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

Received by OCD: 9/4/2019 4:35:14 PM

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NAB1927160599
District RP	2RP-5630
Facility ID	
Application ID	pAB1927160210

Release Notification WLPCF-190904-C-1410

Responsible Party

Charlest Man	Responsible Party: WPX Energy Permian, LLC.			OGRID	: 246289
Contact Name: Bob Raup				Contact	Telephone: 539-573-7314
Contact email: Bob.Raup@wpxenergy.com Inc			m	Incident	t # (assigned by OCD) NAB1927160599
Contact mai 88220	ling address:	: 5315 Buena Vis	ta Dr., Carlsbad,	NM	
			Locatio	n of Release	Source
atitude 32,3	324960		(NAD 83 in	Longitud decimal degrees to 5 de	e -104.042504
Site Name: L	ongview Fe	deral 12-15H		Site Typ	e: Production Facility
Date Release	Discovered	: 9/4/2019		API# (if)	applicable): 30-015-41092
Unit Letter	Section	Township	Range	Co	ounty
С	12	23S	28E	Eddy	
				nd Volume o	f Release
			Nature as	nd Volume o	f Release ific justification for the volumes provided below)
Crude Oi		al(s) Released (Select Volume Releas	Nature as	nd Volume o	f Release
	1		Nature as	nd Volume o	f Release ific justification for the volumes provided below)
	1	Volume Releas Volume Releas Is the concentra	Nature and attack that apply apply apply apply attack that apply app	nd Volume of the calculations or spec	f Release ific justification for the volumes provided below) Volume Recovered (bbls)
	l Water	Volume Releas Volume Releas Is the concentra	Nature and attack and that apply and attack and (bbls) ed (bbls) 10 attion of dissolved the control of the co	nd Volume of the calculations or spec	f Release ific justification for the volumes provided below) Volume Recovered (bbls) Volume Recovered (bbls) 8
Produced	I Water	Volume Releas Volume Releas Is the concentration produced water	Nature and attacked (bbls) ed (bbls) 10 ation of dissolved (bbls) ed (bbls)	nd Volume of the calculations or spec	f Release ific justification for the volumes provided below) Volume Recovered (bbls) Volume Recovered (bbls) 8 Yes \(\sum \) No
Produced Condens	I Water ate Gas	Volume Releas Volume Releas Is the concentrate produced water Volume Releas Volume Releas	Nature and attacked (bbls) ed (bbls) 10 ation of dissolved (bbls) ed (bbls)	nd Volume of the calculations or special chloride in the	f Release ific justification for the volumes provided below) Volume Recovered (bbls) Volume Recovered (bbls) 8 Yes No Volume Recovered (bbls)

Decreased the second	Page 2 o
Incident ID	NAB1927160599
District RP	2RP-5630
Facility ID	
Application ID	pAB1927160210

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s)	does the responsible party consider this a major release?
If YES, was immediate n	otice given to the OCD? By	whom? To whom? When and by what means (phone, email, etc)?
		Initial Response
The responsible	party must undertake the following	actions immediately unless they could create a safety hazard that would result in injury
☑ The impacted area ha☑ Released materials ha	ave been contained via the us	man health and the environment. se of berms or dikes, absorbent pads, or other containment devices. sen removed and managed appropriately.
If all the actions describe	d above have <u>not</u> been under	taken, explain why:
has begun, please attach	a narrative of actions to date	ay commence remediation immediately after discovery of a release. If remediation e. If remedial efforts have been successfully completed or if the release occurred 5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environ- failed to adequately investig	required to report and/or file ce ment. The acceptance of a C-14 gate and remediate contamination	complete to the best of my knowledge and understand that pursuant to OCD rules and rtain release notifications and perform corrective actions for releases which may endanger it report by the OCD does not relieve the operator of liability should their operations have in that pose a threat to groundwater, surface water, human health or the environment. In the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Robert W	'. Raup II	Title: HSE Supervisor
Signature:	VW. Alto	Date: 9/4/2019
email: Bob.Raup@wpxer	nergy.com	Telephone: 539-573-7314
OCD Only		
Received by: Amali	a Bustamante	Date: 9/28/2019

	Page 3 of 84
Incident ID	NAB1927160599
District RP	2RP-5630
Facility ID	
Application ID	pAB1927160210

Site Assessment/Characterization

This information mast be provided to the appropriate district office no taler man 20 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (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 		

containmation associated with the release have been determined. Refer to 19.13.29.11 MMAC for specifics.	
Characterization Report Checklist: Each of the following items must be included in the report.	
 ✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. ✓ Field data ✓ Data table of soil contaminant concentration data ✓ Depth to water determination ✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release ✓ Boring or excavation logs ✓ Photographs including date and GIS information ✓ Topographic/Aerial maps ✓ Laboratory data including chain of custody 	

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

Received by OCD: 3/22/2021 10:17:36 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page 4 of 84

Incident ID	NAB1927160599
District RP	2RP-5630
Facility ID	
Application ID	pAB1927160210

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	ifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Jim Raley	Title: Environmental Specialist
Printed Name: Jim Raley Signature:	Date:3/22/2021
email: james.raley@wpxenergy.com	Telephone: <u>575-689-7597</u>
OCD Only	
Received by:	Date:

Page 5 of 84

Incident ID	NAB1927160599
District RP	2RP-5630
Facility ID	
Application ID	pAB1927160210

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.

Clasura Danart Attachment Chealists Each of the following:	ams must be included in the elecure report	
Closure Report Attachment Checklist: Each of the following it	ems musi ve inciuaea in ine ciosure repori.	
✓ A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)		
Description of remediation activities		
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially neditions that existed prior to the release or their final land use in	
Printed Name: Jim Raley	Title: Environmental Specialist	
Signature: In Rife	Title: Environmental Specialist Date: 3/22/2021	
	Telephone: <u>575-689-7597</u>	
OCD Only		
Received by: Chad Hensley	Date: 04/13/2021	
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.	
Closure Approved by:	Date: 04/13/2021	
Printed Name: Chad Hensley	Title: Environmental Specialist Advanced	

Responsible Party: WPX Energy Permian, LLC.

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NAB1927729096
District RP	2RP-5647
Facility ID	
Application ID	pAB1927728683

Release Notification JU4VI-190916-C-1410

Responsible Party

OGRID: 246289

Contact Name: Jim Raley					Contact Telephone: 575-689-7597				
Contact email: james.raley@wpxenergy.com Contact mailing address: 5315 Buena Vista Dr., Carlsbad, NM					Incident #	(assigned by OCD)	NAB1927729096		
Contact mail 88220	ling address:	5315 Buena Vista	a Dr., Carlsbad,	NM					
			Location	n of Re	elease So	ource			
Latitude 32.3	324960		(NAD 83 in a		ongitude -	-104.042504 nal places)	·		
Site Name: L	ongview Fed	deral 12-15H			Site Type:	Production Facil	lity		
Date Release	Discovered:	9/9/2019			API# (if app	olicable): 30-015-410	992		
Unit Letter	Section	Township	Range		Coun	nty			
С	12	23S	28E	Eddy					
Crude Oi		Volume Release		nch calculatio	ns or specific	Volume Recov	volumes provided below) vered (bbls)		
Produced	Water	Volume Release			Volume Recove		, ,		
		Is the concentra produced water	tion of dissolved >10,000 mg/l?	d chloride i	in the	Yes No)		
Condensa	ate	Volume Release	ed (bbls)			Volume Recov	vered (bbls)		
Natural C	Gas	Volume Release	ed (Mcf)			Volume Recov	vered (Mcf)		
Other (de	escribe)	Volume/Weight	Released (provi	ide units)		Volume/Weigh	ht Recovered (provide units)		
was containe	d in lined se		ent and all 50bb				a produced water transfer line. 50 bbls ils outside of containment, no waterway		

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Oil Conservation Division

Page 2

Incident ID NAB1927729096 District RP 2RP-5647 Facility ID Application ID pAB1927728683

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) Release volume exceeded	does the responsible party consider this a major release? 25 bbls.
Phone call to District 2 of	ffice on 9/16/2019 at 10:40 A	whom? To whom? When and by what means (phone, email, etc)? A.M. Spoke to Mike Bratcher NMOCD directly, to ensure verbal contact had been ding permission to begin remediation activities on soils impacted.
		Initial Response
The responsible	party must undertake the following	actions immediately unless they could create a safety hazard that would result in injury
☑ The impacted area ha☑ Released materials ha	ave been contained via the us	man health and the environment. se of berms or dikes, absorbent pads, or other containment devices. een removed and managed appropriately.
has begun, please attach	a narrative of actions to dat	ay commence remediation immediately after discovery of a release. If remediation c. If remedial efforts have been successfully completed or if the release occurred
I hereby certify that the info regulations all operators are public health or the environ failed to adequately investig	ormation given above is true and required to report and/or file ce ment. The acceptance of a C-14 gate and remediate contaminatio	S)(a) NMAC), please attach all information needed for closure evaluation. I complete to the best of my knowledge and understand that pursuant to OCD rules and extain release notifications and perform corrective actions for releases which may endanger at report by the OCD does not relieve the operator of liability should their operations have on that pose a threat to groundwater, surface water, human health or the environment. In we the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Jim Raley	Y 1	Title: Environmental Specialist
Signature: -/ei	Engl	Date: 9/16/2019
email: james.raley@wpx	energy.com	Telephone: 575-689-7597
OCD Only Received by:	nalia Rustamante	Date: 10/4/2019
The Control by	alia Bustamante	

