District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural **Resources Department**

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

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Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	NAPP2122432860
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380	
Contact Name Shelby Pennington	Contact Telephone 281-723-9353	
Contact email shelby.pennington@exxonmobil.com	Incident # (assigned by OCD)	
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707		

Location of Release Source

Latitude ______32.20817

Longitude	-103.78916
(NAD 83 in decimal degrees to 5 decimal	mal places)

Site Name PLU 16 Twin Wells Ranch 122H	Site Type Production Well
Date Release Discovered 07/31/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	21	24S	31E	Eddy

Surface Owner: State 🗵 Federal 🗌 Tribal 🗌 Private (*Name:* _

Nature and Volume of Release

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
★ Produced Water	Volume Released (bbls) 6.00	Volume Recovered (bbls) 4.00
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
	eck valve malfunctioned, causing fluid to release both insign fluids. A third-party contractor has been retained for	

Page 2

Oil Conservation Division

Incident ID	NAPP2122432860
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Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	N/A
19.15.29.7(A) NMAC?	
🗌 Yes 🔀 No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
N/A	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 \checkmark The source of the release has been stopped.

★ The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

▲ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have <u>not</u> been undertaken, explain why:

akes

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name:	Adrian Baker	~
---------------	--------------	---

Signature:

NA

Title: SSHE Coordinator Environmental Coordinator

email: adrian.baker@exxonmobil.com

advion [

Date: <u>8/11/21</u> Telephone: 432-236-3808

OCD Only

Received by: Ramona Marcus

Date: 8/13/2021

	NAFF2122452800	
PLU 16 TWR 122H		
7/31/2021		

Location:	PLU 16 TWR 122H	
Spill Date:	7/31/2021	
	Area 1	
Approximate A	rea = 11.23	cu.ft.
	VOLUME OF LEAK	
Total Crude Oil	= 0.00	bbls
Total Produced	Water = 2.00	bbls
	Area 2	
Approximate A	rea = 3585.00	sq. ft.
Average Satura	tion (or depth) of spill = 1.25	inches
		-

Average Porosity Factor =	0.03	
---------------------------	------	--

VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	4.00	bbls

TOTAL VOLUME OF LEAK					
Total Crude Oil =	0.00	bbls			
Total Produced Water =	6.00	bbls			
TOTAL VOLUME RECOVERED					
Total Crude Oil =	0.00	bbls			
Total Produced Water =	4.00	bbls			

District | 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

OGRID:		
5380		
Action Number:		
41590		
Action Type:		
[C-141] Release Corrective Action (C-141)		

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	8/13/2021

CONDITIONS

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Action 41590

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Oil Conservation Division

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Incident ID	NAPP2122432860	
District RP		
Facility ID		
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>110</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

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

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

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

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

Received by OCD: 10/2 Form C-141 Page 4	29/2021 1:48:22 PM State of New Mex Oil Conservation Di	cico vision		Incident ID District RP Facility ID Application ID	Page 6 of 80 NAPP2122432860
regulations all operators public health or the env failed to adequately inv addition, OCD acceptar and/or regulations.	information given above is true and comples are required to report and/or file certain re- ironment. The acceptance of a C-141 repor- estigate and remediate contamination that p ace of a C-141 report does not relieve the op	elease notifications and j rt by the OCD does not bose a threat to groundw berator of responsibility	perform cor relieve the vater, surfac for complia	rective actions for rele operator of liability sho e water, human health ance with any other feo	ases which may endanger ould their operations have or the environment. In deral, state, or local laws
Printed Name:	Adrian Baker	Title:	Enviror	mental Coordinator	
Signature:	letrion Baks			Date:10/29/2	1
email:adrian.	baker@exxonmobil.com	Teleph	one:	(432)-236-3808	
OCD Only					
Received by:		Dat	e:		

Page 6

Oil Conservation Division

	Page 7 of	80
Incident ID	NAPP2122432860	
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.

<u>Closure Report Attachment Checklist</u>: Each of the followin	g items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.2	9.11 NMAC
Photographs of the remediated site prior to backfill or phot must be notified 2 days prior to liner inspection)	tos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate O	DC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file cer may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate and human health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or reg	plete to the best of my knowledge and understand that pursuant to OCD rules tain release notifications and perform corrective actions for releases which of a C-141 report by the OCD does not relieve the operator of liability remediate contamination that pose a threat to groundwater, surface water, of a C-141 report does not relieve the operator of responsibility for gulations. The responsible party acknowledges they must substantially conditions that existed prior to the release or their final land use in e OCD when reclamation and re-vegetation are complete.
Printed Name: Adrian Baker	Title: Environmental Coordinator
Signature: aldring Bafus	Date:10/29/2021
email:adrian.baker@exxonmobil.com	Telephone:432-236-3808
OCD Only	
Received by: Chad Hensley	Date: <u>12/15/2021</u>
remediate contamination that poses a threat to groundwater, surfa- party of compliance with any other federal, state, or local laws an	rty of liability should their operations have failed to adequately investigate and ce water, human health, or the environment nor does not relieve the responsible nd/or regulations.
Closure Approved by:	Date: 12/15/2021
Printed Name: Chad Hensley	Title: Environmental Specialist Advanced



WSP USA

3300 North "A" Street Building 1, Unit 222 Midland, Texas 79705 432.704.5178

October 29, 2021

District II New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

RE: Closure Request PLU 16 Twin Wells Ranch 122H Incident Number NAPP2122432860 Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, soil sampling, and excavation activities at the Poker Lake Unit (PLU) Twin Wells Ranch 122H (Site) in Unit D, Section 21, Township 24 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2122432860.

RELEASE BACKGROUND

On July 31, 2021, a check valve malfunctioned, releasing produced water within and outside of a temporary lined containment. A total of 6 barrels (bbls) of produced water were released. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, approximately 4 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 11, 2021. The release was assigned Incident Number NAPP2122432860.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 110 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During December 2020, WSP installed a soil boring (C-4499) within 0.5 miles of the Site utilizing a truck-mounted hollow stem auger rig. Soil boring C-4499 was drilled to a depth of 110 feet bgs. The

wsp

District II Page 2

soil boring was located approximately 0.36 miles southwest of the Site and is provided on Figure 1. A WSP geologist logged and described soils continuously. The Well Record and Log is included in Attachment 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned utilizing hydrated bentonite chips. All wells used for depth to groundwater determination are depicted on Figure 1 and the associated well records are included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an emergent palustrine, located approximately 6,715 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 24, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected two preliminary assessment soil samples (SS01 and SS02) within the release extent, from a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach[®] chloride QuanTab[®] test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positing System (GPS) and are presented on Figure 2. Photographic documentation was completed during the Site assessment and a photographic log is included in Attachment 2.

vsp

District II Page 3

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, and method of analysis and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil sample SS01. Laboratory analytical results indicated that TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria in preliminary soil sample SS02. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, excavation activities were warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES

On October 5, 2021 WSP personnel were at the Site to oversee excavation activities as indicated by visible staining, field screening activities, and laboratory analytical results for the preliminary soil samples. Excavation activities were performed using a backhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach[®] chloride QuanTab[®] test strips, respectively. The excavation was completed to a depth of 1 foot bgs. Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FSO1 through FSO5 were collected from the floor of the excavation. Due to the shallow depth of the excavation, the floor samples were also representative of the excavation sidewalls. The excavation soil samples were collected, handled, and analyzed as described above. The excavation extent and excavation soil sample locations are presented on Figure 3. Photos of the final excavation extent are included in Attachment 2.

The final excavation extent measured approximately 1,000 square feet. A total of approximately 42 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After the completion of confirmation sampling, the excavation was secured with fencing.

Laboratory analytical results for excavation floor samples FS01 through FS05, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the laboratory analytical reports are included as Attachment 3.

vsp

District II Page 4

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the July 31, 2021 release of produced water. Based on the laboratory analytical results for the preliminary soil samples, impacted soil was excavated. Laboratory analytical results for excavation soil samples, collected from the final excavation extent indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. Based on the soil sample analytical results, no further remediation was required. XTO backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.

Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. As such, XTO respectfully requests NFA for Incident Number NAPP2122432860.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Ellin Ste

Elliot Lee Assistant Consultant, Environmental Scientist

cc: Shelby Pennington, XTO Adrian Baker, XTO Bureau of Land Management

Attachments:

- Figure 1 Site Location Map
- Figure 2 Preliminary Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations

Table 1Soil Analytical Results

- Attachment 1 Referenced Well Records
- Attachment 2 Photographic Log

Attachment 3 Laboratory Analytical Reports

Ashley L. Ager, P.G.

Ashley Ł Ager, P.G. Managing Director, Geologist

FIGUR

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Released to Imaging: 12/15/2021 10:30:30 AM





Table 1

Soil Analytical Results PLU 16 Twin Wells Ranch 122H NAPP2122432860 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Clo	osure Criteria (NM	AC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
Surface Samples										
SS01	8/24/2021	0.5	< 0.00200	< 0.00399	578	<49.8	<49.8	578	578	312
SS02	8/24/2021	0.5	< 0.00201	< 0.00402	1,170	<49.9	<49.9	1,170	1,170	11,100
Excavation Floor Sa	mples									
FS01	10/05/2021	1'	< 0.00199	< 0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	173
FS02	10/05/2022	1'	<0.00199	< 0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	34.4
FS03	10/05/2023	1'	< 0.00200	< 0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	15.4
FS04	10/05/2024	1'	< 0.00202	< 0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	122
FS05	10/05/2025	1'	< 0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	19.2

Notes:

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard Greyed data represents samples that were excavated

Released to Imaging: 12/15/2021 10:30:30 AM



2904 W 2nd St. Roswell, NM 88201 volce: 575.624.2420 fax: 575.624.2421 www.atkinseng.com

01/20/2021

DII-NMOSE 1900 W 2nd Street Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4499 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4499 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

Gran Middlam

Lucas Middleton

Enclosures: as noted above

DSE DIT JAN 27 2021 m8/24



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State	Engineer Well Number: C-4499-POD1			
Well	owner: XTO ENERGY (Kyle Littrell)		Phone No.:	432.682.8873
Maili	ing address:6401 Holiday Hill Dr.			
City:	Midland	State:	Texas	Zip code:
<u>II. W</u>	VELL PLUGGING INFORMATION:			
1)	Name of well drilling company that plug	ged well:	Jackie D. Atkins (Atkins Enginee	ring Associates Inc.)
2)	New Mexico Well Driller License No.:	1249	E:	xpiration Date:
3)	Well plugging activities were supervised Shane Eldridge	by the follo	owing well driller(s)/rig supervis	sor(s):
4)	Date well plugging began: 1/19/2021		_ Date well plugging conclude	led: 1/19/2021
5)	GPS Well Location: Latitude: Longitude:			.89 sec .29 sec, WGS 84
6)	Depth of well confirmed at initiation of p by the following manner: weighted tape		ft below ground le	vel (bgl),
7)	Static water level measured at initiation of	of plugging:	n/aft bgl	
8)	Date well plugging plan of operations wa	as approved	by the State Engineer:12/1/2	:020
9)	Were all plugging activities consistent w differences between the approved pluggi	vith an appro ing plan and	wed plugging plan?Yes the well as it was plugged (attac	If not, please describe ch additional pages as needed):

Version: September 8, 2009 Page 1 of 2

Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with 10) horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of <u>Material Placed</u> (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement <u>Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
-	0-10' Hydrated Bentonite	Approx. 26 gallons	26 gallons	Augers	
	10'-110' Drill Cuttings	Approx. 163 gallons	163 gallons	Boring	
-					
-					
-				05E DJI .	NAN 127 2021 pm3:25
		MULTIPLY E cubic feet x 7.4 cubic yards x 201.9	BY AND OBTAIN 1805 = gallons 177 = gallons		

For each interval plugged, describe within the following columns:

III. SIGNATURE:

I, Jackie D. Atkins

, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jack Atkins

01/21/2021

Signature of Well Driller

Date

Version: September 8, 2009 Page 2 of 2

2020-1-15_C-4499-POD1_Plugging Recordforsign

Final Audit Report

2021-01-20

Created:	2021-01-20
Ву:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAAKYAIMzENwZcWpwbipfZabZszsWa5ksl

"2020-1-15_C-4499-POD1_Plugging Record-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-01-20 - 4:18:16 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-01-20 - 4:18:36 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com) 2021-01-20 - 4:24:48 PM GMT- IP address: 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com) Signature Date: 2021-01-20 - 4:27:30 PM GMT - Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-01-20 - 4:27:30 PM GMT

