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

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NMAP1823047252
District RP	2RP-4927
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Shelby Pennington	Contact Telephone: 281-723-9353
Contact email: shelby.g.pennington@exxonmobil.com	Incident #: 2RP-4927
Contact mailing address: 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.157723 Longitude -104.018348
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Golden Child 6 State 1H	Site Type: Production Well Facility
Date Release Discovered: 8/3/2018	API# *(if applicable):* 30-015-38544

Unit Letter	Section	Township	Range	County
I	6	25S	29E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 11	Volume Recovered (bbls): 10
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Crew loaded tubing with water for pressure control and attempted to pull plug in profile nipple. Plug would not release. Crew had to pull tubing, which released fluid into cellar area of well pad. Fluid was contained to cellar area and caliche pad. Vacuum truck recovered 10 bbls of standing fluid.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NMAP1823047252
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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? Release volume was less than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? NA	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:
N/A

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

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 1-31-2022

email: Adrian.Baker@exxonmobile.com Telephone: 432-236-3808

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NMAP1823047252
District RP	2RP-4927
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	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
☒ 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.

State of New Mexico
Oil Conservation Division

Incident ID	NMAP1823047252
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Facility ID	
Application ID	

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 1/31/2022

email: Adrian.Baker@exxonmobile.com Telephone: 432-236-3808

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NMAP1823047252
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Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 1/31/2022

email: Adrian.Baker@exxonmobile.com Telephone: 432-236-3808

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Jennifer Nobui Date: 02/16/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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

January 19, 2022

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

RE: Closure Request
Golden Child 6 State 1H
Incident Number NMAP1823047252 / Remediation Permit Number 2RP-4927
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request as a follow-up to the Deferral Request submitted November 15, 2019. This Closure Request details excavation and soil sampling activities completed at the Golden Child 6 State 1H Battery (Site) located in Unit I, Section 6, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1), following final abandonment of the facility to address the remaining impacted soil previously requested for deferral. Based on the additional excavation and soil sampling activities described below, XTO is requesting no further action (NFA) for Incident Number NMAP1823047252.

BACKGROUND

On August 3, 2018, a drilling crew loaded tubing with water for pressure control and attempted to pull the plug in the profile nipple. The plug would not release, and the crew had to pull the tubing, causing fluid to release. Approximately 11 barrels (bbls) of produced water were released into the cellar area and onto the well pad. A vacuum truck recovered approximately 10 bbls of free-standing fluid. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on August 17, 2018. The release was assigned Incident Number NMAP1823047252 and Remediation Permit (RP) Number 2RP-4927 (Attachment 1).

XTO conducted assessment, delineation, and excavation activities in response to the release. An estimated 2,100 cubic yards of impacted soil were excavated from the Site; however, residual chloride-impacted soil was left in place near active production equipment in order to comply with XTO's safety policy regarding earth-moving activities within two feet of active pipelines and electrical lines and within 10 feet of an active wellhead. An estimated 250 cubic yards of impacted soil remained in place.

XTO requested deferral of final remediation for this release event and proposed to complete remediation during any future major construction, alteration, or final abandonment of the Site.

The Deferral Request detailed site characterization according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Based on the site characterization, the following Closure Criteria were applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

In October 2021, final abandonment of the Site began. Once all production equipment, electrical lines, and flow lines had been removed from the Site, final remediation of the deferred area was scheduled.

EXCAVATION ACTIVITIES AND SOIL ANALYTICAL RESULTS

During December 2021, WSP personnel were at the Site to oversee excavation activities to remove chloride-impacted soil left in place in the area where excavation sidewall samples SW07, SW08, and SW11 had been collected during remediation. The original excavation, deferral areas, and location of sidewall samples SW07, SW08, and SW11 are depicted on Figure 1.

To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a depth of 10 feet bgs. Upon completion of excavation activities, 5-point composite samples were collected from the floor and sidewalls of the excavations. Composite samples FS15 through FS17 were collected from the floor of the excavations from a depth of 10 feet bgs. Composite sidewall samples SW22 through SW24 were collected from the sidewalls of the excavations from two depth intervals; ground surface to 4 feet bgs and 5 feet to 10 feet bgs.

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

The excavation extent and excavation soil sample locations are depicted on Figure 2. Photographic documentation was conducted during excavation activities and a photographic log are included in Attachment 1.

