.94 <u>RL</u> 50.0 50.0 50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg mg/kg mg/kg mg/kg	D	02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 02/02/21 21:08 Prepared 02/02/21 21:08 02/02/21 21:08 02/02/21 21:20 02/04/21 12:20 02/04/21 12:20 02/04/21 12:20 02/04/21 12:20	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/04/21 23:38 02/04/21 23:38 02/04/21 23:38 02/04/21 23:38	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Toluene Total BTEX Xylenes, Total m-Xylene & p-Xylene o-Xylene  Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene (Surr)  Method: 300.0 - Anions, Ion Cl Analyte Chloride  Method: TPH SW8015_MOD - Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Motor Oil Range Hydrocarbons (MRO) Total TPH  Surrogate 1-Chlorooctane o Temboard	<ul> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00199</li> <li>&lt;0.00398</li> <li>&lt;0.00199</li> <li></li> <li><i>%Recovery</i></li> <li>105</li> <li>100</li> <li>hromatogra</li> <li>Result</li> <li>&lt;9.94</li> <li>SW846 801</li> <li>Result</li> <li>ND</li> <li>22</li> </ul>	U U U U Qualifier D D Qualifier U SB DRO Qualifier	0.00199 0.00199 0.00398 0.00199 <u>Limits</u> 70 - 130 70 - 130 <b>ble</b> <b>RL</b> 9.94 <b>RL</b> 50.0	MDL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg mg/kg mg/kg mg/kg	<u>D</u>	02/02/21 21:08 02/02/21 21:08 02/04/21 12:20 02/04/21 12:20 02/04/21 12:20 02/04/21 12:20	02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 21:03 02/03/21 21:03 <b>Analyzed</b> 02/03/21 04:47 <b>Analyzed</b> 02/04/21 23:38 02/04/21 23:38 02/04/21 23:38 02/04/21 23:38	Dil Fac Dil Fac Dil Fac

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Client Sample ID: AH-03 1'-1.5' Date Collected: 02/02/21 11:45 Date Received: 02/02/21 15:45

Method: 8021B - Volatile O	rganic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/02/21 21:08	02/03/21 21:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	107		70 - 130				02/02/21 21:08	02/03/21 21:48	1
4-Bromofluorobenzene (Surr)	104		70 - 130				02/02/21 21:08	02/03/21 21:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/03/21 05:04	1
Mothod: TDH SW/9015 MOD	SW046 9046								

	30040 001								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:58	1
Gasoline Range Hydrocarbons (GRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:58	1
Motor Oil Range Hydrocarbons (MRO)	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:58	1
Total TPH	ND		50.0		mg/kg		02/04/21 12:20	02/04/21 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 135				02/04/21 12:20	02/04/21 23:58	1
o-Terphenyl	97		70 - 135				02/04/21 12:20	02/04/21 23:58	1

#### Client Sample ID: AH-03 2'-2.5' Date Collected: 02/02/21 11:50 Date Received: 02/02/21 15:45

Method: 300.0 - Anions, lor	n Chromatogra	phy - Solub	le						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92		mg/Kg			02/03/21 05:10	1
Client Sample ID: AH-03	3 3'-3.5'						Lab Sam	ole ID: 890-1	22-14
Date Collected: 02/02/21 11:	55							Matrix	c: Solid
Date Received: 02/02/21 15:4	45								
Method: 300.0 - Anions, Ior	n Chromatogra	phy - Solub	le						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		10.1		mg/Kg			02/03/21 05:27	1
Client Sample ID: AH-03	3 4'-4.5'						Lab Sam	ole ID: 890-1	22-15
Date Collected: 02/02/21 12:0	00							Matrix	c: Solid
Date Received: 02/02/21 15:4	45								
Method: 300.0 - Anions, Ior	n Chromatogra	phy - Solub	le						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.1		10.1		mg/Kg			02/03/21 05:33	1

Page 44 of 62

Job ID: 890-122-1

#### Lab Sample ID: 890-122-12 Matrix: Solid

Lab Sample ID: 890-122-13

Matrix: Solid

Released to Imaging: 3/17/2023 9:40:03 AM

## **Surrogate Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

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

			Percen	t Surrogate Recovery (Acceptance Limits)
		DFBZ1	BFB1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-122-1	AH-01 0'-1'	107	103	
890-122-1 MS	AH-01 0'-1'	102	99	
890-122-1 MSD	AH-01 0'-1'	100	102	
890-122-2	AH-01 1'-1.5'	105	106	
890-122-6	AH-02 0'-1'	105	100	
890-122-7	AH-02 1'-1.5'	107	103	
890-122-11	AH-03 0'-1'	105	100	
890-122-12	AH-03 1'-1.5'	107	104	
LCS 890-124/2-A	Lab Control Sample	98	94	
LCSD 890-124/3-A	Lab Control Sample Dup	101	94	
MB 890-124/1-A	Method Blank	105	101	