		Page 8 of 84
Incident ID	NAB1927729096	
District RP	2RP-5647	
Facility ID		
Application ID	pAB1927728683	

Site Assessment/Characterization

This information must be provided to the appropriate district office no tales than 20 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (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
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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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
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 well	ls.

contamination associated with the release have been determined. Refer to 19.13.29.11 NVIAC for specifies.	
Characterization Report Checklist: Each of the following items must be included in the report.	
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If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 3/22/2021 10:17:36 AM Form C-141 State of New Mexico
Page 4 Oil Conservation Division Page 9 of 84

Incident ID	NAB1927729096
District RP	2RP-5647
Facility ID	
Application ID	pAB1927728683

Page 10 of 84

Incident ID	NAB1927729096
District RP	2RP-5647
Facility ID	
Application ID	pAB1927728683

Closure

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

Closure Report Attachment Checklist: Each of the following ite	ems must be included in the closure report.
✓ A scaled site and sampling diagram as described in 19.15.29.11	1 NMAC
Photographs of the remediated site prior to backfill or photos of must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	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 certain may endanger public health or the environment. The acceptance of a	nediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially aditions that existed prior to the release or their final land use in
Printed Name: Jim Raley	Title: Environmental Specialist
Signature:	Date:3/22/2021
	Telephone: <u>575-689-7597</u>
OCD Only	
Received by: Chad Hensley	Date: 04/13/2021
	of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date: 04/13/2021
Printed Name: Chad Hensley	Title: Environmental Specialist Advanced



WSP USA

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

March 21, 2021

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

RE: Closure Request

Longview Federal 12-15H

Incident Numbers NAB1927160599 and NAB1927729096

Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP) on behalf of WPX Energy Permian, LLC. (WPX), is pleased to present the following Closure Request detailing site assessment, soil sampling, and excavation activities at the Longview Federal 12-15H (Site) located in Unit C, Section 12, Township 23 South, Range 28 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 two releases of produced water at the Site. Based on the excavation activities and results of the soil sampling events, WPX is submitting this Closure Request, describing remediation that has occurred and requesting No Further Action (NFA) for Incident Numbers NAB1927160599 and NAB1927729096.

On July 21, 2020, WPX was notified of the Remediation Work Plan (Work Plan) approval associated with Incident Numbers NAB1927160599 and NAB1927729096. The Work Plan was received by the New Mexico Oil Conservation Division (NMOCD) on July 21, 2020. This Closure Request only includes field summaries relevant to fulfilling the conditions of approval issued by NMOCD. All previous data and summaries can be referenced in the original Work Plan.

RELEASE BACKGROUND

Incident Number NAB1927160599

On September 4, 2019, a connection failure along a water transfer line developed and caused the release of approximately 10 barrels (bbls) of produced water into a secondary lined containment, surface of the well pad, and the adjacent pasture. A vacuum truck was dispatched to the Site and recovered approximately 8 bbls of produced water. WPX reported the release to NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) on September 4, 2019 that was subsequently assigned Incident Number NAB1927160599.



District II Page 2

Incident Number NAB1927729096

On September 9, 2019, a connection failure on a produced water transfer line caused the release of approximately 60 bbls of produced water into a lined secondary containment, surface of the pad, and into the adjacent pasture. A vacuum truck was immediately dispatched to the Site and recovered approximately 50 bbls of produced water. WPX reported the release to NMOCD on a Form C-141 on September 16, 2019 that was subsequently assigned Incident Number NAB1927729096.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 55 feet below ground surface (bgs) based on information obtained from a nearby soil boring. The nearest permitted water well with depth to water data is New Mexico Office of the State Engineer (NMOSE) well C 04418, located approximately 271 feet southeast of the Site. NMOSE well C 04418 is a borehole advanced by WPX on March 31, 2020 during a depth to water study of the area. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 55 feet bgs. Water was not observed within the soil boring after 48 hours and the boring was plugged and abandoned. A Plugging Record of the soil boring is included as Attachment 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: 10,000 mg/kg

A reclamation closure criteria of 600 mg/kg chloride was applied to the top 4 feet the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed immediately following remediation.



District II Page 3

EXCAVATION AND SOIL SAMPLING ACTIVITIES

Between January 11 and January 12, 2020, WSP personnel oversaw excavation activities associated with the subject releases. Excavation activities were driven by field screening results of volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Utilizing heavy equipment, approximately 1,001 cubic yards of impacted soil were excavated from the subject release areas. The excavation areas totaled approximately 6,676 square feet cumulatively and ranged from approximately 0.7 feet to 6.5 feet bgs. The impacted soil was transported and properly disposed of at a R360 Facility under WPX approved manifests.

WSP collected 5-point composite soil samples at least every 500 square feet from the sidewalls and floor of the excavations, as described in the NMOCD-approved Work Plan. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the soil samples by thoroughly mixing. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Composite sidewall soil samples (SW01 through SW05) were collected from the sidewalls of the excavation from depths ranging from the ground surface to approximately 4 feet bgs. Composite floor soil samples (FS01 through FS13) were collected from the floor of the excavation from depths ranging from approximately 4 feet to 6.5 feet bgs. Composite floor soil sample FS14 was collected at approximately 0.7 feet bgs and included soil from the sidewalls within the 500 square foot area. The excavation extent and excavation confirmation soil sample locations are presented on Figure 4. Photographic documentation from excavation activities is provided as Attachment 2.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for excavation confirmation soil samples indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and/or compliant with the reclamation criteria in soil samples collected within the pasture from the top 4 feet of the subsurface. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 3.

CLOSURE REQUEST

Impacted soil associated with subject releases was excavated based on field screening results and laboratory analytical results from preliminary and delineation soil samples. Laboratory analytical results for the final excavation soil samples indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH and chloride concentrations were compliant with the Closure Criteria. Additionally, soil samples collected in the pasture from the top 4 feet of the subsurface were compliant with the



District II Page 4

reclamation criteria. Based on the confirmation excavation soil sample analytical results, no further remediation was required. The pasture excavation will be reseeded with an approved Bureau of Land Management (BLM) seed mixture following backfilling activities.

Initial response efforts, which included removal of free-standing fluids via hydrovac and follow-up excavation of residual impacted soil has mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 55 feet bgs and no other sensitive receptors were identified near the release extent. WSP and WPX believe these remedial actions are protective of human health, the environment, and groundwater. As such, WPX requests NFA for Incident Numbers NAB1927160599 and NAB1927729096.

If you have any questions or comments, please do not hesitate to contact Mr. Daniel R. Moir at (303) 887-2946.

Sincerely,

WSP USA Inc.

Fatima Smith

Assistant Consultant, Geologist

Daniel R. Moir, P.G.

Lead Consultant, Geologist

cc: Jim Raley, WPX

Bureau of Land Management

Attachments:

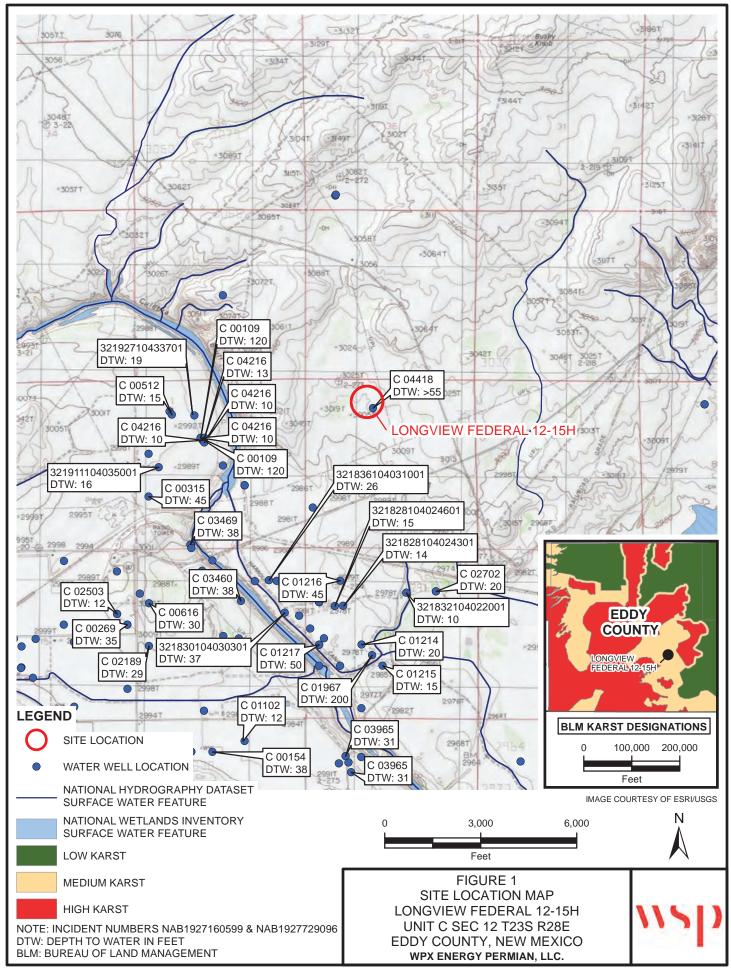
Figure 1 Site Location Map

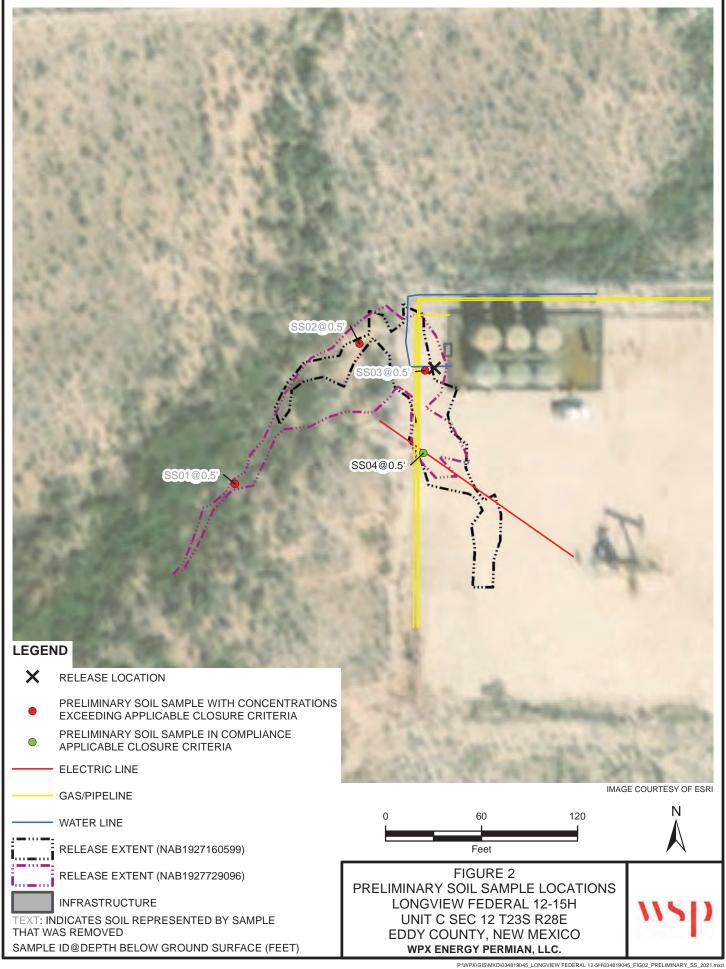
Figure 2 Preliminary Soil Sample Locations
Figure 3 Delineation Soil Sample Locations
Figure 4 Excavation Soil Sample Locations

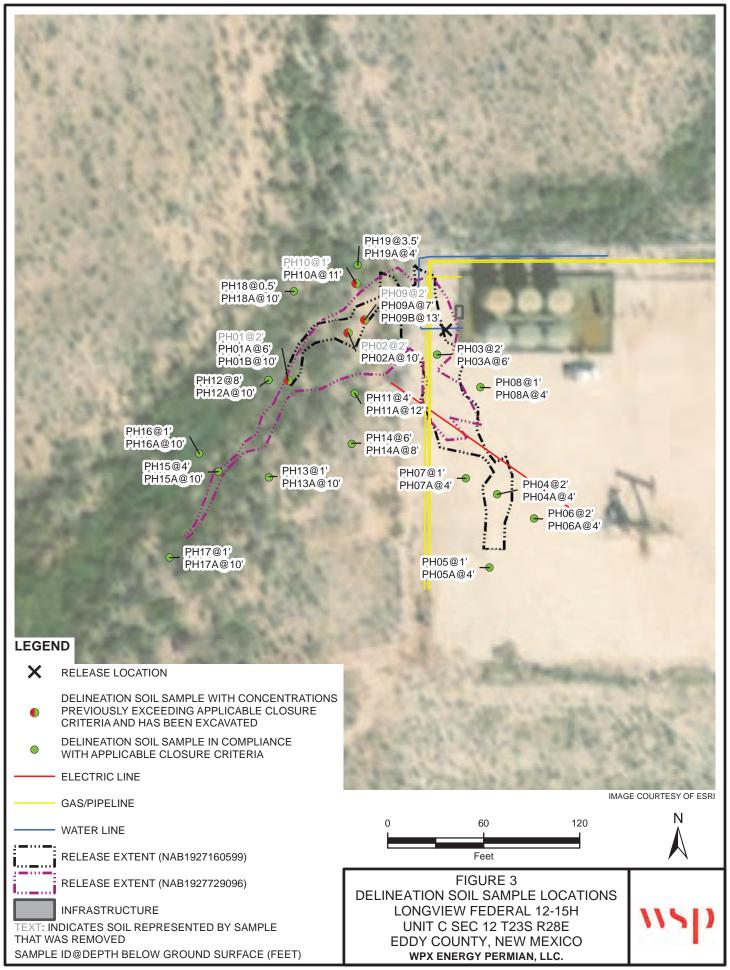
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Record

Attachment 2 Photographic Log

Attachment 3 Laboratory Analytical Reports







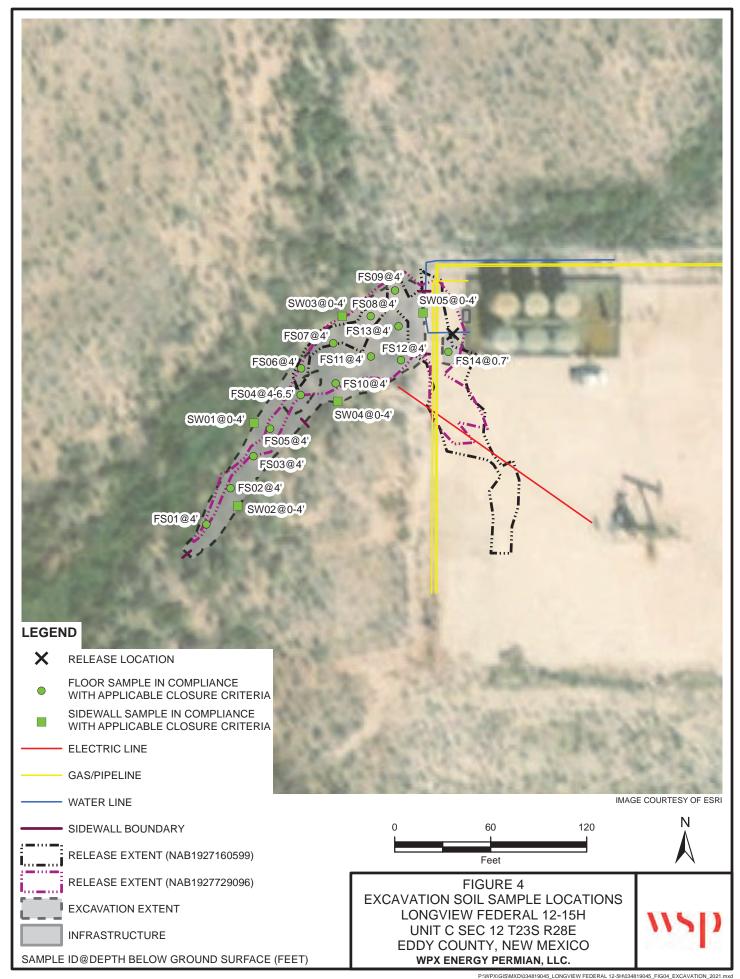


TABLE 1

Soil Analytical Results Longview Federal 12-15H Incident Numbers NAB1927160599 and NAB1927729096 Eddy County, New Mexico WPX Energy Permian, LLC.

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 Closure Criteria (N	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
Surface Samples										
SS01	09/09/2019	0.5	0.00708	0.0135	<50.0	<50.0	<50.0	<50.0	<50.0	4,400*
SS02	09/09/2019	0.5	0.0165	1.37	364	<49.8	<49.8	364	364	8,620*
SS03	09/09/2019	0.5	0.0260	12.8	4,200	583	418	4,780	5,200	47,600
SS04	09/09/2019	0.5	< 0.00199	< 0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	5,730
Delineation Samples	s									
PH01	09/10/2019	2	< 0.00101	< 0.00101	<25.1	<25.1	<25.1	<25.1	<25.1	16,100*
PH01A	09/10/2019	6	NA	NA	NA	NA	NA	NA	NA	16,400
PH01B	09/10/2019	10	NA	NA	NA	NA	NA	NA	NA	105
PH02	09/10/2019	2	0.00837	1.41	1,520	154	<25.1	1,670	1,670	17,900*
PH02A	09/10/2019	10	<0.000990	0.0105	103	<25.0	<25.0	103	103	2,100
PH03	09/12/2019	2	< 0.00101	0.502	206	<24.9	<24.9	206	206	982
PH03A	09/12/2019	6	NA	NA	NA	NA	NA	NA	NA	376
PH04	09/12/2019	2	< 0.00100	0.00108	<25.1	<25.1	<25.1	<25.1	<25.1	1,460
PH04A	09/12/2019	4	NA	NA	NA	NA	NA	NA	NA	395
PH05	12/11/2019	1	< 0.00200	< 0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	370
PH05A	12/11/2019	4	< 0.00199	< 0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	52.3
PH06	12/11/2019	2	< 0.00199	< 0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	176
PH06A	12/11/2019	4	< 0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	< 50.1	95.3
PH07	12/11/2019	1	< 0.00202	< 0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	220
PH07A	12/11/2019	4	< 0.00199	< 0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	176

TABLE 1

Soil Analytical Results Longview Federal 12-15H Incident Numbers NAB1927160599 and NAB1927729096 Eddy County, New Mexico WPX Energy Permian, LLC.