Laboratory analytical results for floor samples FS15 through FS17 and sidewall samples SW22 through SW24, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 2.

CLOSURE REQUEST

Excavation activities were conducted at the Site to address the deferred areas around original sidewall samples SW07, SW08, and SW11. Laboratory analytical results for excavation soil samples FS15 through FS17 and SW22 through SW24, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the final excavation soil sample analytical results, XTO respectfully requests NFA for Incident Number nMAP1823047252, and will proceed with final reclamation of the abandoned facility.

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

Sincerely,

WSP USA, INC.

Aimee Cole
Sr. Consultant, Environmental Scientist

Ashley L. Ager, M.S., P.G.
Managing Director, Geologist

cc: Shelby Pennington, XTO
Adrian Baker, XTO
New Mexico State Land Office

Attachments:

Figure 1	Deferral Areas
Figure 2	Excavation Soil Sample Locations
Table 1	Laboratory Analytical Results
Attachment 1	Photographic Log
Attachment 2	Laboratory Analytical Reports

FIGURES

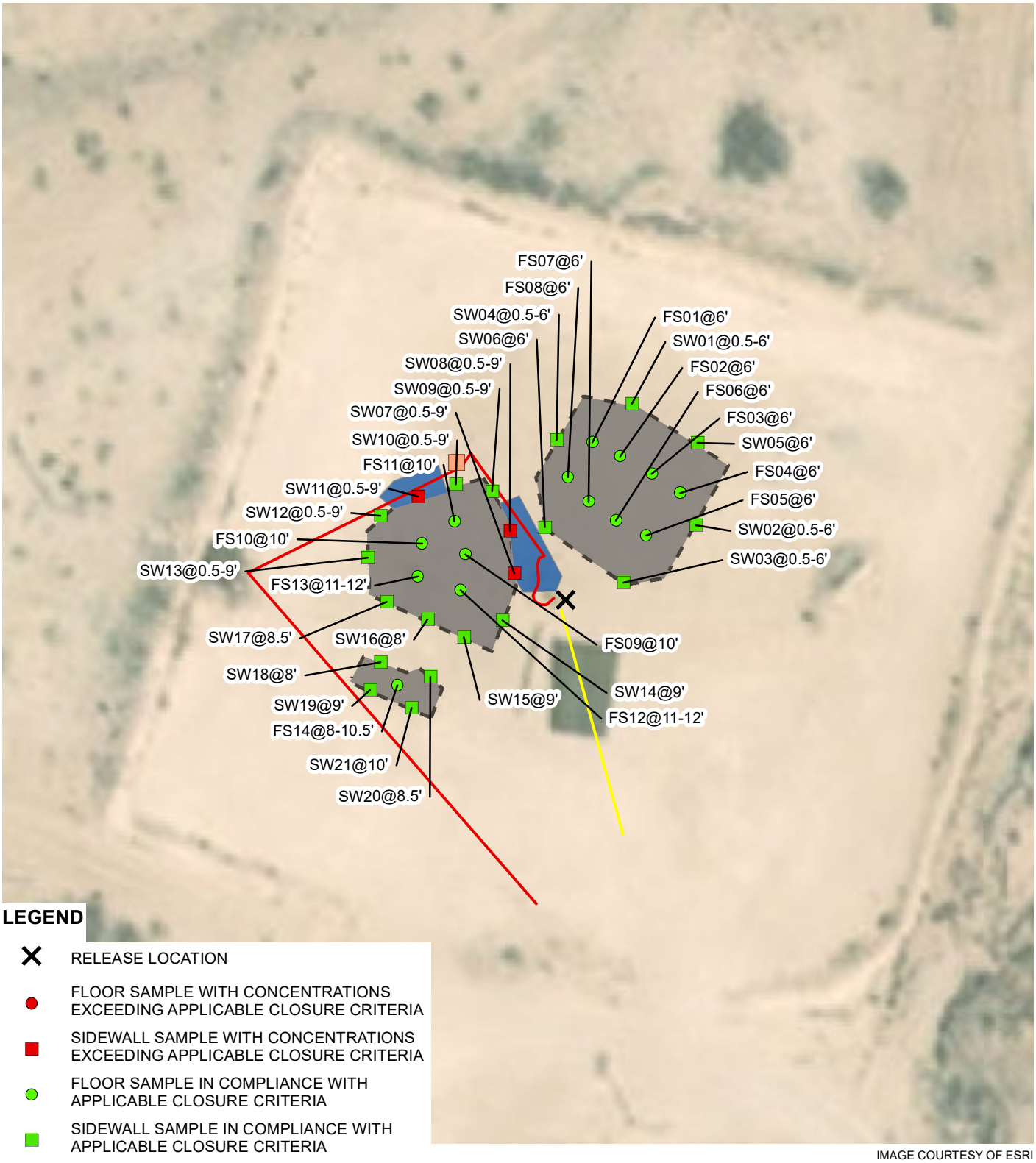
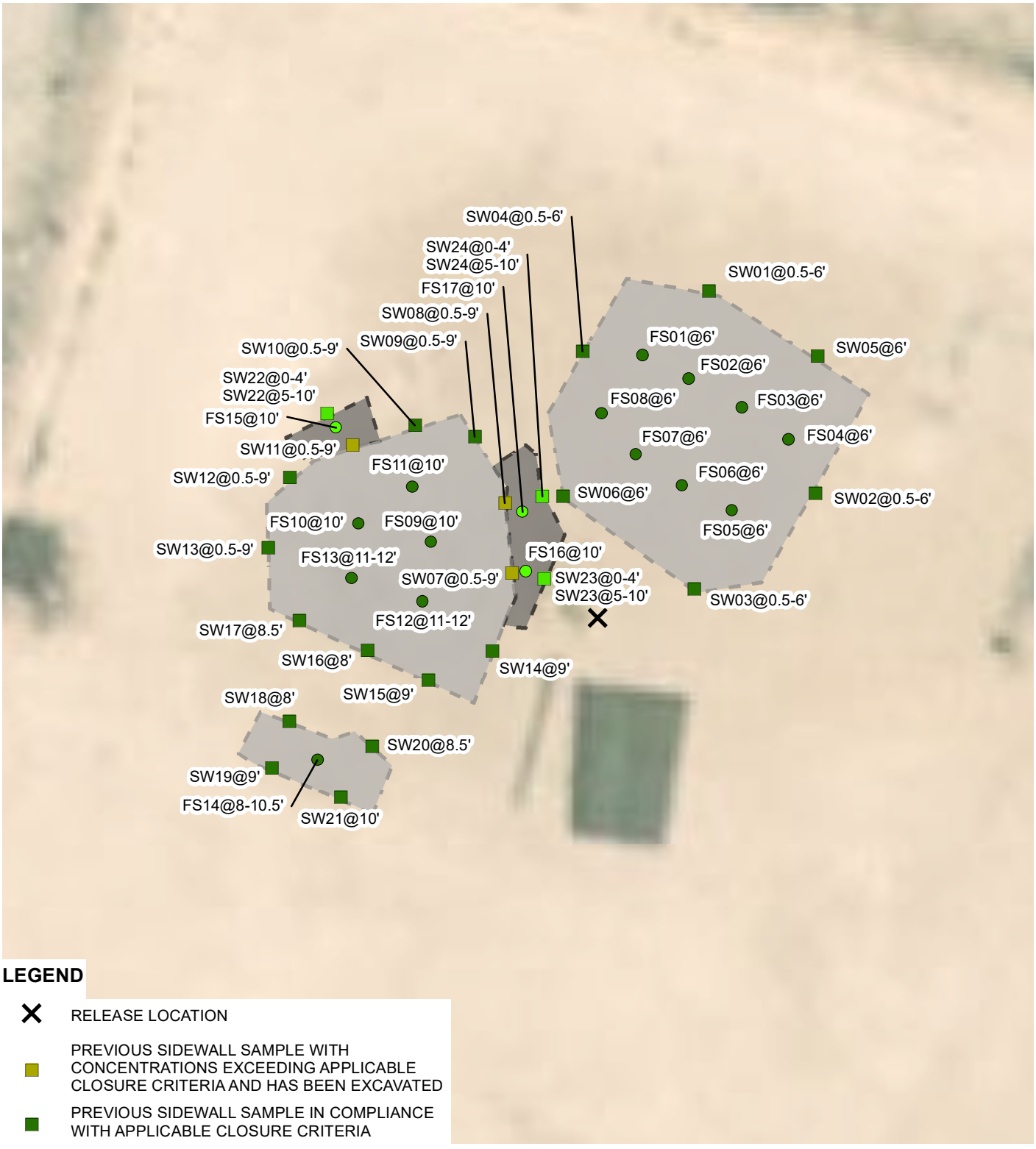