USE DIT JAN 27 2021 PKS:25





WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

z	OSE POD NO. POD1 (MV)	WE n/a	LL TAG ID NO.			OSE FILE NO(C-4499	S).			
IOIL	WELL OWNER							PHONE (OPTI	ONAL)			
OCA	XTO Energ							, .				
GENERAL AND WELL LOCATION	WELL OWNER							CITY Midland		STATE TX	79707	ZIP
WE	6401 Holida							whatana			19101	
ANI	WELL			GREES I 32°	MINUTES 12'	SECON 15.8	0"	* ACCURACY	REQUIRED: ONE TENT	TH OF A SE	COND	
CRAL	LOCATION (FROM GPS		TTUDE	-103°	47'	36.2	<u> </u>		QUIRED: WGS 84			
ENE	DESCRIPTIO		GITUDE	STREET ADDRESS				S (SECTION, TO	WNSHJIP, RANGE) WHI	ERE AVAIL	ABLE	
1.0	SE NE Sec.											
	LICENSE NO. 124		NAME OF LICENSED		ie D. Atkins				NAME OF WELL DRI		APANY ssociates, Li	20
	DRILLING ST		DRILLING ENDED	DEPTH OF COMPLI		<u> </u>	BOREHOI	LE DEPTH (FT)	DEPTH WATER FIRS			
	12/30/2020 12/30/2020 temporary we							110		n/a		
	COMPLETED	SHALLOW	W (UNCON	NFINED)		STATIC WATER LEV	EL IN COM n/a	PLETED WE	LL (FT)			
NOL	COMPLETED WELL IS: ARTESIAN V DRY HOLE SHALLOW (UNCONFINED) DRILLING FLUID: V AIR MUD ADDITIVES - SPECIFY:						IFY:					
2. DRILLING & CASING INFORMATION	DRILLING ME		HAMMER				R – SPECIFY:	- SPECIFY: Hollow Stem Auger				
	DEPTH (feet bgl) BORE HOLE			CASING MATERIAL AND/OR				CASING CASING WALL		SLOT		
	FROM	TO	DIAM		RADE	CONNECTIO		VECTION	INSIDE DIAM.		THICKNESS SIZ	
CASI			(inches)	note section				YPE ling diameter)	(inches)		ches)	(inches)
9 S	0	110	±8.5	Boru	ng- HSA							
TIN						4	1.1.1					
DRII												
'n									·			
				1		1						
Ц	DEPTH (:		BORE HOLE DIAM. (inches)		LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL				AMOUNT (cubic feet)		METHOD OF PLACEMENT	
RIA	FROM	то		GIATUL								
IATH												
AR N												
INNT						_	_					
3. ANNULAR MATERIAL												
FOR	OSE INTERN	NAL USE							0 WELL RECORD &	LOG (V	ersion 06/30	0/17)
	E NO.				POD NO.	•	T	TRN			DUCT	
1 LOC	ATION						1	WELL TAG I	DNO.		PAGE	

LOCATION

WELL TAG ID NO.

									-		
	DEPTH (f	feet bgl) TO	THICKNESS (feet)	INCLUDE WATE	D TYPE OF MATERIAL F R-BEARING CAVITIES C plemental sheets to fully d	OR FRAC	TURE ZONES		WAT BEARI (YES /	ING?	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0	6	6	SAND, well gr	aded, fine-to-large grain par	rticles red	l-brown, dry		¥	√ N	
	6	8	2	SAND, poorly graded,	fine grained little clay mod	. plasitcit	y, red-brown, m	noist	Y	✓ N	
	8	11	3	CALICHE, mod. cons	solidated, some sand, mediu	m /fine g	rain, white-tan,	dry	Y	√ N	
	11	46	35		lidated, some sand, medium			-	Y	√ N	
	46	74	28	SAND, well-graded, 1	nedium grain,caliche grave	l (1-4mm), light brown, d	łry.	Y	√ N	
	74	110	36	SAND, well-graded	l, fine/large grain, few clay,	cohesive	, red-brown, dry	y	Y	√ N	
4. HYDROGEOLOGIC LOG OF WELL									Y	N	
OF									Y	N	
g									Y	N	
CL									Y	N	
Ū O			· · · · · · · · · · · · · · · · · · ·						Y	N	
EOI									Y	N	
S S									Y	N	
							Y	N			
4. H									Y	N	
									Y	N	
				1					Y	N	
									Y	N	
									Y	N	
			·						Y	N	
									Y	N	
	METHOD U	SED TO ES	TIMATE YIELD	OF WATER-BEARING	G STRATA:			TOT/	L ESTIM	ATED	
	PUMP AIR LIFT BAILER OTHER - SPECIFY:							WEL	L YIELD	(gpm):	0.00
NC	WELL TES	T TEST	RESULTS - ATT I TIME, END TI	ACH A COPY OF DAT ME, AND A TABLE SH	A COLLECTED DURING	WELL 1 ND DRAY	ESTING, INCI WDOWN OVE	LUDII R THI	NG DISCH E TESTIN	IARGE I G PERIC	METHOD, DD.
TEST; RIG SUPERVISION	MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.										
TEST	PRINT NAM	E(S) OF DI	RILL RIG SUPER	VISOR(S) THAT PRO	VIDED ONSITE SUPERV	ISION O	F WELL CONS	TRUC	CTION OT	HER TH	IAN LICENSEE:
5. T	Shane Eldrid										
SIGNATURE	CORRECT I	RECORD O	F THE ABOVE I	DESCRIBED HOLE AN	EST OF HIS OR HER KN D THAT HE OR SHE WII PLETION OF WELL DRII	L FILE	GE AND BELI THIS WELL RI	EF, TI ECOR	HE FORE D WITH	GOING I THE STA	IS A TRUE AND ATE ENGINEER
6. SIGN	Jack A	tkins		Jac	ckie D. Atkins				01/15		
		SIGNAT	URE OF DRILLE	ER / PRINT SIGNEE	NAME					DATE	
FOF	R OSE INTER	NAL USE		8			WR-20 WEL	L REC	CORD & I	LOG (Ve	rsion 06/30/2017)
-	E NO.				POD NO.		TRN NO.				
LO	CATION					WELL	TAG ID NO.	JAI	V2720	21 PKR	PAGE 2 OF 2

2021-1-15_C-4499_POD1_OSE_Well Record and Log_plu129-forsign

Final Audit Report

2021-01-15

Created:	2021-01-15
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAgs296c366oClflrLCiy9WDKJlrUnq-9u

"2021-1-15_C-4499_POD1_OSE_Well Record and Log_plu129-f orsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-01-15 - 8:45:00 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-01-15 - 8:45:35 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com) 2021-01-15 - 9:05:13 PM GMT- IP address: 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com) Signature Date: 2021-01-15 - 9:13:18 PM GMT - Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-01-15 - 9:13:18 PM GMT

DSE DTI JAN 27 2021 PK3:26



USGS 321310103482101 24S.31E.17.13120

Available data for this site SUMMARY OF ALL AVAILABLE DATA 🗸 GO

Well Site

DESCRIPTION:

Latitude 32°13'14.1", Longitude 103°48'23.4" NAD83 Eddy County, New Mexico , Hydrologic Unit 13060011 Well depth: not determined. Land surface altitude: 3,530.00 feet above NGVD29. Well completed in "Other aquifers" (N99990THER) national aquifer. Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-03	2013-01-17	4
Revisions	Unavailable (site:0) (timese	eries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center Email questions about this site to <u>New Mexico Water Science Center Water-Data</u> <u>Inquiries</u>



Released to Imaging: 12/15/2021 10:30:30 AM



	PHOTOGRAPHIC LOG	
XTO, Energy	PLU 16 Twin Wells Ranch 122H Eddy, County	NAPP2122432860



Photo No.	Date	
2	August 24th, 2021	the terms to
View of release	extent facing east.	

wsp

	PHOTOGRAPHIC LOG	
XTO, Energy	PLU 16 Twin Wells Ranch 122H Eddy, County	NAPP2122432860



Photo No.	Date	
4	October 22, 2021	
View of back	filled excavation southeast.	

Released to Imaging: 12/15/2021 10:30:30 AM

1 2 3 4 5 6 7 8 9 10 11 12 13

🔅 eurofins

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1152-1

Laboratory Sample Delivery Group: 31403236.020.0129 Client Project/Site: PLU 16 Twin Wells Ranch 122h

For:

WSP USA Inc. 2777 N. Stemmons Freeway Suite 1600 Dallas, Texas 75207

Attn: Dan Moir

RAMER

Authorized for release by: 8/30/2021 8:47:59 AM

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.

Revenue of the second s

LINKS

Review your project results through

Total Access

Have a Question?

Ask-

The

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Laboratory Job ID: 890-1152-1

SDG: 31403236.020.0129

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Method Summary	18
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Qualifiers **GC VOA**

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CFL

CFU CNF

DER

DL

Job ID: 890-1152-1 SDG: 31403236.020.0129	2
	3
	4

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits. Surrogate recovery exceeds control limits, low biased. Indicates the analyte was analyzed for but not detected. GC Semi VOA Qualifier **Qualifier Description** Indicates the analyte was analyzed for but not detected. HPLC/IC Qualifier **Qualifier Description** MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. 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 Percent Recovery Contains Free Liquid Colony Forming Unit Contains No Free Liquid Duplicate Error Ratio (normalized absolute difference) **Dilution Factor** Dil Fac Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DL. RA. RE. IN

- 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"
- Minimum Detectable Activity (Radiochemistry) MDA
- MDC Minimum Detectable Concentration (Radiochemistry)
- Method Detection Limit MDL MI Minimum Level (Dioxin) MPN Most Probable Number
- Method Quantitation Limit MQL 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
- OC Quality Control RER Relative Error Ratio (Radiochemistry)
- Reporting Limit or Requested Limit (Radiochemistry) RL
- RPD Relative Percent Difference, a measure of the relative difference between two points
- TFF Toxicity Equivalent Factor (Dioxin)
- TEQ Toxicity Equivalent Quotient (Dioxin)
- TNTC Too Numerous To Count

Job ID: 890-1152-1 SDG: 31403236.020.0129

Job ID: 890-1152-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1152-1

Receipt

The samples were received on 8/25/2021 8:02 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-5423-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-5485-A-1-B MS) and (880-5485-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7126 and analytical batch 880-7136 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7090 and 880-7090 and analytical batch 880-7171 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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Released to Imaging: 12/15/2021 10:30:30 AM

Date Collected: 08/24/21 11:00 Date Received: 08/25/21 08:02

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		08/26/21 11:37	08/26/21 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			08/26/21 11:37	08/26/21 18:21	1
1,4-Difluorobenzene (Surr)	101		70 - 130			08/26/21 11:37	08/26/21 18:21	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		08/25/21 14:14	08/26/21 04:08	1	
(GRO)-C6-C10									
Diesel Range Organics (Over	578		49.8	mg/Kg		08/25/21 14:14	08/26/21 04:08	1	
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/25/21 14:14	08/26/21 04:08	1	
Total TPH	578		49.8	mg/Kg		08/25/21 14:14	08/26/21 04:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	96		70 - 130			08/25/21 14:14	08/26/21 04:08	1	
o-Terphenyl	97		70 - 130			08/25/21 14:14	08/26/21 04:08	1	

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	312		5.05	mg/Kg			08/27/21 22:51	1

Client Sample ID: SS02 Date Collected: 08/24/21 11:12 Date Received: 08/25/21 08:02

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		08/25/21 11:45	08/25/21 23:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			08/25/21 11:45	08/25/21 23:18	1
1,4-Difluorobenzene (Surr)	109		70 - 130			08/25/21 11:45	08/25/21 23:18	1

Lab Sample ID: 890-1152-2

Matrix: Solid

Job ID: 890-1152-1 SDG: 31403236.020.0129

Lab Sample ID: 890-1152-1

Matrix: Solid

5
Dil Fac

1

1

1

1

1

Dil Fac

Dil Fac

10

Client Sample Results

RL

49.9

49.9

49.9

49.9

RL

49.5

Limits

70 - 130

70 - 130

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Unit

mg/Kg

D

D

Prepared

08/25/21 14:14

08/25/21 14:14

08/25/21 14:14

08/25/21 14:14

Prepared

08/25/21 14:14

08/25/21 14:14

Prepared

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

<49.9 U

<49.9 U

92

96

11100

Result Qualifier

Qualifier

1170

1170

%Recovery

Client Sample ID: SS02

Date Collected: 08/24/21 11:12 Date Received: 08/25/21 08:02

Sample Depth: 0.5

Gasoline Range Organics

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Analyte

C10-C28)