BFB = 4-Bromofluorobenzene (Surr)

#### Method: TPH SW8015\_MOD - SW846 8015B DRO Matrix: Solid

-		Percent Surrogate Recovery (Acceptance Limits)								
		1CO	ОТРН							
Lab Sample ID	Client Sample ID	(70-135)	(70-135)							
890-122-1	AH-01 0'-1'	81	91							
890-122-2	AH-01 1'-1.5'	83	92							
890-122-6	AH-02 0'-1'	80	86							
890-122-7	AH-02 1'-1.5'	91	100							
890-122-11	AH-03 0'-1'	92	103							
890-122-12	AH-03 1'-1.5'	85	97							

#### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

Prep Type: Total/NA

# Page 45 of 62 390-122-1 1 2 3 Total/NA 3 4 5 6 7 8 9 10 11 12 12

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

Lab Sample ID: MB 890-124/1-A

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

Matrix: Solid Analysis Batch: 129								Prep Type: To Prep Bate	otal/NA ch: 124
	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/02/21 21:08	02/03/21 17:41	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	105		70 - 130				02/02/21 21:08	02/03/21 17:41	1
4-Bromofluorobenzene (Surr)	101		70 - 130				02/02/21 21:08	02/03/21 17:41	1

#### Lab Sample ID: LCS 890-124/2-A **Matrix: Solid Analysis Batch: 129**

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09638		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09436		mg/Kg		94	71_129	
Toluene	0.100	0.09632		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1877		mg/Kg		94	70 - 135	
o-Xylene	0.100	0.09498		mg/Kg		95	71 - 133	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,4-Difluorobenzene	98		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130

#### Lab Sample ID: LCSD 890-124/3-A Matrix: Solid Analysis Batch: 129

Analysis Batch: 129							Prep	b Batch	n: 124
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1000		mg/Kg		100	70 - 130	4	35
Ethylbenzene	0.100	0.09594		mg/Kg		96	71 - 129	2	35
Toluene	0.100	0.1001		mg/Kg		100	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1885		mg/Kg		94	70 - 135	0	35
o-Xylene	0.100	0.09635		mg/Kg		96	71 - 133	1	35

	LUSD	LUSD	
Surrogate	%Recovery	Qualifier	Limits
1,4-Difluorobenzene	101		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130

#### Lab Sample ID: 890-122-1 MS Client Sample ID: AH-01 0'-1' **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 129** Prep Batch: 124 Sample Sample Spike MS MS %Rec. **Result Qualifier** Added Analyte Result Qualifier Unit D %Rec Limits <0.00201 U Benzene 0.101 0.09515 mg/Kg 94 70 - 130

Eurofins Xenco, Carlsbad

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Page 46 of 62
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Job ID: 890-122-1

**Client Sample ID: Method Blank** 

8

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Client Sample ID: Lab Control Sample Dup** 