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	Closure Criteria (N	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
PH08	12/11/2019	1	< 0.00198	< 0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	207
PH08A	12/11/2019	4	< 0.00198	< 0.00198	<50.0	<50.0	< 50.0	<50.0	< 50.0	58.0
PH09	12/12/2019	2	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	17,400*
PH09A	12/12/2019	7	< 0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	57.2
PH09B	12/12/2019	13	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	< 50.0	20.0
PH10	12/12/2019	1	< 0.00201	< 0.00201	60.5	<50.0	<50.0	60.5	60.5	760*
PH10A	12/12/2019	11	< 0.00202	< 0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	19.0
PH11	12/12/2019	4	< 0.00202	< 0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	642
PH11A	12/12/2019	12	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	383
PH12	12/12/2019	8	< 0.00199	< 0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	217
PH12A	12/12/2019	10	< 0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	521
PH13	12/12/2019	1	< 0.00198	< 0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	19.0
PH13A	12/12/2019	10	< 0.00199	< 0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	<9.96
PH14	01/31/2020	6	< 0.00202	< 0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	280
PH14A	01/31/2020	8	< 0.00202	< 0.00202	<50.1	<50.1	<50.1	<50.1	< 50.1	307
PH15	01/31/2020	4	< 0.00201	< 0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	3,250
PH15A	01/31/2020	10	< 0.00202	< 0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	<10.1
PH16	01/31/2020	1	< 0.00201	< 0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	16.9
PH16A	01/31/2020	10	< 0.00200	< 0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	16.7
PH17	01/31/2020	1	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	26.6

TABLE 1

Soil Analytical Results Longview Federal 12-15H Incident Numbers NAB1927160599 and NAB1927729096 Eddy County, New Mexico WPX Energy Permian, LLC.

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	Closure Criteria (N	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
PH17A	01/31/2020	10	< 0.00199	< 0.00199	<50.2	<50.2	<50.2	<50.2	< 50.2	10.1
PH18	05/29/2020	0.5	< 0.00200	< 0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	68.6
PH18A	05/29/2020	10	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	< 50.1	10.8
PH19	05/29/2020	3.5	< 0.00199	< 0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	357
PH19A	05/29/2020	4	< 0.00202	< 0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	135
Excavation Floor Sa	mples									
FS01	01/11/2021	4	< 0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	< 50.1	4,980
FS02	01/11/2021	4	< 0.00202	< 0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	7,750
FS03	01/11/2021	4	< 0.00201	< 0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	8,110
FS04	01/12/2021	4 - 6.5	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	< 50.0	8,230
FS05	01/11/2021	4	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	7,170
FS06	01/11/2021	4	< 0.00198	< 0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	6,350
FS07	01/12/2021	4	< 0.00200	< 0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	8,450
FS08	01/12/2021	4	< 0.00201	< 0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	4,430
FS09	01/12/2021	4	< 0.00198	< 0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	5,660
FS10	01/12/2021	4	< 0.00198	< 0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	7,000
FS11	01/12/2021	4	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	4,390
FS12	01/12/2021	4	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	3,990
FS13	01/12/2021	4	< 0.00201	< 0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	3,340

TABLE 1

Soil Analytical Results Longview Federal 12-15H Incident Numbers NAB1927160599 and NAB1927729096 Eddy County, New Mexico WPX Energy Permian, LLC.

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 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
FS14	01/12/2021	0.7	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	8,260
Excavation Sidewall	Samples									
SW01	01/11/2021	0 - 4	< 0.00198	< 0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	109*
SW02	01/11/2021	0 - 4	< 0.00199	< 0.00199	<50.0	<50.0	<50.0	<50.0	< 50.0	115*
SW03	01/12/2021	0 - 4	< 0.00200	< 0.00200	<50.2	<50.2	<50.2	<50.2	< 50.2	59.3*
SW04	01/12/2021	0 - 4	< 0.00200	< 0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	154*
SW05	01/12/2021	0 - 4	< 0.00200	< 0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	5,900

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 - motor 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

 \ast - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg



PLUGGING RECORD



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

vell (Phone No.	
	owner: WPX Energy ag address: 5315 Buena Vista Drive		Filone No.	-
itv:	Carlsbad	State:	NM	Zip code: 88220
. W	ELL PLUGGING INFORMATION:			
)	Name of well drilling company that pl	lugged well: HRL Co	mpliance Solutions	
)	New Mexico Well Driller License No.			Expiration Date: 12/20/2020
)	Well plugging activities were supervis Kalvin (Kelly) Padilla	sed by the following v	vell driller(s)/rig superv	risor(s):
)	Date well plugging began: 4/3/2020) Da	te well plugging conclu	uded: 4/3/2020
)	GPS Well Location: Latitude: _ Longitude:	32 deg, -104 deg,		29.6 sec, WGS 84
)	Depth of well confirmed at initiation of by the following manner: Measuring		ft below ground l	evel (bgl),
)	Static water level measured at initiation	on of plugging:> §	ft bgl	
)	Date well plugging plan of operations	was approved by the	State Engineer: Not A	oplicabl
)	Were all plugging activities consistent differences between the approved plug			

Version: September 8, 2009 Page 1 of 2 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
Depth (fi bgl)	(include any additives used) Clean Native Soil to 10' Bent chips to the surface	(gallons) N/A	(gallons) N/A	(tremie pipe,	("casing perforated first", "open annular space also plugged", etc.)
		MULTIPLY cubic feet x 7 cubic yerds x 201	BY AND OBTAIN 7.4805 = gallons 1.97 = gallons		

III. SIGNATURE:

I, Mark Mumby , 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.

Signature of Well Driller

Date

Version: September 8, 2009 Page 2 of 2



	PHOTOGRAPHIC LOG	
WPX Energy Permian,	Longview Federal 12-15H	TE034819045
LLC.	Eddy County, New Mexico	

Photo No.	Date
1	January 11-12, 2021
Northeast view of	f the excavation in
the pa	asture.



Photo No.	Date
2	January 11-12, 2021
Southwest view o	of the excavation in

Southwest view of the excavation in the pasture.





	PHOTOGRAPHIC LOG	
WPX Energy Permian,	Longview Federal 12-15H	TE034819045
LLC.	Eddy County, New Mexico	

Photo No.	Date
3	January 11-12, 2021
North view of the	he release during
excavation	n activities.



Photo No.	Date
4	January 11-12, 2021
Southwest vi	ow of the final

Southwest view of the final excavation extent in the pasture.



Project Name: Longview 12-15 H

Date Received in Lab: Tue 01.12.2021 15:30

Project Manager: Jessica Kramer

Report Date: 01.18.2021 10:38

	Lab Id:	684421-001	684421-002	684421-003	684421-004	684421-005	684421-006
Analysis Posmostod	Field Id:	FS01	FS02	FS03	FS04	FS05	FS06
national architecture	Depth:	4- ft	4- ft	4- ft	4-6.5 ft	4- ft	4- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.11.2021 11:53	01.11.2021 14:42	01.11.2021 14:45	01.12.2021 10:58	01.11.2021 14:50	01.11.2021 14:51
BTEX by EPA 8021B	Extracted:	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00
	Analyzed:	01.13.2021 09:36	01.13.2021 09:58	01.13.2021 10:21	01.13.2021 10:43	01.13.2021 11:06	01.13.2021 11:28
	Units/RL:	mg/kg RL					
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00404 0.00404	<0.00402 0.00402	<0.00401 0.00401	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300	Extracted:	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	Analyzed:	01.12.2021 22:44	01.12.2021 23:02	01.12.2021 23:08	01.12.2021 23:14	01.12.2021 23:20	01.12.2021 23:38
	Units/RL:	mg/kg RL					
Chloride		4980 49.5	7750 49.5	8110 D 49.5	8230 50.4	7170 49.6	6350 50.3
TPH by SW8015 Mod	Extracted:	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	Analyzed:	01.13.2021 03:09	01.13.2021 04:08	01.13.2021 04:27	01.13.2021 04:46	01.13.2021 05:06	01.13.2021 05:25
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.2 50.2	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.1 50.1	<50.2 50.2	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.1 50.1	<50.2 50.2	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9

LESSION MANNER

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Final 1.001

Eddy County, New Mexico

Project Location:

Project Id: Contact:

Joseph Hernandez TE034819045

Project Name: Longview 12-15 H

Date Received in Lab: Tue 01.12.2021 15:30

Project Manager: Jessica Kramer

Report Date: 01.18.2021 10:38

Lab Id: 684421-007 Field Id: FS07 Depth: Autivis: SOIL BTEX by EPA 8021B Extracted: 01.12.2021 11 Benzene Chits Coloron Co	H421-007 FS07 4- ft SOIL 2.2021 11:00 2.2021 18:00 3.2021 11:51 Ke RI	684421-008 FS08 4- ft	684421-009 FS09	684421-010 FS10	684421-011 FS11	684421-012 FS12
Analysis Requested Field Id: FS07 Depth: 4- ft Matrix: SOIL Sampled: 01.12.2021 Sampled: 01.12.2021 Analyzed: 01.13.2021 Units/RL: mg/kg Co.00200 Extracted: 01.13.2021 Analyzed: 01.13.2021 Co.00200 Rene Co.00200 Co.00309 Co.00200 Co.00200	111:0	FS08 4- ft	FS09	FS10	FS11	FC12
Matrix: SOIL Sampled: A- ft	11:0	4- ft			_	710.1
Matrix: SOIL	11:0		4- ft	4- ft	4- ft	4- ft
Sampled: 01.12.2021 BTEX by EPA 8021B Extracted: 01.12.2021 Analyzed: 01.13.2021 Analyzed: 01.13.2021 Units/RL: mg/kg						

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Final 1.001

Eddy County, New Mexico

Project Location:

Project Id: Contact:

Joseph Hernandez TE034819045

Project Name: Longview 12-15 H

Date Received in Lab: Tue 01.12.2021 15:30

Report Date: 01.18.2021 10:38

Project Location: Eddy County, New Mexico	ico				Project Ma	Project Manager: Jessica Kramer	er
	Lab Id:	684421-013	684421-014	684421-015	684421-016	684421-017	684421-018
Analysis Romostod	Field Id:	FS13	FS14	SW01	SW02	SW03	SW04
marcanhau cacamar	Depth:	4- ft	0.7- ft	0-4 ft	0-4 ft	0-4 ft	0-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.12.2021 11:37	01.12.2021 12:20	01.11.2021 15:17	01.11.2021 15:19	01.12.2021 12:22	01.12.2021 12:25
BTEX by EPA 8021B	Extracted:	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00	01.12.2021 18:00
	Analyzed:	01.13.2021 15:03	01.13.2021 15:25	01.13.2021 15:48	01.13.2021 16:10	01.13.2021 16:33	01.13.2021 16:55
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00396 0.00396	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	Analyzed:	01.13.2021 00:44	01.13.2021 00:50	01.13.2021 00:56	01.13.2021 01:02	01.13.2021 01:08	01.13.2021 01:14
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		3340 50.5	8260 50.5	109 10.1	115 9.98	59.3 10.0	154 D 9.92
TPH by SW8015 Mod	Extracted:	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	Analyzed:	01.13.2021 08:01	01.13.2021 08:21	01.13.2021 08:41	01.13.2021 09:01	01.13.2021 09:22	01.13.2021 09:41
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.2 50.2	<50.2 50.2
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.2 50.2	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.2 50.2	<50.2 50.2
Total TPH		<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.2 50.2	<50.2 50.2

LESSION MANNER

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Final 1.001

Joseph Hernandez TE034819045

Project Id: Contact:

Project Name: Longview 12-15 H

Date Received in Lab: Tue 01.12.2021 15:30

Project Manager: Jessica Kramer

Report Date: 01.18.2021 10:38

	Lab Id:	684421-019
Amolycic Posmostod	Field Id:	SW05
Amujois Nequesieu	Depth:	0-4 ft
	Matrix:	TIOS
	Sampled:	01.12.2021 12:28
BTEX by EPA 8021B	Extracted:	01.12.2021 18:00
	Analyzed:	01.13.2021 17:18
	Units/RL:	
Benzene		<0.00200 0.00200
Toluene		l
Ethylbenzene		<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401
o-Xylene		<0.00200 0.00200
Total Xylenes		<0.00200 0.00200
Total BTEX		<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.12.2021 17:00
	Analyzed:	01.13.2021 01:20
	Units/RL:	mg/kg RL
Chloride		5900 49.9
TPH by SW8015 Mod	Extracted:	01.12.2021 17:00
	Analyzed:	01.13.2021 10:01
	Units/RL:	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3
Diesel Range Organics (DRO)		<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3
Total TPH		<50.3 50.3

LESSION MANNER

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Final 1.001

Eddy County, New Mexico

Project Location:

Project Id: Contact:

Joseph Hernandez TE034819045



Analytical Report 684421

for

WSP USA

Project Manager: Joseph Hernandez

Longview 12-15 H TE034819045 01.18.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



01.18.2021

Project Manager: Joseph Hernandez

WSP USA

2777 N. Stemmons Freeway, Suite 1600 Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 684421

Longview 12-15 H

Project Address: Eddy County, New Mexico

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 684421. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 684421 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	01.11.2021 11:53	4 ft	684421-001
FS02	S	01.11.2021 14:42	4 ft	684421-002
FS03	S	01.11.2021 14:45	4 ft	684421-003
FS04	S	01.12.2021 10:58	4 - 6.5 ft	684421-004
FS05	S	01.11.2021 14:50	4 ft	684421-005
FS06	S	01.11.2021 14:51	4 ft	684421-006
FS07	S	01.12.2021 11:00	4 ft	684421-007
FS08	S	01.12.2021 12:41	4 ft	684421-008
FS09	S	01.12.2021 11:04	4 ft	684421-009
FS10	S	01.12.2021 11:30	4 ft	684421-010
FS11	S	01.12.2021 11:32	4 ft	684421-011
FS12	S	01.12.2021 11:35	4 ft	684421-012
FS13	S	01.12.2021 11:37	4 ft	684421-013
FS14	S	01.12.2021 12:20	0.7 ft	684421-014
SW01	S	01.11.2021 15:17	0 - 4 ft	684421-015
SW02	S	01.11.2021 15:19	0 - 4 ft	684421-016
SW03	S	01.12.2021 12:22	0 - 4 ft	684421-017
SW04	S	01.12.2021 12:25	0 - 4 ft	684421-018
SW05	S	01.12.2021 12:28	0 - 4 ft	684421-019

CASE NARRATIVE



Client Name: WSP USA Project Name: Longview 12-15 H

 Project ID:
 TE034819045
 Report Date:
 01.18.2021

 Work Order Number(s):
 684421
 Date Received:
 01.12.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Final 1.001



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS01 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-001 Date Collected: 01.11.2021 11:53 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3147636

ate Conected: 01.11.2021 11:55 Sample Depth. 4 It

% Moisture:

Basis: Wet Weight

Prep Method: E300P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4980	49.5	mg/kg	01.12.2021 22:44		5

Date Prep:

Analytical Method: TPH by SW8015 Mod

Tech: CAC

Analyst: CAC

Seq Number: 3147664

Date Prep: 01.12.2021 17:00 % Mois

01.12.2021 17:00

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	01.13.2021 03:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	01.13.2021 03:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	01.13.2021 03:09	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	01.13.2021 03:09	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	101	%	70-135	01.13.2021 03:09
o-Terphenyl	84-15-1	112	%	70-135	01.13.2021 03:09



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS01** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-001 Date Collected: 01.11.2021 11:53 Sample Depth: 4 ft

540-36-3

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

Tech: MAB

1,4-Difluorobenzene

Analyst:

MAB

Seq Number: 3147744

Date Prep: 01.12.2021 18:00 % Moisture:

Basis: Wet Weight

01.13.2021 09:36

70-130

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	01.13.2021 09:36	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	01.13.2021 09:36	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	116	%	70-130	01.13.2021 09:36		

103



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS02** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-002 Date Collected: 01.11.2021 14:42 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MAB Analyst:

Seq Number: 3147636

Date Prep: 01.12.2021 17:00 % Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Prep Method: E300P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7750	49.5	mg/kg	01.12.2021 23:02		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst: Seq Number: 3147664

Date Prep:

01.12.2021 17:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	01.13.2021 04:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	01.13.2021 04:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	01.13.2021 04:08	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	01.13.2021 04:08	U	1
Surrogate	C	as Number %	% Recovery	Units	Limits	Analysis Date	Flag	



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS02 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-002 Date Collected: 01.11.2021 14:42 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	01.13.2021 09:58	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	01.13.2021 09:58	U	1
Surrogate	Ca	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	01.13.2021 09:58	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.13.2021 09:58	



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: Matrix: Soil

Date Received:01.12.2021 15:30

Lab Sample Id: 684421-003 Date Collected: 01.11.2021 14:45 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

FS03

Prep Method: E300P

Tech: MAB

% Moisture:

MABAnalyst:

Date Prep: 01.12.2021 17:00

01.12.2021 17:00

Basis: Wet Weight

Seq Number: 3147636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8110	49.5	mg/kg	01.15.2021 11:51	D	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Date Prep:

% Moisture:

CAC Analyst: Seq Number: 3147664

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.3	50.3		mg/kg	01.13.2021 04:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.3	50.3		mg/kg	01.13.2021 04:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.3	50.3		mg/kg	01.13.2021 04:27	U	1
Total TPH	PHC635	< 50.3	50.3		mg/kg	01.13.2021 04:27	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	114	%	70-135	01.13.2021 04:27
o-Terphenyl	84-15-1	107	%	70-135	01.13.2021 04:27



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS03 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-003 Date Collected: 01.11.2021 14:45 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	01.13.2021 10:21	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	01.13.2021 10:21	U	1
Surrogate	Ca	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	F
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.13.2021 10:21	
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.13.2021 10:21	