FIGURE 1
DEFFERAL AREA
GOLDEN CHILD 6 STATE 1H
UNIT I SEC 6 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919125_GOLDENCHILD 6 STATE 1H\012919125_FIG01_EXCAVATION_2022.mxd



LEGEND

- RELEASE LOCATION
- PREVIOUS SIDEWALL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED
- PREVIOUS SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- PREVIOUS FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- PREVIOUS EXCAVATION EXTENT
- EXCAVATION EXTENT

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 2RP-4927

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

FIGURE 2
EXCAVATION SOIL SAMPLE LOCATIONS
GOLDEN CHILD 6 STATE 1H
UNIT I SEC 6 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919125_GOLDENCHILD 6 STATE 1H\012919125_FIG02_EXCAVATION_4927.mxd

TABLES

Table 1

Soil Analytical Results
Golden Child 6 State 1H
Incident Number NMAP1823047252
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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	NE	**100**	**600**
Excavation Floor Samples										
FS01	10/02/2019	6	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	86
FS02	10/02/2019	6	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	108
FS03	10/02/2019	6	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	121
FS04	10/02/2019	6	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	112
FS05	10/02/2019	6	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	93.7
FS06	10/02/2019	6	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	137
FS07	10/02/2019	6	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	184
FS08	10/02/2019	6	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	150
FS09	10/03/2019	10	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	356
FS10	10/03/2019	10	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	253
FS11	10/03/2019	10	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	83.2
FS12	10/07/2019	11.0-12.0	<0.0189	<0.0189	<50.5	<50.5	<50.5	<50.5	<50.5	64.5
FS13	10/07/2019	11.0-12.0	<0.0196	<0.0196	<49.8	<49.8	<49.8	<49.8	<49.8	70
FS14	10/08/2019	8.0-10.5	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	120
FS15	12/09/2021	10	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	35.1
FS16	12/09/2021	10	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	226
FS17	12/09/2021	10	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	76.9

Table 1

Soil Analytical Results
Golden Child 6 State 1H
Incident Number NMAP1823047252
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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	NE	**100**	**600**
Excavation Sidewall Samples										
SW01	10/02/2019	0.5-6.0	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	34.4
SW02	10/02/2019	0.5-6.0	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	56.2
SW03	10/02/2019	0.5-6.0	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	161
SW04	10/02/2019	0.5-6.0	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	204
SW05	10/07/2019	0.5-6.0	<0.0200	<0.0200	<50.0	<50.0	<50.0	<50.0	<50.0	40.9
SW06	10/07/2019	0.5-6.0	<0.0194	<0.0194	<49.6	<49.6	<49.6	<49.6	<49.6	252
SW07	10/03/2019	0.5-9.0	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	**1,220**
SW08	10/03/2019	0.5-9.0	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	**997**
SW09	10/03/2019	0.5-9.0	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	318
SW10	10/03/2019	0.5-9.0	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	97.3
SW11	10/03/2019	0.5-9.5	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	**2,590**
SW12	10/03/2019	0.5-9.0	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	128
SW13	10/03/2019	0.5-9.0	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	221
SW14	10/7/2019	0.5-9.0	<0.0194	<0.0194	<50.0	<50.0	<50.0	<50.0	<50.0	358
SW15	10/7/2019	0.5-9.0	<0.0194	<0.0194	<49.8	<49.8	<49.8	<49.8	<49.8	192
SW16	10/7/2019	0.5-8.0	<0.0195	<0.0195	<50.3	<50.3	<50.3	<50.3	<50.3	272
SW17	10/07/2019	0.5-8.5	<0.0199	<0.0199	<49.9	<49.9	<49.9	<49.9	<49.9	198
SW18	10/8/2019	0.5-8.0	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	149
SW19	10/8/2019	0.5-9.0	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	96.7
SW20	10/8/2019	0.5-8.5	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	110
SW21	10/8/2019	0.5-10.0	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	44.8