**Prep Type: Total/NA** 

Prep Batch: 124	1
с.	
ts	
100	

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

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

Lab Sample ID: 890-122- Matrix: Solid Analysis Batch: 129	1 MS							Client S	Sample ID Prep Ty Prej	: AH-0 <sup>·</sup> pe: Tof p Batcl	1 0'-1' tal/NA n: 124
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	< 0.00201	U	0.101	0.08905		mg/Kg		89	71 - 129		
Toluene	<0.00201	U	0.101	0.09208		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1760		mg/Kg		87	70 - 135		
o-Xylene	<0.00201	U	0.101	0.09063		mg/Kg		90	71 - 133		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1,4-Difluorobenzene	102		70 - 130	_							
4-Bromofluorobenzene (Surr)	99		70 - 130								
Lab Sample ID: 890-122-	1 MSD							Client S	Sample ID	: AH-0	1 0'-1'
Matrix: Solid									Prep Ty	pe: To	al/NA
Analysis Batch: 129									Pre	p Batch	n: 124
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00201	U	0.0996	0.08835		mg/Kg		88	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.0996	0.08303		mg/Kg		83	71 - 129	7	35
Toluene	<0.00201	U	0.0996	0.08618		mg/Kg		87	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1631		mg/Kg		82	70 - 135	8	35
o-Xylene	<0.00201	U	0.0996	0.08407		mg/Kg		84	71 - 133	8	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1,4-Difluorobenzene	100		70 - 130	_							
4-Bromofluorobenzene (Surr)	102		70 - 130								
Method: 300.0 - Anion	ns, Ion Chr	omatogra	ohy								
Lab Sample ID: MB 890-1	118/1-A						Clie	ent San	nple ID: M	ethod	Blank
Matrix: Solid									Prep T	vpe: Se	oluble
Analysis Batch: 119											
		МВ МВ									
Analyte	Re	sult Qualifier		RL	MDL Unit	0	) Р	repared	Analy	zed	Dil Fac
Chloride	<	10.0 U		10.0	mg/K	=			02/03/21	03:11	1
Lab Sample ID: LCS 890-	-118/2-A					Clier	nt Sa	mple ID	: Lab Cor	ntrol Sa	ample
Matrix: Solid									Prep T	ype: So	oluble
Analysis Batch: 119			0								
			Spike	LUS	LUS		_		%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			500	492.7		mg/Kg		99	90 - 110		
Lab Sample ID: LCSD 89 Matrix: Solid	0-118/3-A				C	Client Sa	mple	ID: Lat	Control Pren T	Sample	e Dup oluble
Analysis Batch: 119										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Analysis Baten. ITS			Snike						%Rec		RPD
Analyte				Posult	Qualifiar	Unit	п	%Rec	l imite	<b>BD</b> D	Limit
Chloride			500	402 4	Quaimer	ma/Ka			00 110		20
Chionae			500	492.1		my/Ky		90	90-110	0	20