Total TPH

Surrogate

o-Terphenyl

Analyte

Chloride

1-Chlorooctane

(GRO)-C6-C10

SDG: 31403236.020.0129 Lab Sample ID: 890-1152-2

Analyzed

08/26/21 04:28

08/26/21 04:28

08/26/21 04:28

08/26/21 04:28

Analyzed

08/26/21 04:28

08/26/21 04:28

Analyzed

08/27/21 22:56

Matrix: Solid

Job ID: 890-1152-1

5

Surrogate Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

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

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-5423-A-1-D MS	Matrix Spike	110	105		÷
880-5423-A-1-E MSD	Matrix Spike Duplicate	102	42 S1-		
880-5471-A-1-F MS	Matrix Spike	99	101		2
880-5485-A-1-C MSD	Matrix Spike Duplicate	113	104		
890-1152-1	SS01	109	101		
890-1152-2	SS02	112	109		
LCS 880-7058/1-A	Lab Control Sample	98	98		
LCS 880-7125/1-A	Lab Control Sample	108	95		
LCS 880-7126/1-A	Lab Control Sample	97	97		
LCSD 880-7058/2-A	Lab Control Sample Dup	99	95		
LCSD 880-7125/2-A	Lab Control Sample Dup	103	105		
LCSD 880-7126/2-A	Lab Control Sample Dup	97	97		
MB 880-7058/5-A	Method Blank	122	108		
MB 880-7125/5-A	Method Blank	124	108		
Surrogate Legend					
BFB = 4-Bromofluorobe	nzene (Surr)				
DFBZ = 1,4-Difluoroben					

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

Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) (70-130) Lab Sample ID **Client Sample ID** 890-1147-A-1-C MS Matrix Spike 86 75 890-1147-A-1-D MSD Matrix Spike Duplicate 90 75 890-1152-1 SS01 97 96 890-1152-2 SS02 92 96 LCS 880-7068/2-A Lab Control Sample 96 88 LCSD 880-7068/3-A Lab Control Sample Dup 85 93 MB 880-7068/1-A Method Blank 103 99

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-1152-1 SDG: 31403236.020.0129

Prep Type: Total/NA

Prep Type: Total/NA

Surrogate Legend

Lab Sample ID: MB 880-7058/5-A

QC Sample Results

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 7060							Prep Type: 1 Prep Bato	
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		08/25/21 11:45	08/25/21 14:52	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			08/25/21 11:45	08/25/21 14:52	1
1.4-Difluorobenzene (Surr)	108		70 - 130			08/25/21 11:45	08/25/21 14:52	1

Lab Sample ID: LCS 880-7058/1-A Matrix: Solid Analysis Batch: 7060

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1071		mg/Kg		107	70 - 130	
Toluene	0.100	0.1054		mg/Kg		105	70 - 130	
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene	0.200	0.1928		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09927		mg/Kg		99	70 - 130	

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

Lab Sample ID: LCSD 880-7058/2-A Matrix: Solid

Analysis Batch: 7060							Pre	p Batch	: 7058
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1125		mg/Kg		113	70 - 130	5	35
Toluene	0.100	0.1129		mg/Kg		113	70 - 130	7	35
Ethylbenzene	0.100	0.1113		mg/Kg		111	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2022		mg/Kg		101	70 - 130	5	35
o-Xylene	0.100	0.1014		mg/Kg		101	70 - 130	2	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-5423-A-1-D Matrix: Solid Analysis Batch: 7060	MS							Client	Prep): Matrix Spike Type: Total/NA ep Batch: 7058
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.09135		mg/Kg		92	70 - 130	

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Page 39 of 80

Job ID: 890-1152-1 SDG: 31403236.020.0129

Client Sample ID: Method Blank 5 6 7 8 9

> Prep Type: Total/NA Prep Batch: 7058

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1152-1 SDG: 31403236.020.0129

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

Lab Sample ID: 880-5423-A- Matrix: Solid	1-D MS								Client	Sample ID: I Prep Ty		
Analysis Batch: 7060											Batch	
	Sample	Sample	Spike	MS	MS					%Rec.		
Analyte	•	Qualifier	Added		Qualifier	Unit		D	%Rec	Limits		
Toluene		<u>u</u>	0.0998	0.08347		mg/Kg			84	70 - 130		
Ethylbenzene	< 0.00200		0.0998	0.08350		mg/Kg			84	70 - 130		
m-Xylene & p-Xylene	< 0.00401		0.200	0.1553		mg/Kg			78	70 - 130		
p-Xylene	<0.00200		0.0998	0.07783		mg/Kg			70	70 - 130 70 - 130		
, Aller and a second seco	40.00200	0	0.0000	0.07700		mg/rtg				10 - 100		
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	110		70 - 130									
1,4-Difluorobenzene (Surr)	105		70 - 130									
Lab Sample ID: 880-5423-A-	1-E MSD						Clier	nt Sa	mple ID:	: Matrix Spil	e Dur	olicat
Matrix: Solid										Prep Ty		
Analysis Batch: 7060											Batch	
	Sample	Sample	Spike	MSD	MSD					%Rec.		RP
Analyte	•	Qualifier	Added		Qualifier	Unit		D	%Rec	Limits	RPD	Lim
Benzene	<0.00200		0.0994	0.1007		mg/Kg			101	70 - 130	10	3
Toluene	<0.00200		0.0994	0.09545		mg/Kg			96	70 - 130	13	3
Ethylbenzene	<0.00200		0.0994	0.09085		mg/Kg			91	70 - 130	8	3
n-Xylene & p-Xylene	<0.00200		0.199	0.1649		mg/Kg			83	70 - 130 70 - 130	6	
p-Xylene	<0.00401		0.0994	0.08230		mg/Kg			82	70 - 130 70 - 130	6	3
л-хунене	<0.00200	U	0.0994	0.06230		mg/Kg			02	70 - 130	0	•
		MSD										
-	%Recovery		Limits									
4-Bromofluorobenzene (Surr)	% <i>Recovery</i> 102	Qualifier	70 - 130									
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)									Client S	ample ID: M	athod	Blan
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712		Qualifier	70 - 130						Client Sa	ample ID: Me		
Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid		Qualifier	70 - 130						Client Sa	Prep Ty	pe: To	tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid		Qualifier S1-	70 - 130						Client Sa	Prep Ty		tal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136	%Recovery 102 42 5/5-A	Qualifier S1- MB MB	70 - 130 70 - 130		Unit		D			Prep Ty Prep	pe: To Batch	tal/N 1: 712
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136	%Recovery 102 42 5/5-A	Qualifier S1- MB MB esult Qualifier	70 - 130 70 - 130 		Unit		D	Pr	epared	Prep Ty Prep Analyzed	pe: To Batch	tal/N 1: 712
I-Bromofluorobenzene (Surr) I,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene	%Recovery 102 42 5/5-A Re <0.00	Qualifier S1- MB MB esult Qualifier D2000 U	70 - 130 70 - 130 		mg/K		<u>D</u>	Pr 08/26	epared 5/21 11:37	Prep Ty Prep Analyzed 08/26/21 17	pe: To Batch	tal/N 1: 712
I-Bromofluorobenzene (Surr) I,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene	%Recovery 102 42 5/5-A <0.00 <0.00	Qualifier S1- MB MB esult Qualifier 0200 U	70 - 130 70 - 130 RL 0.00200 0.00200		mg/K mg/K	g	<u>D</u> .	Pr 08/26 08/26	epared 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17	Batch 1 :32 :32	tal/N 1: 712
A-Bromofluorobenzene (Surr) 4.4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene	%Recovery 102 42 5/5-A <0.00 <0.00 <0.00 <0.00	Qualifier S1- MB MB esult Qualifier D2000 U D2000 U	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200		mg/K mg/K mg/K	g g	D	Pr 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17	Batch I :32 :32 :32	tal/N 1: 712
A-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene m-Xylene & p-Xylene	%Recovery 102 42 5/5-A <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00	Qualifier S1- MB MB esult Qualifier D2000 U D2000 U D2000 U D2000 U D2000 U D2000 U	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400		mg/K mg/K mg/K mg/K	g g	<u>D</u> .	Pr 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	be: To Batch 32 32 32 32 32	tal/N 1: 712
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene m-Xylene & p-Xylene p-Xylene	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier 0200 U	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400 0.00200		mg/K mg/K mg/K mg/K	g g g	<u>D</u> .	Pr 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch 32 32 32 32 32 32 32 32	tal/N 1: 712
A-Bromofluorobenzene (Surr) A,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene n-Xylene & p-Xylene b-Xylene Kylenes, Total	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier 0200 U	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00200 0.00400 0.00200 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g	<u>D</u> .	Pr 08/26 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 1 32 32 32 32 32 32 32 32 32 32 32 32 32 33 32 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 35 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 	tal/N 1: 712
A-Bromofluorobenzene (Surr) A,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene n-Xylene & p-Xylene b-Xylene Kylenes, Total	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier 0200 U	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400 0.00200		mg/K mg/K mg/K mg/K	g g g	<u>D</u>	Pr 08/26 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 1 32 32 32 32 32 32 32 32 32 32 32 32 32 33 32 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 35 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 	tal/N 1: 712
A-Bromofluorobenzene (Surr) A,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene n-Xylene & p-Xylene b-Xylene Kylenes, Total	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier D200 U D400 U MB MB	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00200 0.00400 0.00200 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g	<u>D</u> .	Pr 08/26 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Analyzed 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 1 32 32 32 32 32 32 32 32 32 32 32 32 32 33 32 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 35 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 	tal/N 1: 712
A-Bromofluorobenzene (Surr) A,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene b-Xylene Kylenes, Total Total BTEX Surrogate	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier 0200 U 0400 U 0400 U 0400 U 0400 U 0400 U 0400	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g	<u>D</u> .	Pr 08/26 08/26 08/26 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Prep Ty Prep 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 32 32 32 32 32 32 32 32 32 32	tal/N
A-Bromofluorobenzene (Surr) A,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene b-Xylene Kylenes, Total Total BTEX Surrogate	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier D200 U D400 U MB MB	70 - 130 70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400 0.00200 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g	<u>D</u>	Pr 08/26 08/26 08/26 08/26 08/26 08/26 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Prep Ty Prep 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 32 32 32 32 32 32 32 32 32 32	Dil Fa
A-Bromofluorobenzene (Surr) 4.4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712: Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene n-Xylene & p-Xylene b-Xylene (ylenes, Total Total BTEX Surrogate H-Bromofluorobenzene (Surr)	%Recovery 102 42 5/5-A 	Qualifier S1- MB MB esult Qualifier 0200 U 0400 U 0400	70 - 130 70 - 130 RL 0.00200 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g	<u>D</u> .	Pr 08/26 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37	Prep Typ Prep Analyzec 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Batch Batch 1 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 33 32 33 33 34 35 35 35 36 36 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 	Dil Fa
A-Bromofluorobenzene (Surr) 4,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene n-Xylene & p-Xylene b-Xylene Kylenes, Total Total BTEX Surrogate 4-Bromofluorobenzene (Surr) 4,4-Difluorobenzene (Surr)	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 RL 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g		Pr 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared /21 11:37 /21 11:37	Prep Typ Prep Analyzec 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Dee: To Batch :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32 :32	tal/N : 712 Dil Fa
A-Bromofluorobenzene (Surr) A-Difluorobenzene (Surr) Lab Sample ID: MB 880-7123 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Kylenes, Total Fotal BTEX Surrogate A-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-712	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 RL 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g		Pr 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared /21 11:37 /21 11:37	Prep Typ Prep 08/26/21 17	Del: To Batch 132 32	amp
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene p-Xylene Xylenes, Total Total BTEX Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-712 Matrix: Solid	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 RL 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	g g g		Pr 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared /21 11:37 /21 11:37	Prep Ty Prep 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Pee: To Batch 132 332 32 332 32 332 332 332 332 332 332 332 332 332 <	amplytal/N
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 .000200 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 <u>Limits</u> 70 - 130 70 - 130	LCS	mg/K mg/K mg/K mg/K mg/K	g g g		Pr 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared /21 11:37 /21 11:37	Prep Ty Prep 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17	Del: To Batch 132 32	tal/N :: 712 Dil Fa Dil Fa Dil Fa
A-Bromofluorobenzene (Surr) A-Difluorobenzene (Surr) Lab Sample ID: MB 880-7124 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Foluene Ethylbenzene m-Xylene & p-Xylene Sylene Kylenes, Total Fotal BTEX Surrogate A-Bromofluorobenzene (Surr) A-Difluorobenzene (Surr) Lab Sample ID: LCS 880-712 Matrix: Solid Analysis Batch: 7136	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 RL 0.00200 0.00200 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400 0.00400		mg/K mg/K mg/K mg/K mg/K	9 9 9 9 9		Pr 08/26 08/26 08/26 08/26 08/26 Pr 08/26	epared 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 5/21 11:37 epared 5/21 11:37 Sample	Prep Type Prep Analyzec 08/26/21 17	Pee: To Batch 132 332 32 332 32 332 332 332 332 332 332 332 332 332 <	tal/N :: 712 Dil Fa Dil Fa Dil Fa
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: MB 880-712 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene p-Xylene Xylenes, Total Total BTEX Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-712 Matrix: Solid	<u>%Recovery</u> 102 42 5/5-A Ri <0.00	Qualifier S1- MB MB esuit Qualifier 0200 U 0200	70 - 130 70 - 130 70 - 130 		mg/K mg/K mg/K mg/K mg/K	g g g		Pr 08/26 08/26 08/26 08/26 08/26 08/26 08/26 08/26	epared /21 11:37 /21 11:37	Prep Ty Prep 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 08/26/21 17 1D: Lab Con Prep Ty Prep	Pee: To Batch 132 332 32 332 32 332 332 332 332 332 332 332 332 332 <	tal/N :: 712 Dil Fa Dil Fa Dil Fa