Table 1

Soil Analytical Results
Golden Child 6 State 1H
Incident Number NMAP1823047252
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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	NE	**100**	**600**
SW22	12/09/2021	0 - 4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	232
SW22	12/09/2021	5 - 10	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	30.3
SW23	12/09/2021	0 - 4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	98.5
SW23	12/09/2021	5 - 10	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	167
SW24	12/09/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	144
SW24	12/09/2021	5 - 10	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	56.1

Notes:
ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated

ATTACHMENT 1: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Golden Child 6 State 1H Eddy County, New Mexico	NMAP1823047252

Photo No.	Date
1	December 9, 2021

View of open excavation.

Photo No.	Date
2	December 9, 2021

View of open excavation.

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1695-1
Laboratory Sample Delivery Group: 31403236.001.0129
Client Project/Site: Goldenchild 6 State 1

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

Attn: Aimee Cole

JKramer

Authorized for release by:
12/13/2021 4:32:38 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Laboratory Job ID: 890-1695-1
SDG: 31403236.001.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1695-1
Project/Site: Goldenchild 6 State 1 SDG: 31403236.001.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Job ID: 890-1695-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1695-1

Receipt
The samples were received on 12/10/2021 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-14599 and analytical batch 880-14594 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-14608 and analytical batch 880-14657 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW22

Date Collected: 12/09/21 10:40
Date Received: 12/10/21 11:20
Sample Depth: 0 - 4

Lab Sample ID: 890-1695-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/13/21 07:30	12/13/21 10:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/13/21 07:30	12/13/21 10:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/13/21 07:30*	*12/13/21 10:56*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*12/13/21 07:30*	*12/13/21 10:56*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 10:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		12/13/21 08:26	12/13/21 10:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/13/21 08:26*	*12/13/21 10:48*	*1*
o-Terphenyl	*97*		*70 - 130*	*12/13/21 08:26*	*12/13/21 10:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**232**		5.02		mg/Kg			12/13/21 12:07	1

Client Sample ID: SW22

Date Collected: 12/09/21 10:50
Date Received: 12/10/21 11:20
Sample Depth: 5 - 10

Lab Sample ID: 890-1695-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 11:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 11:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 11:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 11:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 11:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*12/13/21 07:30*	*12/13/21 11:16*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW22

Lab Sample ID: 890-1695-2
Matrix: Solid
Date Collected: 12/09/21 10:50
Date Received: 12/10/21 11:20
Sample Depth: 5 - 10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/13/21 07:30*	*12/13/21 11:16*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/13/21 08:26	12/13/21 11:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/13/21 08:26	12/13/21 11:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/13/21 08:26	12/13/21 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/13/21 08:26*	*12/13/21 11:49*	*1*
o-Terphenyl	*103*		*70 - 130*	*12/13/21 08:26*	*12/13/21 11:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.3**		4.99	mg/Kg			12/13/21 12:15	1

Client Sample ID: FS15

Lab Sample ID: 890-1695-3
Matrix: Solid
Date Collected: 12/09/21 11:01
Date Received: 12/10/21 11:20
Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/13/21 07:30	12/13/21 11:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/13/21 07:30	12/13/21 11:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/13/21 07:30	12/13/21 11:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/13/21 07:30	12/13/21 11:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/13/21 07:30	12/13/21 11:37	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/13/21 07:30	12/13/21 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*12/13/21 07:30*	*12/13/21 11:37*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/13/21 07:30*	*12/13/21 11:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			12/13/21 12:23	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: FS15

Lab Sample ID: 890-1695-3
Matrix: Solid
Date Collected: 12/09/21 11:01
Date Received: 12/10/21 11:20
Sample Depth: 10

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:10*	*1*
o-Terphenyl	*107*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.1**		4.98		mg/Kg			12/13/21 12:24	1

Client Sample ID: SW23

Lab Sample ID: 890-1695-4
Matrix: Solid
Date Collected: 12/09/21 13:00
Date Received: 12/10/21 11:20
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 11:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 11:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 11:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/13/21 07:30	12/13/21 11:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 11:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/13/21 07:30	12/13/21 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*12/13/21 07:30*	*12/13/21 11:57*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*12/13/21 07:30*	*12/13/21 11:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:31*	*1*
o-Terphenyl	*113*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:31*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW23