Job ID: 890-122-1

Page 47 of 62

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002 Job ID: 890-122-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 800 122 1 MS								Client Sc			1 0' 1'
Matrix: Solid								chent Sa	Prep Ty	pe: So	bluble
Analysis Batch: 119											
A b - d -	Sample	Sample	Spike	MS	MS		_	0/ <b>D</b>	%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifie		D	%Rec	Limits		
Chioride	<9.90	U	503	497.0		mg/ĸg		97	90 - 110		
Lab Sample ID: 890-122-1 MS Matrix: Solid	D							Client Sa	ample ID: Prep Ty	AH-0 <sup>4</sup> pe: So	1 0'-1' Diuble
Analysis Batch: 119											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifie	Unit	D	%Rec	Limits	RPD	Limit
Chloride	<9.90	U	502	493.5		mg/Kg		97	90 - 110	1	20
Lab Sample ID: 890-122-11 MS	5							Client Sa	ample ID: Prop Ty	AH-0	3 0'-1'
Analysis Batch: 119									герту	pe. 30	Juble
Analysis Datch. 115	Samnlo	Sample	Sniko	МЗ	MS				%Rec		
Analyte	Result	Qualifier		Result	Qualifie	r IInit	п	%Rec	l imits		
Chloride	<9.94		504	497 1		ma/Ka		97	90 - 110		
	-0.0-	0	004	407.1		mg/ng		01	00-110		
Lab Sample ID: 890-122-11 MS Matrix: Solid	SD							Client Sa	ample ID: Prep Ty	AH-0 pe: So	3 0'-1' oluble
Analysis Batch: 119											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifie	r Unit	D	%Rec	Limits	RPD	Limit
Chloride	<9.94	U	504	497.0		mg/Kg		97	90 - 110	0	20
Method: TPH SW8015_MC	)D - SV	V846 801	5B DRO								
Lab Sample ID: 7720905-1-BL Matrix: SOII	к						Clie	ent Samp	ole ID: Me Prep Tyr	thod	Blank al/NA
Analysis Batch: 3150186								Pre	n Batch:	31501	86 P
	BL	ANK BLANK							p Datoin	0.00	
Analyte	Re	esult Qualifie	r	RL	MDL Uni	t [	о р	repared	Analyz	ed	Dil Fac
Diesel Range Organics (DRO)		U		50	mg	kg -	02/0	4/21 12:20	02/04/21 2	20:26	1
Gasoline Range Hydrocarbons (GRO)		U		50	mg/	kg	02/0	4/21 12:20	02/04/21 2	20:26	1
Motor Oil Range Hydrocarbons (MRO)		U		50	mg	kq	02/0	4/21 12:20	02/04/21 2	20:26	1
					0	0					
Lab Sample ID: 7720905-1-BK	S					Clie	nt Sai	mple ID:	Lab Con	trol Sa	ample
Matrix: SOIL									Prep Typ	e: Tot	al/NA
Analysis Batch: 3150186								Pre	p Batch:	<b>3150</b> 1	186_P
									%Rec.		
			Spike	LCS	LCS						
Analyte			Spike Added	LCS Result	LCS Qualifie	r Unit	D	%Rec	Limits		
Analyte Diesel Range Organics (DRO)			Spike Added 1000	LCS Result 1180	LCS Qualifie	r Unit mg/kg	<u>D</u>	% <b>Rec</b>	<b>Limits</b> 70 - 135		
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO)			<b>Spike</b> Added 1000 1000	LCS Result 1180 1050	LCS Qualifie	r Unit mg/kg mg/kg	<u>D</u>	%Rec 118 105	<b>Limits</b> 70 - 135 70 - 135		
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO)			<b>Spike</b> <b>Added</b> 1000 1000	LCS Result 1180 1050	LCS Qualifie	r Unit mg/kg mg/kg		<u>%Rec</u> 118 105	Limits 70 - 135 70 - 135	ample	
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS	D		Spike Added 1000 1000	LCS Result 1180 1050	LCS Qualifie	Client Sa	D	%Rec 118 105	Limits 70 - 135 70 - 135 Control S	Sample	e Dup
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS Matrix: SOIL Analysis Batch: 3150186	D		Spike Added 1000 1000	LCS Result 1180 1050	LCS Qualifie	<u>Unit</u> mg/kg mg/kg	D	%Rec           118           105           ID: Lab	Limits 70 - 135 70 - 135 Control S Prep Typ	Sample be: Tot	e Dup al/NA
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS Matrix: SOIL Analysis Batch: 3150186	D		Spike Added 1000 1000	LCS Result 1180 1050	LCS Qualifie	Unit mg/kg mg/kg	D mple	%Rec           118           105           ID: Lab           Pre	Limits 70 - 135 70 - 135 Control S Prep Typ ep Batch: %Bec	Sample be: Tot 31501	e Dup al/NA 186_P
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS Matrix: SOIL Analysis Batch: 3150186	D		Spike Added 1000 1000 Spike	LCS Result 1180 1050 LCSD	LCS Qualifie	Client Sa	D mple	%Rec           118           105           ID: Lab           Pre           %Rec	Limits 70 - 135 70 - 135 Control S Prep Typ p Batch: %Rec.	Sample be: Tot 31501	e Dup al/NA 186_P RPD
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS Matrix: SOIL Analysis Batch: 3150186 Analyte Diesel Range Organics (DRO)	D		Spike Added Spike Added	LCS Result 1180 1050 LCSD Result	LCS Qualifie	Client Sa	D mple D	%Rec           118           105           ID: Lab           Pre           %Rec           112	Limits 70 - 135 70 - 135 Control S Prep Typ p Batch: %Rec. Limits 70 - 135	Sample be: Tot 31501 RPD	e Dup al/NA 186_P RPD Limit
Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons (GRO) Lab Sample ID: 7720905-1-BS Matrix: SOIL Analysis Batch: 3150186 Analyte Diesel Range Organics (DRO) Gasoline Range Hydrocarbons	D		Spike           Added           1000           1000           Spike           Added           1000	LCS Result 1180 1050 LCSD Result 1120	LCS Qualifie	Client Sa	D	%Rec           118           105           ID: Lab           Prec           %Rec           112           00	Limits 70 - 135 70 - 135 Control \$ Prep Type p Batch: %Rec. Limits 70 - 135 70 - 135 70 - 135	Sample be: Tot 31501 RPD 5	e Dup cal/NA 886_P RPD Limit 20

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

## Method: TPH SW8015\_MOD - SW846 8015B DRO

Lab Sample ID: 687087-001 S Matrix: SOIL Analysis Batch: 3150186							CI	ient Sa Pi	mple ID: Ma Prep Type rep Batch: 3	atrix Spike e: Total/NA 8150186_P
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics (DRO)	<50.0		1000	905		mg/kg		91	70 - 135	
Gasoline Range Hydrocarbons _(GRO)	<50.0		1000	819		mg/kg		82	70 - 135	
Lab Sample ID: 687087-001 SI Matrix: SOIL Analysis Batch: 3150186	C					Client S	Samp	le ID: N Pi	Aatrix Spike Prep Type rep Batch: 3	Duplicate e: Total/NA 8150186_P
-	Sample	Sample	Spike	MSD	MSD				%Rec.	RPD

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics (DRO)	<50.0		1000	972		mg/kg		97	70 - 135	7	20
Gasoline Range Hydrocarbons (GRO)	<50.0		1000	875		mg/kg		88	70 - 135	7	20