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Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1152-1 SDG: 31403236.020.0129

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

Lab Sample ID: LCS 880-71	25/1-A						Client	Sample	ID: Lab C	ontrol Sa	ample
Matrix: Solid										Type: Tot	
Analysis Batch: 7136										p Batch:	
			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene			0.100	0.1075		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.1960		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1004		mg/Kg		100	70 ₋ 130		
-											
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	108		70 - 130								
1,4-Difluorobenzene (Surr)	95		70 - 130								
Lab Sample ID: LCSD 880-7	125/2-1					Clio	nt Sam		Lab Contro	al Sample	
Matrix: Solid	123/2-4					Cile	int San			Type: Tot	
Analysis Batch: 7136			Spike	1.050	LCSD				%Rec.	p Batch:	RP
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Analyte Benzene			0.100	0.1162	Quaimer			116	70 - 130	10 КР	2imi 3
Toluene			0.100	0.1162		mg/Kg mg/Kg		110	70 - 130 70 - 130	10	35
						mg/Kg					
Ethylbenzene			0.100	0.1112		mg/Kg		111	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2058		mg/Kg		103	70 ₋ 130	5	35
o-Xylene			0.100	0.1024		mg/Kg		102	70 - 130	2	35
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
	% <i>Recovery</i> 103	Qualifier	Limits 70 - 130								
4-Bromofluorobenzene (Surr)		Qualifier									
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	103 105	Qualifier	70 - 130								
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A-	103 105	Qualifier	70 - 130					Client	Sample ID		
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid	103 105	Qualifier	70 - 130					Client	Prep	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid	103 105 -1-F MS		70 - 130 70 - 130					Client	Prep 1 Pre		al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136	103 105 -1-F MS Sample	Sample	70 - 130 70 - 130 Spike	MS	MS		_		Prep T Pre %Rec.	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte	103 105 -1-F MS Sample Result	Sample Qualifier	70 - 130 70 - 130 Spike Added	Result	MS Qualifier	Unit	D	%Rec	Prep Pre %Rec. Limits	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene	103 105 -1-F MS Sample Result <0.00200	Sample Qualifier U	70 - 130 70 - 130 Spike Added 0.100	Result 0.09692		mg/Kg	<u>D</u>	%Rec 96	Prep 7 Pre %Rec. Limits 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene	103 105 -1-F MS 	Sample Qualifier U U	70 - 130 70 - 130 Spike Added 0.100 0.100	Result 0.09692 0.09518		mg/Kg mg/Kg	<u>D</u>	%Rec 96 95	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130	Type: Tot	al/NA
Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200	Sample Qualifier U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100	Result 0.09692 0.09518 0.09357		mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 96 95 93	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00399	Sample Qualifier U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200	Sample Qualifier U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100	Result 0.09692 0.09518 0.09357		mg/Kg mg/Kg mg/Kg	D	%Rec 96 95 93	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200 <0.00399 <0.00200	Sample Qualifier U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	<u> </u>	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200 <0.00399 <0.00200	Sample Qualifier U U U U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	<u> </u>	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 MS	Sample Qualifier U U U U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate	103 105 -1-F MS Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 MS %Recovery	Sample Qualifier U U U U U U U	70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 Limits	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	103 105 -1-F MS -1-F MS -1-F MS -1-F MS 	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 96 95 93 88	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot	al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tof	tal/NA : 7125
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.100 0.100 0.200 0.100	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tof	al/NA 7128
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.100 0.100 0.200 0.100	Result 0.09692 0.09518 0.09357 0.1765		mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot p Batch: 	ample ample
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71 Matrix: Solid	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.100 0.100 0.200 0.100	Result 0.09692 0.09518 0.09357 0.1765 0.08733		mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: Tot p Batch: ontrol Sa Type: Tot	ample al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71 Matrix: Solid Analysis Batch: 7136	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 0.200 0.100 70 - 130 70 - 130	Result 0.09692 0.09518 0.09357 0.1765 0.08733	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 Prep 7 Prep 7 Pre	Type: Tot p Batch: ontrol Sa Type: Tot	ample al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene p-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71: Matrix: Solid Analysis Batch: 7136 Analyte	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 70 - 130 70 - 130 70 - 130	Result 0.09692 0.09518 0.09357 0.1765 0.08733	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg	Client	%Rec 96 95 93 88 86	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 Prep 7 Prep 7 Prep 7 Prep 7 Pre 7 %Rec.	Type: Tot p Batch: ontrol Sa Type: Tot	ample al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71 Matrix: Solid Analysis Batch: 7136 Analyte Benzene	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.200 0.100 0.100 0.200 0.100000000	Result 0.09692 0.09518 0.09357 0.1765 0.08733 LCS Result	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg	Client	%Rec 96 95 93 88 86 Sample	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 Prep 7 Prep 7 %Rec. Limits	Type: Tot p Batch: ontrol Sa Type: Tot	ample al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71 Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 Limits 70 - 130 70 - 130 Spike Added 0.100	Result 0.09692 0.09518 0.09357 0.1765 0.08733	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg Unit mg/Kg	Client	%Rec 96 95 93 88 86 Sample %Rec 104	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130	Type: Tot p Batch: ontrol Sa Type: Tot	ample al/NA
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-5471-A- Matrix: Solid Analysis Batch: 7136 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCS 880-71 Matrix: Solid	103 105 -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -1-F MS -105 -105 -105 -105 -105 -105 -105 -105	Sample Qualifier U U U U U U U	70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100	Result 0.09692 0.09518 0.09357 0.1765 0.08733	Qualifier	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	Client	%Rec 96 95 93 88 86 Sample %Rec 104 101	Prep 7 Pre %Rec. Limits 70 - 130 70 - 130 Prep 7 %Rec. Limits 70 - 130 70 - 130 70 - 130	Type: Tot p Batch: ontrol Sa Type: Tot	ample tal/NA

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-7126/2-A

Matrix: Solid

Analysis Batch: 7136							Pre	: 7126	
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1009		mg/Kg		101	70 - 130	3	35
Toluene	0.100	0.09994		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.09984		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1821		mg/Kg		91	70 - 130	1	35
o-Xylene	0.100	0.09338		mg/Kg		93	70 - 130	1	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-5485-A Matrix: Solid Analysis Batch: 7136	1-C MSD					С	lient Sa	ample IC		oike Dup Type: To p Batch	tal/NA
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06954	F1	mg/Kg		69	70 - 130	25	35
Toluene	<0.00199	U F1	0.100	0.07764		mg/Kg		77	70 - 130	16	35
Ethylbenzene	<0.00199	U	0.100	0.07929		mg/Kg		79	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1542		mg/Kg		77	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.07891		mg/Kg		78	70 - 130	2	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	113		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-7068/1-A Matrix: Solid Analysis Batch: 7036	мв	МВ				Client Sa	mple ID: Metho Prep Type: 1 Prep Bato	otal/NA
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		08/25/21 14:14	08/25/21 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/25/21 14:14	08/25/21 21:10	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/25/21 14:14	08/25/21 21:10	1
Total TPH	<50.0	U	50.0	mg/Kg		08/25/21 14:14	08/25/21 21:10	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			08/25/21 14:14	08/25/21 21:10	1
o-Terphenyl	99		70 - 130			08/25/21 14:14	08/25/21 21:10	1

Job ID: 890-1152-1 SDG: 31403236.020.0129

Prep Type: Total/NA

7

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample Dup

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1152-1 SDG: 31403236.020.0129

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

Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics							Chem	oumpic	ID: Lab Co		
Analyte									Prep T	ype: To	tal/N/
-									Pre	p Batch	: 706
-			Spike	LCS	LCS				%Rec.		
Gasoline Range Organics			Added	Result	Qualifier	Unit	D	%Rec	Limits		
			1000	866.7		mg/Kg		87	70 - 130		
(GRO)-C6-C10						0 0					
Diesel Range Organics (Over			1000	947.8		mg/Kg		95	70 - 130		
C10-C28)											
		LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	88		70 - 130								
Lab Sample ID: LCSD 880-70	68/3-A					Clier	nt Sam	nple ID: I	_ab Contro	I Sampl	e Du
Matrix: Solid									Prep T	ype: To	tal/N
Analysis Batch: 7036									Pre	p Batch	: 706
			Spike	LCSD	LCSD				%Rec.		RF
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lin
Gasoline Range Organics			1000	879.6		mg/Kg		88	70 - 130	1	
(GRO)-C6-C10				010.0				00		•	
Diesel Range Organics (Over			1000	926.2		mg/Kg		93	70 - 130	2	:
C10-C28)						5 5				-	
,											
		LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	93		70 - 130								
o-Terphenyl	85		70 - 130								
Matrix: Solid Analysis Batch: 7036	Comula	Sample	Spike	MS	MS					ype: To p Batch	
	•	•	•			11	-	0/ D			
• • •		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Analyte	<50.0	U	995	872.7		mg/Kg		88	70 - 130		
Gasoline Range Organics	00.0										
Gasoline Range Organics (GRO)-C6-C10			005	057.0				00	70 400		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	995	857.9		mg/Kg		86	70 - 130		
Gasoline Range Organics (GRO)-C6-C10		U	995	857.9		mg/Kg		86	70 ₋ 130		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U <i>MS</i>	995	857.9		mg/Kg		86	70 - 130		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0	MS	995 Limits	857.9		mg/Kg		86	70 ₋ 130		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 MS	MS		857.9		mg/Kg		86	70 - 130		
Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane	<50.0 MS <u>%Recovery</u> 86	MS	Limits 70 - 130	857.9		mg/Kg		86	70 - 130		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane	<50.0 MS <u>%Recovery</u>	MS	Limits	857.9		mg/Kg		86	70 ₋ 130		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane p-Terphenyl	<50.0 MS - %Recovery 86 75	MS	Limits 70 - 130	857.9			ent S			bike Dur	olica
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1	<50.0 MS - %Recovery 86 75	MS	Limits 70 - 130	857.9			ent Sa): Matrix Sp		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid	<50.0 MS - %Recovery 86 75	MS	Limits 70 - 130	857.9			ent Sa		9: Matrix Sp Prep T	ype: To	tal/N
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1	<50.0 MS %Recovery 86 75 -D MSD	MS Qualifier	Limits 70 - 130 70 - 130				ent Sa		9: Matrix Sp Prep T Pre		tal/N : 706
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036	<50.0 MS %Recovery 86 75 -D MSD Sample	MS Qualifier Sample	Limits 70 - 130 70 - 130 Spike	MSD		Cli		ample IC	9: Matrix Sp Prep T Pre %Rec.	ype: To p Batch	tal/N : 706 RF
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte	<50.0 MS %Recovery 86 75 -D MSD Sample Result	MS Qualifier Sample Qualifier	Limits 70 - 130 70 - 130 Spike Added	MSD Result	MSD Qualifier	Cli	ent Sa	ample ID %Rec	9: Matrix Sp Prep T Pre %Rec. Limits	ype: To p Batch RPD	tal/N : 706 RF Lin
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics	<50.0 MS %Recovery 86 75 -D MSD Sample	MS Qualifier Sample Qualifier	Limits 70 - 130 70 - 130 Spike	MSD		Cli		ample IC	9: Matrix Sp Prep T Pre %Rec.	ype: To p Batch	tal/N : 706 RF Lin
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics (GRO)-C6-C10	<50.0 MS %Recovery 86 75 -D MSD Sample Result <50.0	MS Qualifier Sample Qualifier U	Limits 70 - 130 70 - 130 Spike Added 998	MSD Result 956.6		Cli Unit mg/Kg		ample ID <u>%Rec</u> 96	9: Matrix Sp Prep T Pre %Rec. Limits 70 - 130	Type: To p Batch 	tal/N : 706 RF Lin
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 MS %Recovery 86 75 -D MSD Sample Result	MS Qualifier Sample Qualifier U	Limits 70 - 130 70 - 130 Spike Added	MSD Result		Cli		ample ID %Rec	9: Matrix Sp Prep T Pre %Rec. Limits	ype: To p Batch RPD	tal/N : 706 RF Lin
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics (GRO)-C6-C10	<50.0 MS %Recovery 86 75 -D MSD Sample Result <50.0	MS Qualifier Sample Qualifier U	Limits 70 - 130 70 - 130 Spike Added 998	MSD Result 956.6		Cli Unit mg/Kg		ample ID <u>%Rec</u> 96	9: Matrix Sp Prep T Pre %Rec. Limits 70 - 130	Type: To p Batch 	tal/N : 706 RF Lin
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 MS %Recovery 86 75 -D MSD Sample Result <50.0	MS Qualifier Sample Qualifier U	Limits 70 - 130 70 - 130 Spike Added 998	MSD Result 956.6		Cli Unit mg/Kg		ample ID <u>%Rec</u> 96	9: Matrix Sp Prep T Pre %Rec. Limits 70 - 130	Type: To p Batch 	tal/N : 706 RF Lim
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-1147-A-1 Matrix: Solid Analysis Batch: 7036 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 MS %Recovery 86 75 -D MSD Sample Result <50.0	MS Qualifier Sample Qualifier U U	Limits 70 - 130 70 - 130 Spike Added 998	MSD Result 956.6		Cli Unit mg/Kg		ample ID <u>%Rec</u> 96	9: Matrix Sp Prep T Pre %Rec. Limits 70 - 130	Type: To p Batch 	tal/N

Project/Site: PLU 16 Twin Wells Ranch 122h

Client: WSP USA Inc.