Lab Sample ID: 890-1695-4
Matrix: Solid
Date Collected: 12/09/21 13:00
Date Received: 12/10/21 11:20
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.5		4.95		mg/Kg			12/13/21 12:32	1

Client Sample ID: SW23

Lab Sample ID: 890-1695-5
Matrix: Solid
Date Collected: 12/09/21 13:21
Date Received: 12/10/21 11:20
Sample Depth: 5 - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 12:17	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 12:17	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 12:17	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/13/21 07:30	12/13/21 12:17	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 12:17	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/13/21 07:30	12/13/21 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:17*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:17*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/13/21 08:26	12/13/21 12:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/13/21 08:26	12/13/21 12:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/13/21 08:26	12/13/21 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:51*	*1*
o-Terphenyl	*125*		*70 - 130*	*12/13/21 08:26*	*12/13/21 12:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		5.04		mg/Kg			12/13/21 12:57	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW24

Lab Sample ID: 890-1695-6
Matrix: Solid
Date Collected: 12/09/21 13:35
Date Received: 12/10/21 11:20
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 12:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:38*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:38*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 13:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 13:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/13/21 08:26	12/13/21 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:11*	*1*
o-Terphenyl	*113*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**144**		4.98		mg/Kg			12/13/21 13:06	1

Client Sample ID: SW24

Lab Sample ID: 890-1695-7
Matrix: Solid
Date Collected: 12/09/21 13:40
Date Received: 12/10/21 11:20
Sample Depth: 5 - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 12:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/13/21 07:30	12/13/21 12:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/13/21 07:30	12/13/21 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:58*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW24

Lab Sample ID: 890-1695-7
Matrix: Solid
Date Collected: 12/09/21 13:40
Date Received: 12/10/21 11:20
Sample Depth: 5 - 10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*12/13/21 07:30*	*12/13/21 12:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		12/13/21 08:26	12/13/21 13:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		12/13/21 08:26	12/13/21 13:32	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/13/21 08:26	12/13/21 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*94*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:32*	*1*
o-Terphenyl	*115*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.1**		5.05	mg/Kg			12/13/21 13:14	1

Client Sample ID: FS16

Lab Sample ID: 890-1695-8
Matrix: Solid
Date Collected: 12/09/21 13:55
Date Received: 12/10/21 11:20
Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		12/13/21 07:30	12/13/21 13:19	1
Toluene	<0.00198	U	0.00198	mg/Kg		12/13/21 07:30	12/13/21 13:19	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		12/13/21 07:30	12/13/21 13:19	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		12/13/21 07:30	12/13/21 13:19	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		12/13/21 07:30	12/13/21 13:19	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		12/13/21 07:30	12/13/21 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*12/13/21 07:30*	*12/13/21 13:19*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/13/21 07:30*	*12/13/21 13:19*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			12/13/21 12:23	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: FS16

Lab Sample ID: 890-1695-8
Matrix: Solid
Date Collected: 12/09/21 13:55
Date Received: 12/10/21 11:20
Sample Depth: 10

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 13:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 13:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:53*	*1*
o-Terphenyl	*126*		*70 - 130*	*12/13/21 08:26*	*12/13/21 13:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**226**		4.98		mg/Kg			12/13/21 13:22	1

Client Sample ID: FS17

Lab Sample ID: 890-1695-9
Matrix: Solid
Date Collected: 12/09/21 14:05
Date Received: 12/10/21 11:20
Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 13:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 13:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 13:39	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/13/21 07:30	12/13/21 13:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/13/21 07:30	12/13/21 13:39	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/13/21 07:30	12/13/21 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/13/21 07:30*	*12/13/21 13:39*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/13/21 07:30*	*12/13/21 13:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			12/13/21 11:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/13/21 12:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 14:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 14:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/13/21 08:26*	*12/13/21 14:14*	*1*
o-Terphenyl	*100*		*70 - 130*	*12/13/21 08:26*	*12/13/21 14:14*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: FS17
Date Collected: 12/09/21 14:05
Date Received: 12/10/21 11:20
Sample Depth: 10