8

# **QC Association Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

#### Prep Batch: 124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-122-1	AH-01 0'-1'	Total/NA	Solid	5030C	
890-122-2	AH-01 1'-1.5'	Total/NA	Solid	5030C	
890-122-6	AH-02 0'-1'	Total/NA	Solid	5030C	
890-122-7	AH-02 1'-1.5'	Total/NA	Solid	5030C	
890-122-11	AH-03 0'-1'	Total/NA	Solid	5030C	
890-122-12	AH-03 1'-1.5'	Total/NA	Solid	5030C	
MB 890-124/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 890-124/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 890-124/3-A	Lab Control Sample Dup	Total/NA	Solid	5030C	
890-122-1 MS	AH-01 0'-1'	Total/NA	Solid	5030C	
890-122-1 MSD	AH-01 0'-1'	Total/NA	Solid	5030C	

#### Analysis Batch: 129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-122-1	AH-01 0'-1'	Total/NA	Solid	8021B	124
890-122-2	AH-01 1'-1.5'	Total/NA	Solid	8021B	124
890-122-6	AH-02 0'-1'	Total/NA	Solid	8021B	124
890-122-7	AH-02 1'-1.5'	Total/NA	Solid	8021B	124
890-122-11	AH-03 0'-1'	Total/NA	Solid	8021B	124
890-122-12	AH-03 1'-1.5'	Total/NA	Solid	8021B	124
MB 890-124/1-A	Method Blank	Total/NA	Solid	8021B	124
LCS 890-124/2-A	Lab Control Sample	Total/NA	Solid	8021B	124
LCSD 890-124/3-A	Lab Control Sample Dup	Total/NA	Solid	8021B	124
890-122-1 MS	AH-01 0'-1'	Total/NA	Solid	8021B	124
890-122-1 MSD	AH-01 0'-1'	Total/NA	Solid	8021B	124

#### HPLC/IC

#### Leach Batch: 118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-122-1	AH-01 0'-1'	Soluble	Solid	DI Leach	
890-122-2	AH-01 1'-1.5'	Soluble	Solid	DI Leach	
890-122-3	AH-01 2'-2.5'	Soluble	Solid	DI Leach	
890-122-4	AH-01 3'-3.5'	Soluble	Solid	DI Leach	
890-122-5	AH-01 4'-4'.5'	Soluble	Solid	DI Leach	
890-122-6	AH-02 0'-1'	Soluble	Solid	DI Leach	
890-122-7	AH-02 1'-1.5'	Soluble	Solid	DI Leach	
890-122-8	AH-02 2'-2.5'	Soluble	Solid	DI Leach	
890-122-9	AH-02 3'-3.5'	Soluble	Solid	DI Leach	
890-122-10	AH-02 4'-4.5'	Soluble	Solid	DI Leach	
890-122-11	AH-03 0'-1'	Soluble	Solid	DI Leach	
890-122-12	AH-03 1'-1.5'	Soluble	Solid	DI Leach	
890-122-13	AH-03 2'-2.5'	Soluble	Solid	DI Leach	
890-122-14	AH-03 3'-3.5'	Soluble	Solid	DI Leach	
890-122-15	AH-03 4'-4.5'	Soluble	Solid	DI Leach	
MB 890-118/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 890-118/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 890-118/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-122-1 MS	AH-01 0'-1'	Soluble	Solid	DI Leach	
890-122-1 MSD	AH-01 0'-1'	Soluble	Solid	DI Leach	
890-122-11 MS	AH-03 0'-1'	Soluble	Solid	DI Leach	

#### Eurofins Xenco, Carlsbad

Job ID: 890-122-1

# **QC** Association Summary

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

## HPLC/IC (Continued)

#### Leach Batch: 118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-122-11 MSD	AH-03 0'-1'	Soluble	Solid	DI Leach		5
Analysis Batch: 1	19					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-122-1	AH-01 0'-1'	Soluble	Solid	300.0	118	
890-122-2	AH-01 1'-1.5'	Soluble	Solid	300.0	118	
890-122-3	AH-01 2'-2.5'	Soluble	Solid	300.0	118	
890-122-4	AH-01 3'-3.5'	Soluble	Solid	300.0	118	8
890-122-5	AH-01 4'-4'.5'	Soluble	Solid	300.0	118	
890-122-6	AH-02 0'-1'	Soluble	Solid	300.0	118	9
890-122-7	AH-02 1'-1.5'	Soluble	Solid	300.0	118	
890-122-8	AH-02 2'-2.5'	Soluble	Solid	300.0	118	
890-122-9	AH-02 3'-3.5'	Soluble	Solid	300.0	118	
890-122-10	AH-02 4'-4.5'	Soluble	Solid	300.0	118	
890-122-11	AH-03 0'-1'	Soluble	Solid	300.0	118	