Job ID: 890-1152-1 SDG: 31403236.020.0129

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

Lab Sample ID: 890-1147-A-1- Matrix: Solid	D MSD							Client	Samp	le IC		oike Dup ype: To p Batch	tal/NA
Analysis Batch: 7036											Pre	рвасси	. 7000
	MSD	MSD											
Surrogate	%Recovery	Qualifier	Limits	_									
o-Terphenyl	75		70 - 130										
Method: 300.0 - Anions, Io	n Chromat	ography											
Lab Sample ID: MB 880-7090/	1-A								Clie	ent S	Sample ID:	Method	Blank
Matrix: Solid											Prep	Type: S	oluble
Analysis Batch: 7171													
		MB MB											
Analyte	R	esult Qualifier		RL		Unit		D	Prepa	red	Analyz	ed	Dil Fac
Chloride	<	5.00 U		5.00		mg/Kg					08/27/21	20:08	1
Lab Sample ID: LCS 880-7090	/ 2- Δ							Clie	nt Sa	mnle	ID: Lab Co	ontrol S	amnlo
Matrix: Solid								Unic		inpic		Type: S	
Analysis Batch: 7171											Fieh	Type. 3	oluble
Analysis Datch. 7171			Spike		cs	LCS					%Rec.		
Analyte			Added			Qualifier	Unit	1	D %F	Rec	Limits		
Chloride			250		3.9		mg/Kg			110	90 - 110		
							5 5						
Lab Sample ID: LCSD 880-709	0/3-A						Cl	ient Sa	ample	ID:	Lab Contro	I Samp	e Dup
Matrix: Solid											Prep	Type: S	oluble
Analysis Batch: 7171													
-			Spike	LC	SD	LCSD					%Rec.		RPD
Analyte			Added	Res	sult	Qualifier	Unit	I	D %F	Rec	Limits	RPD	Limit
Chloride			250	27	5.0		mg/Kg			110	90 - 110	0	20
Lab Sample ID: 880-5445-A-11	-B MS								CI	ient	Sample ID	: Matrix	Spike
Matrix: Solid											Prep	Type: S	oluble
Analysis Batch: 7171													
	Sample	Sample	Spike		MS	MS					%Rec.		
Analyte	Result	Qualifier	Added	Res	sult	Qualifier	Unit	I	D %F	Rec	Limits		
Chloride	1240		253	14	142	4	mg/Kg			80	90 - 110		
Lab Sample ID: 880-5445-A-11	-C MSD							Client	Samp	le IC): Matrix Sp	oike Dur	olicate
Matrix: Solid												Type: S	
Analysis Batch: 7171												210 C	
-	Sample	Sample	Spike	м	SD	MSD					%Rec.		RPD
Analyte	Result	Qualifier	Added	Res	sult	Qualifier	Unit	I	D %F	Rec	Limits	RPD	Limit
Chloride	1240		253	14	140	4	mg/Kg			80	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Page 45 of 80

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Job ID: 890-1152-1 SDG: 31403236.020.0129

GC VOA

Prep Batch: 7058

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batcl
890-1152-2	SS02	Total/NA	Solid	5035	
MB 880-7058/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7058/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7058/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5423-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-5423-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 7060					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
390-1152-2	SS02	Total/NA	Solid	8021B	705
MB 880-7058/5-A	Method Blank	Total/NA	Solid	8021B	705
LCS 880-7058/1-A	Lab Control Sample	Total/NA	Solid	8021B	7058
LCSD 880-7058/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	705
880-5423-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	705
880-5423-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	705
rep Batch: 7125					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Bato
390-1152-1	SS01	Total/NA	Solid	5035	
MB 880-7125/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7125/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7125/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5471-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
rep Batch: 7126					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
LCS 880-7126/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7126/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5485-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 7136					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
890-1152-1	SS01	Total/NA	Solid	8021B	712
MB 880-7125/5-A	Method Blank	Total/NA	Solid	8021B	712
_CS 880-7125/1-A	Lab Control Sample	Total/NA	Solid	8021B	712
_CS 880-7126/1-A	Lab Control Sample	Total/NA	Solid	8021B	712
LCSD 880-7125/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	712
LCSD 880-7126/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	712
880-5471-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	712
880-5485-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	712

Analysis Batch: 7036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1152-1	SS01	Total/NA	Solid	8015B NM	7068
890-1152-2	SS02	Total/NA	Solid	8015B NM	7068
MB 880-7068/1-A	Method Blank	Total/NA	Solid	8015B NM	7068
LCS 880-7068/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7068
LCSD 880-7068/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7068
890-1147-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	7068

QC Association Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

GC Semi VOA (Continued)

Analysis Batch: 7036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1147-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7068
rep Batch: 7068					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1152-1	SS01	Total/NA	Solid	8015NM Prep	
890-1152-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-7068/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7068/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7068/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1147-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1147-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1152-1	SS01	Soluble	Solid	DI Leach	
890-1152-2	SS02	Soluble	Solid	DI Leach	
MB 880-7090/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7090/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7090/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5445-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5445-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7171

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-1152-1	SS01	Soluble	Solid	300.0	7090
890-1152-2	SS02	Soluble	Solid	300.0	7090
MB 880-7090/1-A	Method Blank	Soluble	Solid	300.0	7090
LCS 880-7090/2-A	Lab Control Sample	Soluble	Solid	300.0	7090
LCSD 880-7090/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7090
880-5445-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	7090
880-5445-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7090

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Job ID: 890-1152-1 SDG: 31403236.020.0129

Project/Site: PLU 16 Twin Wells Ranch 122h

Job ID: 890-1152-1 SDG: 31403236.020.0129

Lab Sample ID: 890-1152-2

Matrix: Solid

Lab Sample ID: 890-1152-1

Matrix: Solid

Client Sample ID: SS01 Date Collected: 08/24/21 11:00 Date Received: 08/25/21 08:02

Client: WSP USA Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7125	08/26/21 11:37	MR	XEN MID
Total/NA	Analysis	8021B		1	7136	08/26/21 18:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			7068	08/25/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7036	08/26/21 04:08	AJ	XEN MID
Soluble	Leach	DI Leach			7090	08/25/21 18:17	SC	XEN MID
Soluble	Analysis	300.0		1	7171	08/27/21 22:51	SC	XEN MID

Client Sample ID: SS02 Date Collected: 08/24/21 11:12 Date Received: 08/25/21 08:02

_	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7058	08/25/21 11:45	MR	XEN MID
Total/NA	Analysis	8021B		1	7060	08/25/21 23:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			7068	08/25/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7036	08/26/21 04:28	AJ	XEN MID
Soluble	Leach	DI Leach			7090	08/25/21 18:17	SC	XEN MID
Soluble	Analysis	300.0		10	7171	08/27/21 22:56	SC	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

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	vin Wells Ranch 122h			SDG: 31403236.020.0129	_
-	ns Xenco, Midland		reditation /portification holow		
less otherwise noted, all a					-
Authority		ogram	Identification Number	Expiration Date	
exas	NE	ELAP	T104704400-20-21	06-30-22	
The following analytes	are included in this report, bu	t the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for which	
the agency does not off		-			
Analysis Method	Prep Method	Matrix	Analyte		
8015B NM	8015NM Prep	Solid	Total TPH		
8021B	5035	Solid	Total BTEX		

Eurofins Xenco, Carlsbad

Released to Imaging: 12/15/2021 10:30:30 AM

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Method Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1152-1 SDG: 31403236.020.0129

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	XEN MID
3015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
3015NM Prep	Microextraction	SW846	XEN MID
OI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

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:

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

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Sample Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1152-1 SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
390-1152-1	SS01	Solid	08/24/21 11:00	08/25/21 08:02	0.5	4
390-1152-2	SS02	Solid	08/24/21 11:12	08/25/21 08:02	0.5	
						5
						8
						9
						12
						13

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Revised Date 051418 Rev 2018			0								5 / /
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-			8:07 2	2	240					The second secon	
ignature) Date/Time	Received by: (Signature)	Relinguished by: (Signature)		Date/Time		ure)	Received by: (Signature)	- Received	e)	v: (Signature)	Relinduished b
	 terms and conditions nces beyond the control iously negotiated. 	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontrectors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negoliated.	incurred by ut not analyz	ompany to Xe or expenses d to Xenco, b	m client co ny losses submitter	urchase order fro sponsibility for a 5 for each sample	stitutes a valid p ot assume any ro nd a charge of S	of samples cons les and shall no each project au	relinquishment of the cost of samp will be applied to	s document and be liable only for harge of \$75.00	Notice: Signature of thi of service. Xenco will b of Xenco. A minimum c
iO2 Na Sr TI Sn U V Zn 1631/245.1/7470/7471 : Hg	in Mo Ni K Se Ag SiO2 ig Ti U 1	Cd Ca Cr Co Cu Fe Pb Mg Mn Cr Co Cu Pb Mn Mo Ni Se Ag	a Be B Be Cd	Sb As Ba Sb As Ba	11 AI Sb CRA Sb	ACRA 13PPM Texas 11 A TCLP / SPLP 6010: 8RCRA	8RCRA 13F TCLP/SP	8 nalyzed	200.8 / 6020: Metal(s) to be a	6010 200 d(s) and Me	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
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DISCRETE			×	×		0.5'	11:12	8/24/2021	s	SS02	SS
DISCRETE			×	××		0.5'	11:00	8/24/2021	s	01	SS01
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Sample Comments			lorid		mbe	Denth	Time	Date	Matrix	ntification	Comple Ide
lab, if received by 4:30pm			e (EP	PA 80	er of		Total Containers:		No		Sample Custody Seals:
TAT starts the day recevied by the	_	_	A 30		Cor	-0.2	Correction Factor:	_	Ş	als: Yes	Cooler Custody Seals:
	dy	890-1152 Chain of Custody	00.0))21)	ntair	4	Nm-DO-	J-N	Yes No	7	Received Intact:
)		ners	ō	Thermometer ID	(o h h	÷	Temperature (°C):
					8	Kes No	Wet Ice:	: (res No	Temp Blank:	EIPT	SAMPLE RECEIPT
						Due Date:	Due	ee	Elliot Lee		Sampler's Name:
Incident # NAPP2122432860							Rush:				P.O. Number:
AFE: DD.2017.04430.CAP.CMP.01						ine P	Routine	0.0129	31403236.020.0129		Project Number:
Work Order Notes		ANALYSIS REQUEST				Turn Around		s Ranch 122	PLU 16 Twin Wells Ranch 122H	PLU 1	Project Name:
ADaPT Other:	Deliverables: EDD		orrissey@	Tacoma.M	sp.com,	Email: Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com	Email		3849	(432) 236-3849	Phone:
	Reporting:Level II evel III		IM, 88220	Carlsbad, NM, 88220		City, State ZIP:			x 79705	Midland, Tx 79705	City, State ZIP:
	f	Sta	en Street	3104 E Green Street	ω	Address:			n A Street	3300 North A Street	Address:
prownfields CRC Sperfund	Program: UST/PST	Progra		XTO Energy		Company Name:			nian office	WSP Permian office	Company Name:
Work Order Comments				Kyle Littrell	nt)	Bill to: (if different)				Dan Moir	Project Manager:
<u>D.com</u> ^D age 1_ of 1_) www.xenco.com	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	Atlanta,GA	355-0900)	,AZ (480-	-7550) Phoenix	s,NM (575-392	Hobb			
		Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	902-0300 S	as,TX (214) ; Paso,TX (91	200 Dalla 440) EL	_I ,TX (281) 240-4 d,TX (432-704-5	Houstor			N	
ler No:	Work Order No:	Chain of Custody	of Cu	lain c	<u>C</u>						