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS04** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-004 Date Collected: 01.12.2021 10:58 Sample Depth: 4 - 6.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Date Prep: 01.12.2021 17:00 % Moisture:

Basis: Wet Weight

Prep Method: E300P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8230	50.4	mg/kg	01.12.2021 23:14		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst:

Seq Number: 3147664

% Moisture: 01.12.2021 17:00 Date Prep:

Basis:

Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	01.13.2021 04:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	01.13.2021 04:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	01.13.2021 04:46	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	01.13.2021 04:46	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	100	%	70-135	01.13.2021 04:46
o-Terphenyl	84-15-1	112	%	70-135	01.13.2021 04:46



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS04 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-004 Date Collected: 01.12.2021 10:58 Sample Depth: 4 - 6.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401	mg/kg	01.13.2021 10:43	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	01.13.2021 10:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.13.2021 10:43	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.13.2021 10:43	



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS05** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-005 Sample Depth: 4 ft

Date Prep:

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3147636

Date Collected: 01.11.2021 14:50

01.12.2021 17:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Un	nits	Analysis Date	Flag	Dil
Chloride	16887-00-6	7170	49.6	mg	g/kg	01.12.2021 23:20		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CACAnalyst:

Seq Number: 3147664

01.12.2021 17:00 Date Prep:

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	01.13.2021 05:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	01.13.2021 05:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	01.13.2021 05:06	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	01.13.2021 05:06	U	1
Surrogate	(cas Number 9	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	112	%	70-135	01.13.2021 05:06
o-Terphenyl	84-15-1	98	%	70-135	01.13.2021 05:06



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS05 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-005 Date Collected: 01.11.2021 14:50 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

460-00-4

Seq Number: 3147744

4-Bromofluorobenzene

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	01.13.2021 11:06	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	01.13.2021 11:06	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	5	40-36-3	108	%	70-130	01.13.2021 11:06		

121

70-130

01.13.2021 11:06



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS06** Matrix:

Lab Sample Id: 684421-006 Date Collected: 01.11.2021 14:51 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MAB Analyst:

Seq Number: 3147636

Soil Date Received:01.12.2021 15:30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6350	50.3	mg/kg	01.12.2021 23:38		5

Date Prep:

Analytical Method: TPH by SW8015 Mod

Tech: CAC

Analyst: Seq Number: 3147664

CAC

Date Prep:

01.12.2021 17:00

01.12.2021 17:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	01.13.2021 05:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	01.13.2021 05:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	01.13.2021 05:25	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	01.13.2021 05:25	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS06 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-006 Date Collected: 01.11.2021 14:51 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture:

Seq Number: 3147744

Date Prep: 01.12.2021 18:00

Basis: Wet Weight

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	01.13.2021 11:28	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	01.13.2021 11:28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	105	%	70-130	01.13.2021 11:28		
4-Bromofluorobenzene		460-00-4	124	%	70-130	01.13.2021 11:28		



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS07** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-007 Date Collected: 01.12.2021 11:00 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Prep Method: E300P

01.12.2021 17:00

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8450	49.5	mg/kg	01.12.2021 23:44		5

Date Prep:

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst:

Seq Number: 3147664

% Moisture: 01.12.2021 17:00 Date Prep:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	01.13.2021 05:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	01.13.2021 05:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	01.13.2021 05:45	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	01.13.2021 05:45	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	115	%	70-135	01.13.2021 05:45
o-Terphenyl	84-15-1	106	%	70-135	01.13.2021 05:45



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WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS07 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-007 Date Collected: 01.12.2021 11:00 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399	mg/kg	01.13.2021 11:51	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	01.13.2021 11:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.13.2021 11:51	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.13.2021 11:51	



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: **FS08** Matrix: Soil

Lab Sample Id: 684421-008 Date Collected: 01.12.2021 12:41 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MAB Analyst:

Seq Number: 3147636

Date Prep: 01.12.2021 17:00 % Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Prep Method: E300P

Date Received:01.12.2021 15:30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4430	50.3	mg/kg	01.12.2021 23:50		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst: Seq Number: 3147664

Date Prep: 01.12.2021 17:00 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	01.13.2021 06:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	01.13.2021 06:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	01.13.2021 06:04	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	01.13.2021 06:04	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

01.13.2021 12:13

70-130



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Longview 12-15 H

Sample Id: FS08 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-008 Date Collected: 01.12.2021 12:41 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

460-00-4

Seq Number: 3147744

4-Bromofluorobenzene

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	01.13.2021 12:13	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	01.13.2021 12:13	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	4	540-36-3	103	%	70-130	01.13.2021 12:13		

122



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Longview 12-15 H

Sample Id: FS09 Matrix: Soil

Date Received:01.12.2021 15:30

Lab Sample Id: 684421-009 Date Collected: 01.12.2021 11:04

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

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01.12.2021 17:00

Analyst: MAB

Date Prep:

% Moisture:

Seq Number: 3147636

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Unit	s Analysis Date	Flag	Dil
Chloride	16887-00-6	5660	50.4	mg/k	g 01.12.2021 23:56		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Seq Number: 3147664

Analyst:

CAC

Date Prep: 01.12.2021 17:00

% Moisture:

Date Prep: 01.12.2021 17.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	01.13.2021 06:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	01.13.2021 06:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	01.13.2021 06:24	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	01.13.2021 06:24	U	1
Surrogate	•	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	123	%	70-135	01.13.2021 06:24
o-Terphenyl	84-15-1	106	%	70-135	01.13.2021 06:24



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Longview 12-15 H

Sample Id: FS09 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-009 Date Collected: 01.12.2021 11:04 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1
Toluene	108-88-3	< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397	mg/kg	01.13.2021 12:36	U	1
o-Xylene	95-47-6	< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1
Total BTEX		< 0.00198	0.00198	mg/kg	01.13.2021 12:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.13.2021 12:36	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.13.2021 12:36	



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Longview 12-15 H

Sample Id: **FS10** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-010 Date Collected: 01.12.2021 11:30 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

MAB Tech:

MAB

Analyst: Seq Number: 3147636 Date Prep:

% Moisture: 01.12.2021 17:00

Basis: Wet Weight

Prep Method: E300P

Parameter Cas Number Result RL Units **Analysis Date** Flag Dil Chloride 16887-00-6 7000 50.1 01.13.2021 00:02 5 mg/kg

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst:

Seq Number: 3147664

% Moisture: Date Prep: 01.12.2021 17:00

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	01.13.2021 06:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	01.13.2021 06:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	01.13.2021 06:43	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	01.13.2021 06:43	U	1
Surrogate	C	cas Number 9	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	122	%	70-135	01.13.2021 06:43
o-Terphenyl	84-15-1	114	%	70-135	01.13.2021 06:43

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Longview 12-15 H

Sample Id: FS10 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-010 Date Collected: 01.12.2021 11:30 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1
Toluene	108-88-3	< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397	mg/kg	01.13.2021 12:58	U	1
o-Xylene	95-47-6	< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1
Total BTEX		< 0.00198	0.00198	mg/kg	01.13.2021 12:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.13.2021 12:58	
4-Bromofluorobenzene	460-00-4	118	%	70-130	01.13.2021 12:58	



WSP USA, Dallas, TX

Longview 12-15 H

01.12.2021 17:00

Sample Id: **FS11** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-011 Date Collected: 01.12.2021 11:32 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4390	49.5	mg/kg	01.13.2021 00:08		5

Date Prep:

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

CAC Analyst: Seq Number: 3147664

Date Prep: 01.12.2021 17:00 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	01.13.2021 07:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	01.13.2021 07:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	01.13.2021 07:22	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	01.13.2021 07:22	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	



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Longview 12-15 H

Sample Id: FS11 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-011 Date Collected: 01.12.2021 11:32 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399	mg/kg	01.13.2021 14:18	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	01.13.2021 14:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.13.2021 14:18	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.13.2021 14:18	



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Longview 12-15 H

Sample Id: FS12 Matrix: Soil

Date Received:01.12.2021 15:30

Lab Sample Id: 684421-012 Date Collected: 01.12.2021 11:35

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

WITED

% Moisture:

Analyst: MAB

Date Prep: 01.12.2021 17:00

Basis: Wet Weight

Seq Number: 3147636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3990	49.5	mg/kg	01.13.2021 00:26		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Seq Number: 3147664

Analyst:

CAC

Date Prep: 01.12.2021 17:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	01.13.2021 07:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	01.13.2021 07:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	01.13.2021 07:41	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	01.13.2021 07:41	U	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	128	%	70-135	01.13.2021 07:41
o-Terphenyl	84-15-1	122	%	70-135	01.13.2021 07:41



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Longview 12-15 H

Sample Id: FS12 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-012 Date Collected: 01.12.2021 11:35 Sample Depth: 4 ft

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

riep Metilod. Sw 5055A

Tech: MAB

Date Prep: 01.12.2021 18:00 % Moisture:

Basis: Wet Weight

Analyst: MAB Seq Number: 3147744

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	01.13.2021 14:40	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	01.13.2021 14:40	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	118	%	70-130	01.13.2021 14:40		
1,4-Difluorobenzene		540-36-3	107	%	70-130	01.13.2021 14:40		



WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: Matrix: Soil

Date Received:01.12.2021 15:30

Lab Sample Id: 684421-013 Date Collected: 01.12.2021 11:37 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