Soluble

Soluble

Solid

Solid

890-122-13	AH-03 2'-2.5'	Soluble	Solid	
890-122-14	AH-03 3'-3.5'	Soluble	Solid	
890-122-15	AH-03 4'-4.5'	Soluble	Solid	
MB 890-118/1-A	Method Blank	Soluble	Solid	
LCS 890-118/2-A	Lab Control Sample	Soluble	Solid	
LCSD 890-118/3-A	Lab Control Sample Dup	Soluble	Solid	
890-122-1 MS	AH-01 0'-1'	Soluble	Solid	
890-122-1 MSD	AH-01 0'-1'	Soluble	Solid	
890-122-11 MS	AH-03 0'-1'	Soluble	Solid	

AH-03 1'-1.5'

AH-03 0'-1'

## 890-122-11 MSD **Subcontract**

890-122-12

#### Analysis Batch: 3150186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-122-1	AH-01 0'-1'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
890-122-2	AH-01 1'-1.5'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
890-122-6	AH-02 0'-1'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
890-122-7	AH-02 1'-1.5'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
890-122-11	AH-03 0'-1'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
890-122-12	AH-03 1'-1.5'	Total/NA	Solid	TPH	3150186_P
				SW8015_MOD	
7720905-1-BLK	Method Blank	Total/NA	SOIL	TPH	3150186_P
				SW8015_MOD	
7720905-1-BKS	Lab Control Sample	Total/NA	SOIL	TPH	3150186_P
				SW8015_MOD	
7720905-1-BSD	Lab Control Sample Dup	Iotal/NA	SOIL	TPH	3150186_P
				SW8015_MOD	
687087-001 S	Matrix Spike	Iotal/NA	SOIL	TPH	3150186_P
				SW8015_MOD	
687087-001 SD	Matrix Spike Duplicate	Iotal/NA	SOIL	IPH	3150186_P
				SW8015_MOD	

Job ID: 890-122-1

300.0

300.0

300.0

300.0

300.0

300.0

300.0

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300.0

300.0

300.0

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Page 51 of 62

# **QC Association Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

## Subcontract

#### Prep Batch: 3150186\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-122-1	AH-01 0'-1'	Total/NA	Solid	SW8015P	
890-122-2	AH-01 1'-1.5'	Total/NA	Solid	SW8015P	
890-122-6	AH-02 0'-1'	Total/NA	Solid	SW8015P	
890-122-7	AH-02 1'-1.5'	Total/NA	Solid	SW8015P	
890-122-11	AH-03 0'-1'	Total/NA	Solid	SW8015P	
890-122-12	AH-03 1'-1.5'	Total/NA	Solid	SW8015P	
7720905-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT	
				PREP***	
7720905-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT	
				PREP***	
7720905-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT	
				PREP***	
687087-001 S	Matrix Spike	Total/NA	SOIL	***DEFAULT	
				PREP***	
687087-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT	
				PREP***	

Job ID: 890-122-1

Page 52 of 62

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7 8 9

Project/Site: Medano VA State #002 Client Sample ID: AH-01 0'-1' Job ID: 890-122-1

#### Lab Sample ID: 890-122-1 Matrix: Solid

Lab Sample ID: 890-122-2

Matrix: Solid

Date Collected: 02/02/21 10:30 Date Received: 02/02/21 15:45

Client: Tetra Tech, Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	МС	XC
Total/NA	Analysis	8021B		1	129	02/03/21 18:49	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 03:28	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 21:30	ARM	XM

#### Client Sample ID: AH-01 1'-1.5' Date Collected: 02/02/21 10:35 Date Received: 02/02/21 15:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	MC	XC
Total/NA	Analysis	8021B		1	129	02/03/21 19:56	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 03:45	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 22:34	ARM	XM

# Client Sample ID: AH-01 2'-2.5'

Date Collected: 02/02/21 10:40 Date Received: 02/02/21 15:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 03:50	A1S	XC

## Client Sample ID: AH-01 3'-3.5'

Date Collected: 02/02/21 10:45 Date Received: 02/02/21 15:45

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 03:56	A1S	XC

#### Client Sample ID: AH-01 4'-4'.5' Date Collected: 02/02/21 10:50 Date Received: 02/02/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:02	A1S	XC

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10

Lab Sample ID: 890-122-3 Matrix: Solid

Lab Sample ID: 890-122-4

Lab Sample ID: 890-122-5

Matrix: Solid

Matrix: Solid

Project/Site: Medano VA State #002 Client Sample ID: AH-02 0'-1' Job ID: 890-122-1

#### Lab Sample ID: 890-122-6 Matrix: Solid

Lab Sample ID: 890-122-7

Date Collected: 02/02/21 11:05 Date Received: 02/02/21 15:45

Client: Tetra Tech, Inc.