Received by OCD: 10/29/2021 1:48:22 PM



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∆ Yes ∆ No	ala Intant	Relinquished by	Relinquished by	Relinquished by	Empty Kit Relinguished by:	Deliverable Requested I II III IV Other (specify)	Possible Hazard Identification	maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC.	Note Chap Internation according to a subject to the structure from Verse				SS02 (890-1152-2)	SS01 (890-1152-1)		Sample Identification - Client ID (Lab ID)	Site	Project Name: PLU 16 Twin Wells Ranch 122h	Email	Phone 432-704-5440(Tel)	State Zip TX 79701	City Midland	Address 1211 W Florida Ave	Eurofins Xenco	Shipping/Receiving	Client Information (Sub Contract Lab)	1089 N Canal St Carlsbad NM 88220 Phone: 575-988-3199 Fax 575-988-3199	
		Date/Time	Date/Time:	Date/Time	Date	Primary Deliverable Rank 2		LLC places the ownership or me atrix being analyzed the sample um the signed Chain of Custody		_			8/24/21 Mc	8/24/21 1 Mc	X	Sample Date 1	SSOW#:	Project #: 89000004	WO #	PO #		TAT Requested (days):	Due Date Requested 8/31/2021		Phone.	Sampler		
	Company		Company	Company	Ď	Rank 2		errod, analyte & accreditation or as must be shipped back to the r attesting to said complicance to		_			Mountain Sc		Preservation Code:	Sample Matrix Type (w-water Sample (C=comp, o-water) Time G=grab) BT=Tissue, A-At/											Chain of Custody Record	
Cooler Temperature(s)				Inv Received by	Time	Special Instructions/QC Requirements	Sample Disposal (A f	ompliance upon out subcontract laborat Eurofins Xenco LLC laboratory or other o Eurofins Xenco LLC.					Solid X X X	Solid X X X	ode: XX	Matrix (Wewater secold, Secold, Orwastool, Biold Fittered Perform MS/I 8015MOD_NM/ 300_ORGFM_2 8021B/5035FP_	ASD (Y 8015NN 8D/DI_L	es or I_S_Pri .EACH	No) ep Full	ning for the second	radially star		A	Accreditations Required (See note): NELAP - Louisiana NELAP - Texas	E-Mail jessica kramer@eurofinset com	Lab PM Kramer Jessica	ly Record	
s) ^o C and Other Remarks			TOWARD		Method of Shipment	C Requirements	fee may be	ories. This sample shipment is forward instructions will be provided Any char															nalysis Requested	_{lote):} AP - Texas	m New Mexico	Carrier Tracking No(s)		
0.2/2.8	Date/ I ime		Le Se S	ate/lime	inment:		ples are retained longer th	led under chain-of-custody If the is iges to accreditation status should t								Total Number Spec.	of cor Other	⊼ ⊐	<u> </u>	F MECH G Amchior H Ascorbic Acid	D Nitric Acid		Preservation Codes	Job # 890-1152-1	Page. Page 1 of 1		🕷 eurofins	
Ver: 06/08/2021	Company	Company	Company	Company		MOUL	than 1 month)	laboratory does not currently be brought to Eurofins Xenco LLC								Special Instructions/Note:		W pH 4-5 Z other (specify)	< c	- ω π	P Na204S Q Na2SO3	0 z s					Ins Environment Testing America	

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2 .

Login Sample Receipt Checklist

Client: WSP USA Inc.

Login Number: 1152 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 True The cooler or samples do not appear to have been compromised or tampered with. 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 True Samples are received within Holding Time (excluding tests with immediate HTs) True Sample containers have legible labels. 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 True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs N/A

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

Eurofins Xenco, Carlsbad Released to Imaging: 12/15/2021 10:30:30 AM Job Number: 890-1152-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Carlsbad

Login Sample Receipt Checklist

Client: WSP USA Inc.

Login Number: 1152 List Number: 2 Creator: Kramer, Jessica Job Number: 890-1152-1

SDG Number: 31403236.020.0129	
List Source: Eurofins Xenco, Midland	
List Creation: 08/25/21 01:37 PM	

Gleator. Maner, Jessica		
Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3/2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Received by OCD: 10/29/2021 1:48:22 PM

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1368-1

Laboratory Sample Delivery Group: 31403236.010.0129 Client Project/Site: PLU 16 Twin Wells Ranch 122h

For:

WSP USA Inc. 2777 N. Stemmons Freeway Suite 1600 Dallas, Texas 75207

Attn: Tacoma Morrissey

RAMER

Authorized for release by: 10/15/2021 3:58:11 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.

Visit us at: www.eurofinsus.com/Env Released to Imaging: 12/15/2021 10:30:30 AM

LINKS

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Have a Question?

Ask-

The

Expert

SDG: 31403236.010.0129

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Definitions/Glossary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1368-1 SDG: 31403236.010.0129

		 J
GC VOA		
Qualifier	Qualifier Description	
*1	LCS/LCSD RPD exceeds control limits.	 _
F1	MS and/or MSD recovery exceeds control limits.	5
F2	MS/MSD RPD exceeds control limits	
S1-	Surrogate recovery exceeds control limits, low biased.	
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VO	Α	
Qualifier	Qualifier Description	8
*_	LCS and/or LCSD is outside acceptance limits, low biased.	
U	Indicates the analyte was analyzed for but not detected.	9
HPLC/IC		
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	
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	4.5
%R	Percent Recovery	13

%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

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Job ID: 890-1368-1 SDG: 31403236.010.0129

Job ID: 890-1368-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1368-1

Receipt

The samples were received on 10/6/2021 8:24 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9203 and analytical batch 880-9437 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-9433 and analytical batch 880-9426 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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.

4

Date Collected: 10/05/21 12:45 Date Received: 10/06/21 08:24

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	< 0.00199	U *1 F1 F2	0.00199	mg/Kg		10/11/21 11:51	10/15/21 00:44	
Toluene	<0.00199	U F1 F2	0.00199	mg/Kg		10/11/21 11:51	10/15/21 00:44	
Ethylbenzene	<0.00199	U F1 F2	0.00199	mg/Kg		10/11/21 11:51	10/15/21 00:44	
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		10/11/21 11:51	10/15/21 00:44	
o-Xylene	<0.00199	U F1 F2	0.00199	mg/Kg		10/11/21 11:51	10/15/21 00:44	
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		10/11/21 11:51	10/15/21 00:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	98		70 - 130			10/11/21 11:51	10/15/21 00:44	
1,4-Difluorobenzene (Surr)	109		70 - 130			10/11/21 11:51	10/15/21 00:44	
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/14/21 15:26	
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 14:23	
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		10/14/21 08:43	10/14/21 15:02	
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8	mg/Kg		10/14/21 08:43	10/14/21 15:02	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 08:43	10/14/21 15:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	78		70 - 130			10/14/21 08:43	10/14/21 15:02	
o-Terphenyl	80		70 - 130			10/14/21 08:43	10/14/21 15:02	
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	173	F1	4.98	mg/Kg			10/15/21 10:07	
lient Sample ID: FS02						Lab Sar	nple ID: 890-	1368-
ate Collected: 10/05/21 13:00							Matri	x: Soli
ate Received: 10/06/21 08:24								
ample Depth: 1								
Method: 8021B - Volatile Organi	ic Compounds ((GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U *1	0.00199	mg/Kg		10/11/21 11:51	10/15/21 01:04	
Toluene	<0.00199	U	0.00199	mg/Kg		10/11/21 11:51	10/15/21 01:04	
			0.00100					

Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID: 890-1368-1

Matrix: Solid

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5

1

	10/11/21 11:51	10/15/21 01:04	1
	Prepared	Analyzed	Dil Fac
mg/Kg	10/11/21 11:51	10/15/21 01:04	1
mg/Kg	10/11/21 11:51	10/15/21 01:04	1
mg/Kg	10/11/21 11:51	10/15/21 01:04	1

10/11/21 11:51

10/11/21 11:51 10/15/21 01:04

10/15/21 01:04

Eurofins Xenco, Carlsbad

Ethylbenzene

Xylenes, Total

o-Xylene

Surrogate

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

0.00199

0.00398

0.00199

0.00398

Limits

70 - 130

mg/Kg

<0.00199 U

<0.00398 U

<0.00199 U

<0.00398 U

%Recovery Qualifier

Client Sample Results

Limits

70 - 130

RL

RL

50.0

RL

50.0

50.0

0.00398

Unit

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

Method: Total BTEX - Total BTEX Calculation

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

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

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

%Recovery

<0.00398

<50.0 U

81

Result Qualifier

Ū

Result Qualifier

Result Qualifier

<50.0 U *-

<50.0 U*-

Qualifier

Client Sample ID: FS02

Date Collected: 10/05/21 13:00

Date Received: 10/06/21 08:24

Sample Depth: 1

1,4-Difluorobenzene (Surr)

Gasoline Range Organics

Diesel Range Organics (Over

Surrogate

Analyte

Analyte

Analyte

(GRO)-C6-C10

Total TPH

Total BTEX

Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID: 890-1368-2

Analyzed

10/15/21 01:04

Analyzed

10/14/21 15:26

Analyzed

10/13/21 14:23

Analyzed

10/14/21 15:23

10/14/21 15:23

Lab Sample ID: 890-1368-3

Prepared

10/11/21 11:51

Prepared

Prepared

Prepared

10/14/21 08:43

10/14/21 08:43

D

D

D

Matrix: Solid

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Matrix: Solid

1

5

3

C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	10/14/21 08:43	10/14/21 15:23	
Surrogate 1-Chlorooctane	%Recovery 87	Qualifier	<u>Limits</u>		Prepared 10/14/21 08:43	Analyzed	
o-Terphenyi	89		70 - 130		10/14/21 08:43	10/14/21 15:23	

Method: 300.0 - Anions, Ion Chromatography - Soluble											
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	34.4		5.00	mg/Kg			10/15/21 10:24	1			

Client Sample ID: FS03

Date Collected: 10/05/21 13:20 Date Received: 10/06/21 08:24 Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 U *1 0.00200 mg/Kg 10/11/21 11:51 10/15/21 01:25 Toluene <0.00200 U 0.00200 mg/Kg 10/11/21 11:51 10/15/21 01:25 1 Ethylbenzene <0.00200 U 0.00200 10/11/21 11:51 10/15/21 01:25 mg/Kg 0.00400 10/15/21 01:25 m-Xylene & p-Xylene <0.00400 U 10/11/21 11:51 mg/Kg 1 o-Xylene <0.00200 U 0.00200 mg/Kg 10/11/21 11:51 10/15/21 01:25 Xylenes, Total <0.00400 U 0.00400 mg/Kg 10/11/21 11:51 10/15/21 01:25 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analvzed 70 - 130 4-Bromofluorobenzene (Surr) 10/11/21 11:51 98 10/15/21 01.25 1 1,4-Difluorobenzene (Surr) 107 70 - 130 10/11/21 11:51 10/15/21 01:25 1 Method: Total BTEX - Total BTEX Calculation Analvte RL D Dil Fac Result Qualifier Unit Prepared Analvzed Total BTEX <0.00400 Ū 0.00400 10/14/21 15:26 mg/Kg Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac <49.9 U Total TPH 49.9 mg/Kg 10/13/21 14:23 1

RL

49.9

49.9

49.9

RL

4.95

Limits

70 - 130

70 - 130

Unit

mg/Kg

mg/Kg

mg/Kg

Unit

mg/Kg

D

D

Prepared

10/14/21 08:43

10/14/21 08:43

10/14/21 08:43

Prepared

10/14/21 08:43

10/14/21 08:43

Prepared

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

<49.9 U *-

<49.9 U*-

<49.9 U

%Recovery Qualifier

79

83

15.4

Result Qualifier

Sample Depth: 1

(GRO)-C6-C10

Gasoline Range Organics

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Analyte

C10-C28)