FS13

MAB

Prep Method: E300P

Tech: MAB

Analyst:

Date Prep: 01.12.2021 17:00 % Moisture:

Seq Number: 3147636

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3340	50.5	mg/kg	01.13.2021 00:44		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Seq Number: 3147664

Analyst:

CAC

01.12.2021 17:00 Date Prep:

% Moisture:

Basis:

Wet Weight

Flag

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2	mg/kg	01.13.2021 08:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2	mg/kg	01.13.2021 08:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2	mg/kg	01.13.2021 08:01	U	1
Total TPH	PHC635	< 50.2	50.2	mg/kg	01.13.2021 08:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	124	%	70-135	01.13.2021 08:01
o-Terphenyl	84-15-1	106	%	70-135	01.13.2021 08:01



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

Sample Id: FS13 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-013 Date Collected: 01.12.2021 11:37 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	01.13.2021 15:03	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	01.13.2021 15:03	U	1
Surrogate	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.13.2021 15:03	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.13.2021 15:03	



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Longview 12-15 H

Sample Id: **FS14** Matrix: Soil

Lab Sample Id: 684421-014 Date Collected: 01.12.2021 12:20 Sample Depth: 0.7 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

MABAnalyst:

Date Prep: 01.12.2021 17:00

Basis: Wet Weight

Prep Method: SW8015P

Date Received:01.12.2021 15:30

Seq Number: 3147636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8260	50.5	mg/kg	01.13.2021 00:50		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

Analyst: Seq Number: 3147664

CAC

Date Prep:

01.12.2021 17:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	01.13.2021 08:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	01.13.2021 08:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	01.13.2021 08:21	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	01.13.2021 08:21	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	113	%	70-135	01.13.2021 08:21
o-Terphenyl	84-15-1	118	%	70-135	01.13.2021 08:21



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Longview 12-15 H

Sample Id: FS14 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-014 Date Collected: 01.12.2021 12:20 Sample Depth: 0.7 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	01.13.2021 15:25	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	01.13.2021 15:25	U	1
Surrogate	Ca	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	F
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.13.2021 15:25	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.13.2021 15:25	



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Longview 12-15 H

Sample Id: **SW01** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-015 Date Collected: 01.11.2021 15:17 Sample Depth: 0 - 4 ft

Date Prep:

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Prep Method: E300P

01.12.2021 17:00

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	109	10.1	mg/kg	01.13.2021 00:56		1

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst: Seq Number: 3147664

Date Prep: 01.12.2021 17:00 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	01.13.2021 08:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	01.13.2021 08:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	01.13.2021 08:41	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	01.13.2021 08:41	U	1
Surrogate	•	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

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Longview 12-15 H

Sample Id: SW01 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-015 Date Collected: 01.11.2021 15:17 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	01.13.2021 15:48	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	01.13.2021 15:48	U	1
Surrogate	Ca	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.13.2021 15:48	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.13.2021 15:48	



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Longview 12-15 H

Sample Id: **SW02** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-016 Date Collected: 01.11.2021 15:19 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

% Moisture: Date Prep: 01.12.2021 17:00

Basis: Wet Weight

Prep Method: E300P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	115	9.98	mg/kg	01.13.2021 01:02		1

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst: Seq Number: 3147664

01.12.2021 17:00 Date Prep:

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	01.13.2021 09:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	01.13.2021 09:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	01.13.2021 09:01	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	01.13.2021 09:01	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	117	%	70-135	01.13.2021 09:01
o-Terphenyl	84-15-1	104	%	70-135	01.13.2021 09:01



Certificate of Analytical Results 684421

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Longview 12-15 H

Sample Id: SW02 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-016 Date Collected: 01.11.2021 15:19 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1
Toluene	108-88-3	< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398	mg/kg	01.13.2021 16:10	U	1
o-Xylene	95-47-6	< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1
Total BTEX		< 0.00199	0.00199	mg/kg	01.13.2021 16:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.13.2021 16:10	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.13.2021 16:10	



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Longview 12-15 H

Sample Id: SW03 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-017 Date Collected: 01.12.2021 12:22 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3147636

Date Prep: 01.12.2021 17:00

% Moisture:

Basis: Wet Weight

Prep Method: E300P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.3	10.0	mg/kg	01.13.2021 01:08		1

Analytical Method: TPH by SW8015 Mod

Tech: CAC

Analyst: CAC

Seq Number: 3147664

Date Prep: 01.12.2021 17:00 % M

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	01.13.2021 09:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	01.13.2021 09:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	01.13.2021 09:22	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	01.13.2021 09:22	U	1
Surrogate	C	as Number ⁹	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	114	%	70-135	01.13.2021 09:22
o-Terphenyl	84-15-1	104	%	70-135	01.13.2021 09:22

Wet Weight



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Longview 12-15 H

Sample Id: SW03 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-017 Date Collected: 01.12.2021 12:22 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Seq Number: 3147744

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399	mg/kg	01.13.2021 16:33	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	01.13.2021 16:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.13.2021 16:33	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.13.2021 16:33	



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Longview 12-15 H

Sample Id: **SW04** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-018 Date Collected: 01.12.2021 12:25 Sample Depth: 0 - 4 ft

Date Prep:

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	154	9.92	mg/kg	01.15.2021 11:56	D	1

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst:

Seq Number: 3147664

01.12.2021 17:00 Date Prep:

01.12.2021 17:00

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	01.13.2021 09:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	01.13.2021 09:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	01.13.2021 09:41	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	01.13.2021 09:41	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	116	%	70-135	01.13.2021 09:41
o-Terphenyl	84-15-1	106	%	70-135	01.13.2021 09:41

Wet Weight



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Longview 12-15 H

Sample Id: SW04 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-018 Date Collected: 01.12.2021 12:25 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Seq Number: 3147744

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	01.13.2021 16:55	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	01.13.2021 16:55	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	01.13.2021 16:55	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401	mg/kg	01.13.2021 16:55	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	01.13.2021 16:55	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	01.13.2021 16:55	U	1
Total BTEX		< 0.00200	0.00200	mø/kø	01.13.2021.16:55	IJ	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.13.2021 16:55	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.13.2021 16:55	



Certificate of Analytical Results 684421

WSP USA, Dallas, TX

Longview 12-15 H

01.12.2021 17:00

Sample Id: **SW05** Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-019 Date Collected: 01.12.2021 12:28 Sample Depth: 0 - 4 ft

Date Prep:

Analytical Method: Inorganic Anions by EPA 300

Tech: MAB

MABAnalyst:

Seq Number: 3147636

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5900	49.9	mg/kg	01.13.2021 01:20		5

Analytical Method: TPH by SW8015 Mod

Tech: CAC

CAC Analyst: Seq Number: 3147664

01.12.2021 17:00 Date Prep:

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.3	50.3		mg/kg	01.13.2021 10:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.3	50.3		mg/kg	01.13.2021 10:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.3	50.3		mg/kg	01.13.2021 10:01	U	1
Total TPH	PHC635	< 50.3	50.3		mg/kg	01.13.2021 10:01	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	126	%	70-135	01.13.2021 10:01
o-Terphenyl	84-15-1	106	%	70-135	01.13.2021 10:01

Wet Weight



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Longview 12-15 H

Sample Id: SW05 Matrix: Soil Date Received:01.12.2021 15:30

Lab Sample Id: 684421-019 Date Collected: 01.12.2021 12:28 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 01.12.2021 18:00 % Moisture: Basis:

Seq Number: 3147744

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	01.13.2021 17:18	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	01.13.2021 17:18	U	1
Surrogate	Co	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.13.2021 17:18	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.13.2021 17:18	



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate MS Matrix Spike MSD: Matrix Spike Duplicate

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 684421

eurofins **Environment Testing** Xenco

WSP USA

Longview 12-15 H

E300P Analytical Method: Inorganic Anions by EPA 300 Prep Method: Seq Number: 3147636 Matrix: Solid Date Prep: 01.12.2021 7719044-1-BLK LCS Sample Id: 7719044-1-BKS LCSD Sample Id: 7719044-1-BSD MB Sample Id:

RPD MB Spike LCS LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 254 102 255 90-110 0 20 01.12.2021 22:33 102 mg/kg

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P Seq Number: 3147636 Matrix: Soil Date Prep: 01.12.2021 MS Sample Id: 684421-001 S MSD Sample Id: 684421-001 SD Parent Sample Id: 684421-001

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 01.12.2021 22:50 Chloride 4980 202 5200 109 5180 100 90-110 0 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300

3147636 Seq Number: Matrix: Soil Date Prep: 01.12.2021 MS Sample Id: 684421-011 S MSD Sample Id: 684421-011 SD Parent Sample Id: 684421-011

Spike **RPD** Parent MS MS %RPD Units MSD **MSD** Limite Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 4390 20 01.13.2021 00:14 202 4590 99 4580 94 90-110 0 mg/kg

Analytical Method: TPH by SW8015 Mod Prep Method:

3147664 Matrix: Solid Seq Number: Date Prep: 01.12.2021 LCS Sample Id: 7719081-1-BKS LCSD Sample Id: 7719081-1-BSD MB Sample Id: 7719081-1-BLK