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	МС	XC
Total/NA	Analysis	8021B		1	129	02/03/21 20:19	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:19	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 22:55	ARM	XM

#### Client Sample ID: AH-02 1'-1.5' Date Collected: 02/02/21 11:10 Date Received: 02/02/21 15:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	MC	XC
Total/NA	Analysis	8021B		1	129	02/03/21 20:41	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:24	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 23:17	ARM	XM

#### Client Sample ID: AH-02 2'-2.5' Date Collected: 02/02/21 11:15

Date Received: 02/02/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:30	A1S	XC

# Client Sample ID: AH-02 3'-3.5'

Date Collected: 02/02/21 11:20 Date Received: 02/02/21 15:45

「	Batch	Batch	_	Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:36	A1S	XC

#### Client Sample ID: AH-02 4'-4.5' Date Collected: 02/02/21 11:25 Date Received: 02/02/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:42	A1S	XC

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10

# Lab Sample ID: 890-122-8

Lab Sample ID: 890-122-9

Lab Sample ID: 890-122-10

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Project/Site: Medano VA State #002 Client Sample ID: AH-03 0'-1'

Date Collected: 02/02/21 11:40

Date Received: 02/02/21 15:45

Client: Tetra Tech, Inc.

Page 55 of 62

Job ID: 890-122-1

#### Lab Sample ID: 890-122-11 Matrix: Solid

Lab Sample ID: 890-122-12

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	MC	XC
Total/NA	Analysis	8021B		1	129	02/03/21 21:03	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 04:47	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 23:38	ARM	XM

#### Client Sample ID: AH-03 1'-1.5' Date Collected: 02/02/21 11:45 Date Received: 02/02/21 15:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			124	02/02/21 21:08	MC	XC
Total/NA	Analysis	8021B		1	129	02/03/21 21:48	MC	XC
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 05:04	A1S	XC
Total/NA	Prep	SW8015P		1	3150186_P	02/04/21 12:20		XM
Total/NA	Analysis	TPH SW8015_MOD		1	3150186	02/04/21 23:58	ARM	XM

## Client Sample ID: AH-03 2'-2.5'

Date Collected: 02/02/21 11:50 Date Received: 02/02/21 15:45

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 05:10	A1S	XC

#### Client Sample ID: AH-03 3'-3.5'

Date Collected: 02/02/21 11:55 Date Received: 02/02/21 15:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 05:27	A1S	XC

#### Client Sample ID: AH-03 4'-4.5' Date Collected: 02/02/21 12:00 Date Received: 02/02/21 15:45

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			118	02/02/21 19:53	MC	XC
Soluble	Analysis	300.0		1	119	02/03/21 05:33	A1S	XC

#### Laboratory References:

XC = Eurofins Xenco, Carlsbad, 1089 N Canal St., Carlsbad, NM 88220, TEL (575)988-3199 XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

10

# Matrix: Solid

Lab Sample ID: 890-122-14

Lab Sample ID: 890-122-15

Lab Sample ID: 890-122-13

Matrix: Solid

Matrix: Solid

Matrix: Solid

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

# Job ID: 890-122-1

# Laboratory: Eurofins Xenco, Carlsbad

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

Authority	Pi	ogram	Identification Number	Expiration Date
Louisiana	N	ELAP	05092	06-30-21
<b>T</b> I ( ) ( ) ( )				
The following analytes the agency does not o	s are included in this repo offer certification.	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for wh
The following analytes the agency does not c Analysis Method	s are included in this repo offer certification. Prep Method	ort, but the laboratory is r Matrix	not certified by the governing authority. Analyte	This list may include analytes for wh

## Laboratory: Eurofins Xenco, Midland

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The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

## **Method Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA Stat #002 Job ID: 890-122-1

Page 57 of 62

dano VA State #002			
			= 3
Method Description	Protocol	Laboratory	
Volatile Organic Compounds (GC)	SW846	XC	- 1