Surrogate 1-Chlorooctane

o-Terphenyl

Analyte

Chloride

Dil Fac

1

1

1

1

1

Dil Fac

Dil Fac

Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID: 890-1368-3

Analyzed

10/14/21 15:45

10/14/21 15:45

10/14/21 15:45

Analyzed

10/14/21 15:45

10/14/21 15:45

Analyzed

10/15/21 10:29

Matrix: Solid

Lab Sample ID:	890-1368-4
	Matrix: Solid

Date Received: 10/06/21 08:24 Sample Depth: 1

Client Sample ID: FS04 Date Collected: 10/05/21 13:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *1	0.00202	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		10/11/21 11:51	10/15/21 01:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			10/11/21 11:51	10/15/21 01:45	1
1,4-Difluorobenzene (Surr)	104		70 - 130			10/11/21 11:51	10/15/21 01:45	1
- Method: Total BTEX - Total BTEX	K Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			10/14/21 15:26	1
Method: 8015 NM - Diesel Range	Organics (DR	0) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 14:23	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		10/14/21 08:43	10/14/21 16:06	1
				malla		10/14/21 08:43	10/14/21 16:06	1
	<49.8	U *-	49.8	mg/Kg		10/14/21 00.45	10/14/21 10:00	1
C10-C28)	<49.8 <49.8		49.8 49.8	mg/Kg		10/14/21 08:43	10/14/21 16:06	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate		U		0.0				
C10-C28) Oll Range Organics (Over C28-C36)	<49.8	U	49.8	0.0		10/14/21 08:43	10/14/21 16:06	1

Eurofins Xenco, Carlsbad

Released to Imaging: 12/15/2021 10:30:30 AM

		Clien	t Sample Re	sults				
Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Rai	nch 122h					SE	Job ID: 890)G: 31403236.0	
Client Sample ID: FS04 Date Collected: 10/05/21 13:50 Date Received: 10/06/21 08:24 Sample Depth: 1						Lab Sar	nple ID: 890- Matri	1368-4 x: Solid
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		5.05	mg/Kg			10/15/21 11:23	1
Client Sample ID: FS05 Date Collected: 10/05/21 14:25 Date Received: 10/06/21 08:24 Sample Depth: 1						Lab Sar	nple ID: 890- Matri	1368-5 x: Solid
- Method: 8021B - Volatile Organic Analyte		(<mark>GC)</mark> Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200			10/11/21 11:51	10/15/21 02:06	1
Toluene	<0.00200		0.00200	mg/Kg		10/11/21 11:51	10/15/21 02:06	1
Ethylbenzene	< 0.00200		0.00200	mg/Kg		10/11/21 11:51	10/15/21 02:06	
m-Xylene & p-Xylene	<0.00200		0.00401	mg/Kg		10/11/21 11:51	10/15/21 02:06	
o-Xylene	< 0.00200		0.00200	mg/Kg		10/11/21 11:51	10/15/21 02:06	1
Xylenes, Total	<0.00401		0.00401	mg/Kg		10/11/21 11:51	10/15/21 02:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/11/21 11:51	10/15/21 02:06	1
1,4-Difluorobenzene (Surr) _	110		70 - 130			10/11/21 11:51	10/15/21 02:06	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/14/21 15:26	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 14:23	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		10/14/21 08:43	10/14/21 16:28	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8	mg/Kg		10/14/21 08:43	10/14/21 16:28	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 08:43	10/14/21 16:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			10/14/21 08:43	10/14/21 16:28	1
o-Terphenyl	79		70 - 130			10/14/21 08:43	10/14/21 16:28	1
Method: 300.0 - Anions, Ion Chro		Soluble Qualifier	ы	Unit	~	Dronarad	Apaluzad	Dil Fac
Analyte	Result	Quaimer	RL	Unit	D	Prepared	Analyzed	

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10/15/21 11:28

Released to Imaging: 12/15/2021 10:30:30 AM

Chloride

4.97

mg/Kg

19.2

Project/Site: PLU 16 Twin Wells Ranch 122h Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		5
890-1368-1	FS01	98	109		
890-1368-1 MS	FS01	1186 S1+	49 S1-		6
890-1368-1 MSD	FS01	124	10 S1-		
890-1368-2	FS02	70	81		
890-1368-3	FS03	98	107		
890-1368-4	FS04	93	104		9
890-1368-5	FS05	117	110		
LCS 880-9203/1-A	Lab Control Sample	87	80		0
LCSD 880-9203/2-A	Lab Control Sample Dup	85	100		J
MB 880-9203/5-A	Method Blank	101	104		
MB 880-9306/5-A	Method Blank	100	106		
Surrogate Legend					
BFB = 4-Bromofluorobe	enzene (Surr)				

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

				Percent Surr
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-6945-A-171-B MS	Matrix Spike	79	80	
880-6945-A-171-C MSD	Matrix Spike Duplicate	77	75	
890-1368-1	FS01	78	80	
890-1368-2	FS02	87	89	
890-1368-3	FS03	79	83	
890-1368-4	FS04	84	87	
890-1368-5	FS05	76	79	
LCS 880-9433/2-A	Lab Control Sample	75	75	
LCSD 880-9433/3-A	Lab Control Sample Dup	79	84	
MB 880-9433/1-A	Method Blank	83	90	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Prep Type: Total/NA

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Prep Type: Total/NA

Lab Sample ID: MB 880-9203/5-A

QC Sample Results

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 9437							Prep Type: 1 Prep Bato	
	МВ	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 11:51	10/15/21 00:15	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			10/11/21 11:51	10/15/21 00:15	1
1,4-Difluorobenzene (Surr)	104		70 - 130			10/11/21 11:51	10/15/21 00:15	1

Lab Sample ID: LCS 880-9203/1-A Matrix: Solid

Analysis Batch: 9437

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07006		mg/Kg		70	70 - 130	
Toluene	0.100	0.07910		mg/Kg		79	70 - 130	
Ethylbenzene	0.100	0.08412		mg/Kg		84	70 - 130	
m-Xylene & p-Xylene	0.200	0.1588		mg/Kg		79	70 - 130	
o-Xylene	0.100	0.08688		mg/Kg		87	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: LCSD 880-9203/2-A

Matrix: Solid

Analysis Batch: 9437							Pre	p Batch	9203
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1032	*1	mg/Kg		103	70 - 130	38	35
Toluene	0.100	0.1035		mg/Kg		103	70 - 130	27	35
Ethylbenzene	0.100	0.1105		mg/Kg		110	70 - 130	27	35
m-Xylene & p-Xylene	0.200	0.2112		mg/Kg		106	70 - 130	28	35
o-Xylene	0.100	0.1090		mg/Kg		109	70 - 130	23	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1368-1 MS

Matrix: Solid									Prep	Type: Total/NA	
Analysis Batch: 9437									Pre	ep Batch: 9203	
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	< 0.00199	U *1 F1	0.100	0.1553	F1	mg/Kg		155	70 - 130		
		F2									

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Client Sample ID: FS01

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Client Sample ID: Method Blank

SDG: 31403236.010.0129

Job ID: 890-1368-1

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

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

Lab Sample ID: 890-1368-1 MS Matrix: Solid									Client Sa Prep 1	mple ID: Type: To	
Analysis Batch: 9437									Pre	p Batch	: 9203
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Toluene	<0.00199	U F1 F2	0.100	0.06144	F1	mg/Kg		61	70 - 130		
Ethylbenzene	<0.00199	U F1 F2	0.100	0.03870	F1	mg/Kg		39	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.05344	F1	mg/Kg		27	70 - 130		
o-Xylene	<0.00199	U F1 F2	0.100	0.06883	F1	mg/Kg		69	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	1186	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	49	S1-	70 - 130								
_ Lab Sample ID: 890-1368-1 MSI	D								Client Sa	mple ID:	: FS01
Matrix: Solid										ype: To	
Analysis Batch: 9437										p Batch	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U *1 F1	0.0990	0.006864	F1 F2	mg/Kg		7	70 - 130	183	35
		F2									
Toluene	<0.00199	U F1 F2	0.0990	0.002203	F1 F2	mg/Kg		2	70 - 130	186	35
Ethylbenzene	<0.00199	U F1 F2	0.0990	0.01848	F1 F2	mg/Kg		19	70 - 130	71	35
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.05743	F1	mg/Kg		29	70 - 130	7	35
o-Xylene	<0.00199	U F1 F2	0.0990	0.03581	F1 F2	mg/Kg		36	70 - 130	63	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	124		70 - 130								
1,4-Difluorobenzene (Surr)	10	S1-	70 - 130								
_ Lab Sample ID: MB 880-9306/5-	A							Client S	Sample ID:	Method	Blank
Matrix: Solid										ype: To	
Analysis Batch: 9437										p Batch	

Analysis Batch: 9437

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/12/21 12:26	10/14/21 12:41	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			10/12/21 12:26	10/14/21 12:41	1
1,4-Difluorobenzene (Surr)	106		70 - 130			10/12/21 12:26	10/14/21 12:41	1

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Job ID: 890-1368-1

SDG: 31403236.010.0129

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

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

Lab Sample ID: MB 880-9433/1	I-A										Client Sa	mple ID: N		
Matrix: Solid												Prep T	-	
Analysis Batch: 9426												Prep	Batch	n: 9433
			MB											
Analyte			Qualifier		RL		Ur		<u>D</u>		repared	Analyze		Dil Fac
Gasoline Range Organics	<	\$50.0	U		50.0		mę	g/Kg		10/1	4/21 08:43	10/14/21 1	2:54	1
(GRO)-C6-C10 Diesel Range Organics (Over	<	50.0	U		50.0		mg	g/Kg		10/1	4/21 08:43	10/14/21 1	2:54	1
C10-C28)														
Oll Range Organics (Over C28-C36)	<	\$0.0			50.0		m	g/Kg		10/1	4/21 08:43	10/14/21 1	2:54	1
-		MB												
Surrogate	%Reco	-	Qualifier	Lin							repared	Analyze		Dil Fac
1-Chlorooctane		83			- 130						4/21 08:43	10/14/21 1		1
o-Terphenyl		90		70 -	- 130					10/1	4/21 08:43	10/14/21 1	2:54	1
Lab Sample ID: LCS 880-9433	/2-A								С	lient	Sample	ID: Lab Co	ntrol S	Sample
Matrix: Solid												Prep Ty	/pe: To	otal/NA
Analysis Batch: 9426												Prep	Batch	n: 9433
				Spike		LCS	LCS					%Rec.		
Analyte				Added		Result	Qualifie	r Unit		D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10				1000		722.0		mg/Kg			72	70 - 130		
Diesel Range Organics (Over				1000		696.5		mg/Kg			70	70 ₋ 130		
C10-C28)														
-	LCS													
Surrogate	%Recovery	Qua	lifier	Limits	_									
1-Chlorooctane	75			70 - 130										
o-Terphenyl	75			70 - 130										
Lab Sample ID: LCSD 880-943	3/3-A							Cli	ent	Sam	ple ID: L	ab Control	Samp	le Dup
Matrix: Solid												Prep Ty	/pe: To	otal/NA
Analysis Batch: 9426												Prep	Batch	n: 9433
-				Spike		LCSD	LCSD					«Rec.		RPD
Analyte				Added		Result	Qualifie	r Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics				1000		694.2	*_	mg/Kg			69	70 - 130	4	20
(GRO)-C6-C10														
Diesel Range Organics (Over C10-C28)				1000		689.2	*-	mg/Kg			69	70 _ 130	1	20
	LCSD	LCS	D											
Surrogate	%Recovery	Qua	lifier	Limits	_									
1-Chlorooctane	79			70 - 130	_									
o-Terphenyl	84			70 - 130										
Lab Sample ID: 880-6945-A-17	1-B MS										Client S	Sample ID:	Matrix	Spike
Matrix: Solid												Prep Ty		
Analysis Batch: 9426														n: 9433
	Sample	Sam	ple	Spike		MS	MS					%Rec.		
Analyte	Result		-	Added		Result	Qualifie	r Unit		D	%Rec	Limits		
Gasoline Range Organics	<49.9			997		789.3		mg/Kg			79	70 - 130		
(GRO)-C6-C10	<49.9			997		741.6					73	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	0 -		997		741.0		mg/Kg			13	10 - 130		

Job ID: 890-1368-1 SDG: 31403236.010.0129

Project/Site: PLU 16 Twin Wells Ranch 122h

Client: WSP USA Inc.