Lab Sample ID: 890-1695-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.9		4.96		mg/Kg			12/13/21 13:31	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-1695-1	SW22	115	114										
890-1695-1 MS	SW22	104	96										
890-1695-1 MSD	SW22	101	98										
890-1695-2	SW22	124	86										
890-1695-3	FS15	95	108										
890-1695-4	SW23	149 S1+	123										
890-1695-5	SW23	120	103										
890-1695-6	SW24	115	112										
890-1695-7	SW24	126	109										
890-1695-8	FS16	128	107										
890-1695-9	FS17	108	106										
LCS 880-14447/1-A	Lab Control Sample	108	100										
LCSD 880-14447/2-A	Lab Control Sample Dup	105	101										
MB 880-14447/5-B	Method Blank	132 S1+	105										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-1695-1	SW22	86	97										
890-1695-1 MS	SW22	84	83										
890-1695-1 MSD	SW22	88	88										
890-1695-2	SW22	92	103										
890-1695-3	FS15	93	107										
890-1695-4	SW23	96	113										
890-1695-5	SW23	101	125										
890-1695-6	SW24	88	113										
890-1695-7	SW24	94	115										
890-1695-8	FS16	102	126										
890-1695-9	FS17	90	100										
LCS 880-14599/2-A	Lab Control Sample	89	97										
LCSD 880-14599/3-A	Lab Control Sample Dup	118	118										
MB 880-14599/1-A	Method Blank	94	119										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14447/5-B
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14447

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/13/21 07:30	12/13/21 10:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/21 07:30	12/13/21 10:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/13/21 07:30	12/13/21 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*12/13/21 07:30*	*12/13/21 10:34*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/13/21 07:30*	*12/13/21 10:34*	*1*

Lab Sample ID: LCS 880-14447/1-A
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14447

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09495		mg/Kg		95	70 - 130		
Toluene			0.100	0.08907		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08816		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1830		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09232		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-14447/2-A
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14447

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08985		mg/Kg		90	70 - 130	6	35
Toluene			0.100	0.08570		mg/Kg		86	70 - 130	4	35
Ethylbenzene			0.100	0.08480		mg/Kg		85	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1768		mg/Kg		88	70 - 130	3	35
o-Xylene			0.100	0.08732		mg/Kg		87	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-1695-1 MSD
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: SW22
Prep Type: Total/NA
Prep Batch: 14447

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08933		mg/Kg					
Toluene	<0.00200	U	0.0990	0.08357		mg/Kg					

QC Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

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

Lab Sample ID: 890-1695-1 MSD
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: SW22
Prep Type: Total/NA
Prep Batch: 14447

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00200	U	0.0990	0.08153		mg/Kg					
m-Xylene & p-Xylene	<0.00400	U	0.198	0.1734		mg/Kg					
o-Xylene	<0.00200	U	0.0990	0.08500		mg/Kg					

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-1695-1 MS
Matrix: Solid
Analysis Batch: 14589

Client Sample ID: SW22
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

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

Lab Sample ID: MB 880-14599/1-A
Matrix: Solid
Analysis Batch: 14594

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14599

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 09:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 09:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/13/21 08:26	12/13/21 09:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/13/21 08:26*	*12/13/21 09:22*	*1*
o-Terphenyl	*119*		*70 - 130*	*12/13/21 08:26*	*12/13/21 09:22*	*1*

Lab Sample ID: LCS 880-14599/2-A
Matrix: Solid
Analysis Batch: 14594

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14599

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	804.6		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	856.7		mg/Kg		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

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

Lab Sample ID: LCSD 880-14599/3-A
Matrix: Solid
Analysis Batch: 14594

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14599

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	951.7		mg/Kg		95	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1000		mg/Kg		100	70 - 130	15	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: 890-1695-1 MS
Matrix: Solid
Analysis Batch: 14594

Client Sample ID: SW22
Prep Type: Total/NA
Prep Batch: 14599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1257		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	1250		mg/Kg		125	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Lab Sample ID: 890-1695-1 MSD
Matrix: Solid
Analysis Batch: 14594

Client Sample ID: SW22
Prep Type: Total/NA
Prep Batch: 14599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1307		mg/Kg		128	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1343	F1	mg/Kg		134	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14608/1-A
Matrix: Solid
Analysis Batch: 14657

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/13/21 10:03	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-14608/2-A
Matrix: Solid
Analysis Batch: 14657