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Result Amount %Rec %Rec Date Result Gasoline Range Hydrocarbons (GRO) 01.12.2021 17:33 990 99 988 99 35 < 50.0 1000 70-135 0 mg/kg 01.12.2021 17:33 Diesel Range Organics (DRO) 1030 103 1030 70-135 35 < 50.0 1000 103 0 mg/kg

LCS MB MB LCS LCSD Limits Units Analysis LCSD **Surrogate** %Rec %Rec Flag Flag Date Flag %Rec 01.12.2021 17:33 1-Chlorooctane 107 118 107 70-135 % 01.12.2021 17:33 o-Terphenyl 108 109 111 70-135 %

SW8015P Analytical Method: TPH by SW8015 Mod Prep Method: Seq Number: 3147664 Matrix: Solid Date Prep: 01.12.2021

MB Sample Id: 7719081-1-BLK

MB Units Analysis Flag **Parameter** Result Date

01.12.2021 17:13 Motor Oil Range Hydrocarbons (MRO) < 50.0 mg/kg

Prep Method:

E300P

SW8015P

Flag

Flag

Flag

QC Summary 684421



WSP USA

Longview 12-15 H

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Seq Number:	3147664	Matrix:	Soil	Date Prep:	01.12.2021
Parent Sample Id:	684421-001	MS Sample Id:	684421-001 S	MSD Sample Id:	684421-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	< 50.3	1010	1120	111	1190	119	70-135	6	35	mg/kg	01.13.2021 03:28
Diesel Range Organics (DRO)	<50.3	1010	1210	120	1130	113	70-135	7	35	mg/kg	01.13.2021 03:28

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		114		70-135	%	01.13.2021 03:28
o-Terphenyl	106		96		70-135	%	01.13.2021 03:28

SW5035A Analytical Method: BTEX by EPA 8021B Prep Method: Seq Number: 3147744 Matrix: Solid Date Prep: 01.12.2021 MB Sample Id: 7719139-1-BLK LCS Sample Id: 7719139-1-BKS LCSD Sample Id: 7719139-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.0968	97	0.0919	92	70-130	5	35	mg/kg	01.13.2021 07:31
Toluene	< 0.00200	0.100	0.0912	91	0.0844	84	70-130	8	35	mg/kg	01.13.2021 07:31
Ethylbenzene	< 0.00200	0.100	0.0945	95	0.0869	87	71-129	8	35	mg/kg	01.13.2021 07:31
m,p-Xylenes	< 0.00400	0.200	0.197	99	0.180	90	70-135	9	35	mg/kg	01.13.2021 07:31
o-Xylene	< 0.00200	0.100	0.0973	97	0.0895	90	71-133	8	35	mg/kg	01.13.2021 07:31
Surrogata	MB	MB	L	CS 1	LCS	LCSI) LCS	D Li	mits	Units	Analysis

Surrogate	%Rec	Flag	%Rec	Flag	%Rec	Flag		Date
1,4-Difluorobenzene	102		100		100	70-130	%	01.13.2021 07:31
4-Bromofluorobenzene	115		114		108	70-130	%	01.13.2021 07:31

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A Seq Number: 3147744 Matrix: Soil Date Prep: 01.12.2021 MS Sample Id: 684421-001 S Parent Sample Id: 684421-001 MSD Sample Id: 684421-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.103	103	0.103	103	70-130	0	35	mg/kg	01.13.2021 08:16	
Toluene	< 0.00200	0.100	0.0962	96	0.0952	95	70-130	1	35	mg/kg	01.13.2021 08:16	
Ethylbenzene	< 0.00200	0.100	0.0972	97	0.0965	97	71-129	1	35	mg/kg	01.13.2021 08:16	
m,p-Xylenes	< 0.00401	0.200	0.202	101	0.200	100	70-135	1	35	mg/kg	01.13.2021 08:16	
o-Xylene	< 0.00200	0.100	0.100	100	0.0988	99	71-133	1	35	mg/kg	01.13.2021 08:16	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	01.13.2021 08:16
4-Bromofluorobenzene	117		118		70-130	%	01.13.2021 08:16

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample

A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec Received by OCD: 3/22/2021 10:17:36 AM

Page 81

Chain of Custody

Work Order No: 108442

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			4			_			1
			21 1530 2	2.1		ato	Joe (aklh
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		gnature)	Received by: (Signature)	Rece	gnature)	linquished by: (Signature)
	gotiated.	September 2018 Aminimum 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 negotiated.	co, but not analyzed. The	tted to Xen	5 for each sample submi	and a charge of \$	to each project a	of \$75.00 will be applied	Xanco. 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
	nd conditions	tice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expanses incurred by the client if such losses are standard to the cost of samples and shall not assume any responsibility for any losses or expanses incurred by the client if such losses are standard terms and conditions.	to Xenco, its affiliates ar	t company	urchase order from clien	stitutes a valid p	t of samples con	iment and relinquishmen	tice: Signature of this docuservice. Xenco will be liable
Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn Ni Se Ag Tl U 1631/245.1		Al Sb As Ba Be B Sb As Ba Be Cd Cr	Texas 11 A 8RCRA Sb	8RCRA 13PPM Texas 1 TCLP / SPLP 6010: 8RCRA	8RCRA TCLP / SP	e analyzed	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) :
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Sample Comments			TPF BTE Cnl	Numbe	ne Depth	ite Time pled Sampled	Matrix Date Sampled		Sample Identification
received by 4:00pm	17.00		× (er of	iners:) S	Total Containers:	N/A	eals: Yes No	Sample Custody Seals:
ts the day received by the lab	TAT state		E	Co	actor: ~O~C	Correction Factor:	N/A	Yes No	Cooler Custody Seals:
Zn Acetate+ NaOH: Zn	Zn Ace		PA	ntaiı	F00	- MM-E	0	ntact: Yes No	Received Intact:
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6	None: NO				Rush: 3 day		nty	Eddy county	Project Location
Me	MeOH: Me			Code	Routine		9045	TE 0348 19045	Project Number:
Preservative Codes		ANALYSIS REQUEST		Prae	Turn Around		12-15H	Longview 12-15H	Project Name:
Other:	Deliverables: EDD				Email:		-2329	(281)702	Phone:
TRRP Level IV	Reporting:Level II Level III PST/UST TRRP Level IV	1, NM 88220	Carlebox	City, State ZIP:	City, Si	19708	TX7	1	City, State ZIP:
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SIN	Work Order Comments	ey	CIB KG	if different)	Bill to: (if different)	lez	Hernandez	05000	Project Manager: (

Lab

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 (232) 704-5440 Ft. Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440 Work Order No: 108442/ Ü V

		10	12.21 1580	1-1-		W S	200		
Date/Illie	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		ure)	Received by: (Signature)	Received	re)	uished by: (Signature)
Det. Time	negotiated.	gnature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and succontracture. It assumes that the control samples are 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. 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 in the control of 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 the cost of samples and success and shall not assume any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of the cost of samples and shall not assume any losses are due to circumstances beyond the control of the cost of samples and shall not assume any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of the cost of samples and shall not assume any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of the cost of t	gnature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Aminimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed.	ient compa osses or ex omitted to X	se order from cli sibility for any lo each sample sub	s a valid purcha sume any respon charge of \$5 for a	mples constitute and shall not ass sh project and a	d relinquishment of sa r the cost of samples 0 will be applied to ea	s document an be liable only for
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odilibie collinging			TF BT Ch	Num	Depth	Time Sampled	Date Sampled	Matrix	Sample Identification
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TAT starts the day recevied by the lab, if	TATA		EP.	onta	1	those	305	Yes No	Received Intact:
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NO	None: NO			Code		Routine	245	E034819045	ct Number: TEO
-: Me	MeOH: Me			Pres.	Turn Around	nı	ICI	ongview 12-15H	oject Name: LONG
Preservative Codes	ST	ANALYSIS REQUEST				Lilidii.	1202	401-10	Phone: (ZOI)
Other:	Deliverables: EDD ☐ ADaPT ☐	, National Control	Carlona	City, State ZIP:	City, St		2 2	1	State ZIP: MIC
TRRP Level IV	Reporting:Level II Level III PST/UST TRRP Level IV	10000000000000000000000000000000000000	100	Address:	A	et		North O	Address: 33C
	State of Project:	S Sint Or		Name:	Company Name:	Ce	SO OFFICE	Parmian	any Name: WOF
RRC Superfund	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐			different)	Bill to: (if different)		Hornandez.		Manager: Uccoph
		000			The second second				

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 01.12.2021 03.30.00 PM

Temperature Measuring device used: T_NM_007 Work Order #: 684421

Sample Rec	eipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.8	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?	Yes	
#6*Custody Seals Signed and dated?	Yes	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	Samples received in bulk containers.
#13 Samples properly preserved?	Yes	containers.
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	No	
#18 Water VOC samples have zero headspace?	N/A	

^{*} Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Checklist completed by:	Cloe Clifton	Date: 01.12.2021	
Checklist reviewed by:	Jessica Vramer	Date: 01.13.2021	

Jessica Kramer

PH Device/Lot#:

Analyst:

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

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

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

CONDITIONS

Action 21542

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
WPX ENERGY PERMIAN, LLC	3500 One Williams Center	Tulsa, OK74172	246289	21542	C-141

OCD Reviewer	Condition
chensley	None