QC Sample Results

Job ID: 890-1368-1 SDG: 31403236.010.0129

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

Lab Sample ID: 880-6945-A-171-B MS **Client Sample ID: Matrix Spike** Matrix: Solid Prep Type: Total/NA Analysis Batch: 9426 Prep Batch: 9433 MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 79 70 - 130 o-Terphenyl 80 70 - 130 Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 880-6945-A-171-C MSD Prep Type: Total/NA Matrix: Solid Analysis Batch: 9426 Prep Batch: 9433

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *-	1000	754.8		mg/Kg		75	70 - 130	4	20
Diesel Range Organics (Over	<49.9	U *-	1000	722.9		mg/Kg		70	70 - 130	3	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	77		70 _ 130								
o-Terphenyl	75		70 - 130								

· · · · · · · · · · · · · · · · · · ·														
_ Lab Sample ID: MB 880-9409/1- Matrix: Solid	A									C	Client S	Sample ID: Prep		l Blank Soluble
Analysis Batch: 9528													.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Analysis Datch: 5520		мв	мв											
A h.da												A		DH 5
Analyte			Qualifier		RL		Uni		D	Pre	epared	Analyz		Dil Fac
Chloride	<{	5.00	U		5.00		mg/	Kg				10/15/21	09:50	1
Lab Sample ID: LCS 880-9409/2	-A								Clie	ent :	Sample	D: Lab C	ontrol	Sample
Matrix: Solid											-	Prep	Type: \$	Soluble
Analysis Batch: 9528														
				Spike		LCS	LCS					%Rec.		
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride				250		255.4		mg/Kg			102	90 - 110		
Lab Sample ID: LCSD 880-9409	/3 -A							CI	ient S	amp	ole ID:	Lab Contro	ol Samp	ole Dup
Matrix: Solid												Prep	Type: \$	Soluble
Analysis Batch: 9528														
				Spike		LCSD	LCSD					%Rec.		RPD
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limit
Chloride				250		256.1		mg/Kg			102	90 _ 110	0	20
Lab Sample ID: 890-1368-1 MS												Client Sa	mple IC): FS01
Matrix: Solid														Soluble
Analysis Batch: 9528													1	
	Sample	Samp	ole	Spike		MS	MS					%Rec.		
Analyte	Result			Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride	173	F1		249		389.0	F1	mg/Kg			87	90 - 110		

Method: 300.0 - Anions, Ion Chromatography

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h

Job ID: 890-1368-1 SDG: 31403236.010.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1368-1 MSD Matrix: Solid									Client Sar Prep	nple ID: Type: So		
Analysis Batch: 9528	Result	Sample Qualifier	Spike Added	Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	173	F1	249	390.5	F1	mg/Kg		87	90 - 110	0	20	
												į

QC Association Summary

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1368-1 SDG: 31403236.010.0129

GC VOA

Prep Batch: 9203

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	5035	
890-1368-2	FS02	Total/NA	Solid	5035	
890-1368-3	FS03	Total/NA	Solid	5035	
890-1368-4	FS04	Total/NA	Solid	5035	
890-1368-5	FS05	Total/NA	Solid	5035	
MB 880-9203/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9203/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9203/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1368-1 MS	FS01	Total/NA	Solid	5035	
890-1368-1 MSD	FS01	Total/NA	Solid	5035	

Prep Batch: 9306

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 880-9306/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 9437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	8021B	9203
890-1368-2	FS02	Total/NA	Solid	8021B	9203
890-1368-3	FS03	Total/NA	Solid	8021B	9203
890-1368-4	FS04	Total/NA	Solid	8021B	9203
890-1368-5	FS05	Total/NA	Solid	8021B	9203
MB 880-9203/5-A	Method Blank	Total/NA	Solid	8021B	9203
MB 880-9306/5-A	Method Blank	Total/NA	Solid	8021B	9306
LCS 880-9203/1-A	Lab Control Sample	Total/NA	Solid	8021B	9203
LCSD 880-9203/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9203
890-1368-1 MS	FS01	Total/NA	Solid	8021B	9203
890-1368-1 MSD	FS01	Total/NA	Solid	8021B	9203

Analysis Batch: 9497

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	Total BTEX	
890-1368-2	FS02	Total/NA	Solid	Total BTEX	
890-1368-3	FS03	Total/NA	Solid	Total BTEX	
890-1368-4	FS04	Total/NA	Solid	Total BTEX	
890-1368-5	FS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	8015 NM	
890-1368-2	FS02	Total/NA	Solid	8015 NM	
890-1368-3	FS03	Total/NA	Solid	8015 NM	
890-1368-4	FS04	Total/NA	Solid	8015 NM	
890-1368-5	FS05	Total/NA	Solid	8015 NM	
Analysis Batch: 942	6				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	8015B NM	9433
890-1368-2	FS02	Total/NA	Solid	8015B NM	9433

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QC Association Summary

GC Semi VOA (Continued)

Analysis Batch: 9426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1368-3	FS03	Total/NA	Solid	8015B NM	9433
890-1368-4	FS04	Total/NA	Solid	8015B NM	9433
890-1368-5	FS05	Total/NA	Solid	8015B NM	9433
MB 880-9433/1-A	Method Blank	Total/NA	Solid	8015B NM	9433
LCS 880-9433/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9433
LCSD 880-9433/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9433
880-6945-A-171-B MS	Matrix Spike	Total/NA	Solid	8015B NM	9433
880-6945-A-171-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9433

Prep Batch: 9433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1368-1	FS01	Total/NA	Solid	8015NM Prep	
890-1368-2	FS02	Total/NA	Solid	8015NM Prep	
890-1368-3	FS03	Total/NA	Solid	8015NM Prep	
890-1368-4	FS04	Total/NA	Solid	8015NM Prep	
890-1368-5	FS05	Total/NA	Solid	8015NM Prep	
MB 880-9433/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9433/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9433/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6945-A-171-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6945-A-171-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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Leach Batch: 9409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1368-1	FS01	Soluble	Solid	DI Leach	
890-1368-2	FS02	Soluble	Solid	DI Leach	
890-1368-3	FS03	Soluble	Solid	DI Leach	
890-1368-4	FS04	Soluble	Solid	DI Leach	
890-1368-5	FS05	Soluble	Solid	DI Leach	
MB 880-9409/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9409/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9409/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1368-1 MS	FS01	Soluble	Solid	DI Leach	
890-1368-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 9528

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-1368-1	FS01	Soluble	Solid	300.0	9409
890-1368-2	FS02	Soluble	Solid	300.0	9409
890-1368-3	FS03	Soluble	Solid	300.0	9409
890-1368-4	FS04	Soluble	Solid	300.0	9409
890-1368-5	FS05	Soluble	Solid	300.0	9409
MB 880-9409/1-A	Method Blank	Soluble	Solid	300.0	9409
LCS 880-9409/2-A	Lab Control Sample	Soluble	Solid	300.0	9409
LCSD 880-9409/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9409
890-1368-1 MS	FS01	Soluble	Solid	300.0	9409
890-1368-1 MSD	FS01	Soluble	Solid	300.0	9409

Page 70 of 80

Job ID: 890-1368-1 SDG: 31403236.010.0129

Project/Site: PLU 16 Twin Wells Ranch 122h

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Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID: 890-1368-1 Matrix: Solid

Date Collected: 10/05/21 12:45 Date Received: 10/06/21 08:24

Client Sample ID: FS01

Client: WSP USA Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9203	10/11/21 11:51	KL	XEN MID
Total/NA	Analysis	8021B		1	9437	10/15/21 00:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9497	10/14/21 15:26	MR	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 14:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9433	10/14/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9426	10/14/21 15:02	AJ	XEN MID
Soluble	Leach	DI Leach			9409	10/13/21 18:21	CA	XEN MID
Soluble	Analysis	300.0		1	9528	10/15/21 10:07	СН	XEN MID

Client Sample ID: FS02

Date Collected: 10/05/21 13:00

Date Received: 10/06/21 08:24

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9203	10/11/21 11:51	KL	XEN MID
Total/NA	Analysis	8021B		1	9437	10/15/21 01:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9497	10/14/21 15:26	MR	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 14:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9433	10/14/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9426	10/14/21 15:23	AJ	XEN MID
Soluble	Leach	DI Leach			9409	10/13/21 18:21	CA	XEN MID
Soluble	Analysis	300.0		1	9528	10/15/21 10:24	CH	XEN MID

Client Sample ID: FS03

Date Collected: 10/05/21 13:20

Date Received: 10/06/21 08:24

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9203	10/11/21 11:51	KL	XEN MID
Total/NA	Analysis	8021B		1	9437	10/15/21 01:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9497	10/14/21 15:26	MR	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 14:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9433	10/14/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9426	10/14/21 15:45	AJ	XEN MID
Soluble	Leach	DI Leach			9409	10/13/21 18:21	CA	XEN MID
Soluble	Analysis	300.0		1	9528	10/15/21 10:29	СН	XEN MID

Client Sample ID: FS04 Date Collected: 10/05/21 13:50 Date Received: 10/06/21 08:24

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9203	10/11/21 11:51	KL	XEN MID
Total/NA	Analysis	8021B		1	9437	10/15/21 01:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9497	10/14/21 15:26	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1368-4

Matrix: Solid

Lab Sample ID: 890-1368-2

Lab Sample ID: 890-1368-3

Matrix: Solid

Matrix: Solid

Project/Site: PLU 16 Twin Wells Ranch 122h

Matrix: Solid

Matrix: Solid

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Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID: 890-1368-4

Client Sample ID: FS04

Client: WSP USA Inc.

Date Collected: 10/05/21 13:50 Date Received: 10/06/21 08:24

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	9387	10/13/21 14:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9433	10/14/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9426	10/14/21 16:06	AJ	XEN MID
Soluble	Leach	DI Leach			9409	10/13/21 18:21	CA	XEN MID
Soluble	Analysis	300.0		1	9528	10/15/21 11:23	СН	XEN MID

Client Sample ID: FS05 Date Collected: 10/05/21 14:25

Date Received: 10/06/21 08:24

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9203	10/11/21 11:51	KL	XEN MID
Total/NA	Analysis	8021B		1	9437	10/15/21 02:06	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9497	10/14/21 15:26	MR	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 14:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9433	10/14/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9426	10/14/21 16:28	AJ	XEN MID
Soluble	Leach	DI Leach			9409	10/13/21 18:21	CA	XEN MID
Soluble	Analysis	300.0		1	9528	10/15/21 11:28	СН	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

		Accreditation/C	ertification Summary		
Client: WSP USA Inc. Project/Site: PLU 16 Tv	win Wells Ranch 122l	ı		Job ID: 890-1368-1 SDG: 31403236.010.0129	2
Laboratory: Eurofi Unless otherwise noted, all a		nd were covered under each acc	reditation/certification below.		
Authority		Program	Identification Number	Expiration Date	
Texas		NELAP	T104704400-21-22	06-30-22	5
The following analytes the agency does not off		but the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for which	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
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Eurofins Xenco, Carlsbad

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Job ID: 890-1368-1 SDG: 31403236.010.0129

lethod	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	XEN MID
fotal BTEX	Total BTEX Calculation	TAL SOP	XEN MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
OI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

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. TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Client: WSP USA Inc. Project/Site: PLU 16 Twin Wells Ranch 122h Job ID: 890-1368-1 SDG: 31403236.010.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
390-1368-1	FS01	Solid	10/05/21 12:45	10/06/21 08:24	1	
390-1368-2	FS02	Solid	10/05/21 13:00	10/06/21 08:24	1	
390-1368-3	FS03	Solid	10/05/21 13:20	10/06/21 08:24	1	5
390-1368-4	FS04	Solid	10/05/21 13:50	10/06/21 08:24	1	
390-1368-5	FS05	Solid	10/05/21 14:25	10/06/21 08:24	1	
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Other:	Deliverables: EDD ADaPT	Email: Alexis.Castro@wsp.com Tacoma.Morrissey@wsp.com Delive	sp.com Tacoma.M	is.Castro@ws	Email: Alex		849	(432) 236-3849	Phone:
			Carlsbad, NM 88220	City, State ZIP:	City,		79705	Midland, TX 79705	City, State ZIP:
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Eurofins Xenco, Carlsbad

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Job Number: 890-1368-1

SDG Number: 31403236.010.0129

List Source: Eurofins Xenco, Carlsbad

Login Sample Receipt Checklist

Client: WSP USA Inc.

Login Number: 1368 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 True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. 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 True HTs) 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 True MS/MSDs

N/A

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

Job Number: 890-1368-1

SDG Number: 31403236.010.0129

List Creation: 10/13/21 01:49 PM

List Source: Eurofins Xenco, Midland

Login Sample Receipt Checklist

Client: WSP USA Inc.

Login Number: 1368 List Number: 2 Creator: Lowe, Katie

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	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:
X	FO ENERGY, INC	5380
64	I01 Holiday Hill Road	Action Number:
М	idland, TX 79707	58672
		Action Type:
		[C-141] Release Corrective Action (C-141)
CONDITION	3	
Created By	Condition	Condition Date

Created By Condition None chensley

CONDITIONS

Action 58672

12/15/2021