8021B	Volatile Organic Compounds (GC)	SW846	XC
300.0	Anions, Ion Chromatography	MCAWW	XC
8015B	SW846 8015B DRO	SW846	XM
5030C	Purge and Trap	SW846	XC
DI Leach	Deionized Water Leaching Procedure	ASTM	XC

#### **Protocol References:**

Method

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

XC = Eurofins Xenco, Carlsbad, 1089 N Canal St., Carlsbad, NM 88220, TEL (575)988-3199

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

## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Medano VA State #002

Page 58 of 62

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-122-1	AH-01 0'-1'	Solid	02/02/21 10:30	02/02/21 15:45
890-122-2	AH-01 1'-1.5'	Solid	02/02/21 10:35	02/02/21 15:45
890-122-3	AH-01 2'-2.5'	Solid	02/02/21 10:40	02/02/21 15:45
890-122-4	AH-01 3'-3.5'	Solid	02/02/21 10:45	02/02/21 15:45
890-122-5	AH-01 4'-4'.5'	Solid	02/02/21 10:50	02/02/21 15:45
890-122-6	AH-02 0'-1'	Solid	02/02/21 11:05	02/02/21 15:45
890-122-7	AH-02 1'-1.5'	Solid	02/02/21 11:10	02/02/21 15:45
890-122-8	AH-02 2'-2.5'	Solid	02/02/21 11:15	02/02/21 15:45
890-122-9	AH-02 3'-3.5'	Solid	02/02/21 11:20	02/02/21 15:45
890-122-10	AH-02 4'-4.5'	Solid	02/02/21 11:25	02/02/21 15:45
890-122-11	AH-03 0'-1'	Solid	02/02/21 11:40	02/02/21 15:45
890-122-12	AH-03 1'-1.5'	Solid	02/02/21 11:45	02/02/21 15:45
890-122-13	AH-03 2'-2.5'	Solid	02/02/21 11:50	02/02/21 15:45
890-122-14	AH-03 3'-3.5'	Solid	02/02/21 11:55	02/02/21 15:45
890-122-15	AH-03 4'-4.5'	Solid	02/02/21 12:00	02/02/21 15:45

## Received by OCD: 3/7/2022 2:29:52 PM



Page 59 of 62

# Received by OCD: 3/7/2022 2:29:52 PM

	Relinquished by	Relinquished by	Relinquished b									( LAB USE )	LAB#		Comments:	Eurofins	EOG; Attn.	Involce to:	Project Location state)	Medano VA	Project Name:	Cilent Name: EOG	۲.
	Date	r. Date: T	$\frac{2^{\text{ate:}}}{2/24}$			ип-5 4 4 30	AH-3 3-3.5		AH-3 2-2 5'	AH-3 1'-1.5'	AH-3 0'-1'		SAMPLE IDENTIFICATION			atory:	James Kennedy	Lea, NM	i: (county,	State #002			Tetra Tecl
	me: Receiv	Receiv	ime:						2-⊑	2-F	2-F	DATE	YEAR 2				5	0717	Project			Site Ma	ı, Inc.
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	Date	Date	22:			>	<>	<>	<	×	X	WATEI SOIL HCL	R	MATRIX									4000 N. Big Sp 401 Midland Tet (432) Fax (432)
	time:	e: Time:	24 ISZ									HNO <sub>3</sub> ICE		PRESERVATIVE									ving Street, Ste ,Texas 79705 682-4559 682-3946
			le				 z z	 z ;	-' Z	N L	-1 Z	# CONT FILTER		RS Y/N)									
(Circle) HAND		Sample Temper	LAB USE (							XX	XX	BTEX 8 TPH TX TPH 80 PAH 82	021B (1005 15M	BTE (Ext to (GRO	EX 8260 0 C35) - DRO -	B ORO)				<b>.</b>			
DELIVERED FE												Total Me TCLP M TCLP V TCLP S	etals / letals olatile emi V	Ag As E Ag As es /olatiles	Ba Cd Cr Ba Cd C	Pb Si FPb S	e Hg ie Hg					ANAL	
DEX UPS Tra	Special Report L	Rush Charges A	SIICH: Same [									RCI GC/MS GC/MS PCB's I	Vol. Semi 8082	8260B . Vol. 8 / 608	/ 624 3270C/6:	25						YSIS REQU	
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Job Number: 890-122-1

List Source: Eurofins Carlsbad

#### Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Login Number: 122 List Number: 1 Creator: Clifton, Cloe

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.	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	True	

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

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	87737
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/17/2023

CONDITIONS

Page 62 of 62

Action 87737