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.0		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-14608/3-A
Matrix: Solid
Analysis Batch: 14657

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	266.2		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 880-9251-A-1-D MS
Matrix: Solid
Analysis Batch: 14657

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5740		1250	6430	4	mg/Kg		55	90 - 110		

Lab Sample ID: 880-9251-A-1-E MSD
Matrix: Solid
Analysis Batch: 14657

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5740		1250	6336	4	mg/Kg		47	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1695-1
Project/Site: Goldenchild 6 State 1 SDG: 31403236.001.0129

GC VOA

Prep Batch: 14447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	5035	
890-1695-2	SW22	Total/NA	Solid	5035	
890-1695-3	FS15	Total/NA	Solid	5035	
890-1695-4	SW23	Total/NA	Solid	5035	
890-1695-5	SW23	Total/NA	Solid	5035	
890-1695-6	SW24	Total/NA	Solid	5035	
890-1695-7	SW24	Total/NA	Solid	5035	
890-1695-8	FS16	Total/NA	Solid	5035	
890-1695-9	FS17	Total/NA	Solid	5035	
MB 880-14447/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-14447/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14447/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1695-1 MSD	SW22	Total/NA	Solid	5035	

Analysis Batch: 14589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	8021B	14447
890-1695-2	SW22	Total/NA	Solid	8021B	14447
890-1695-3	FS15	Total/NA	Solid	8021B	14447
890-1695-4	SW23	Total/NA	Solid	8021B	14447
890-1695-5	SW23	Total/NA	Solid	8021B	14447
890-1695-6	SW24	Total/NA	Solid	8021B	14447
890-1695-7	SW24	Total/NA	Solid	8021B	14447
890-1695-8	FS16	Total/NA	Solid	8021B	14447
890-1695-9	FS17	Total/NA	Solid	8021B	14447
MB 880-14447/5-B	Method Blank	Total/NA	Solid	8021B	14447
LCS 880-14447/1-A	Lab Control Sample	Total/NA	Solid	8021B	14447
LCSD 880-14447/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14447
890-1695-1 MS	SW22	Total/NA	Solid	8021B	
890-1695-1 MSD	SW22	Total/NA	Solid	8021B	14447

Analysis Batch: 14648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	Total BTEX	
890-1695-2	SW22	Total/NA	Solid	Total BTEX	
890-1695-3	FS15	Total/NA	Solid	Total BTEX	
890-1695-4	SW23	Total/NA	Solid	Total BTEX	
890-1695-5	SW23	Total/NA	Solid	Total BTEX	
890-1695-6	SW24	Total/NA	Solid	Total BTEX	
890-1695-7	SW24	Total/NA	Solid	Total BTEX	
890-1695-8	FS16	Total/NA	Solid	Total BTEX	
890-1695-9	FS17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 14594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	8015B NM	14599
890-1695-2	SW22	Total/NA	Solid	8015B NM	14599
890-1695-3	FS15	Total/NA	Solid	8015B NM	14599
890-1695-4	SW23	Total/NA	Solid	8015B NM	14599

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1695-1
Project/Site: Goldenchild 6 State 1 SDG: 31403236.001.0129

GC Semi VOA (Continued)

Analysis Batch: 14594 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-5	SW23	Total/NA	Solid	8015B NM	14599
890-1695-6	SW24	Total/NA	Solid	8015B NM	14599
890-1695-7	SW24	Total/NA	Solid	8015B NM	14599
890-1695-8	FS16	Total/NA	Solid	8015B NM	14599
890-1695-9	FS17	Total/NA	Solid	8015B NM	14599
MB 880-14599/1-A	Method Blank	Total/NA	Solid	8015B NM	14599
LCS 880-14599/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14599
LCSD 880-14599/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14599
890-1695-1 MS	SW22	Total/NA	Solid	8015B NM	14599
890-1695-1 MSD	SW22	Total/NA	Solid	8015B NM	14599

Prep Batch: 14599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	8015NM Prep	
890-1695-2	SW22	Total/NA	Solid	8015NM Prep	
890-1695-3	FS15	Total/NA	Solid	8015NM Prep	
890-1695-4	SW23	Total/NA	Solid	8015NM Prep	
890-1695-5	SW23	Total/NA	Solid	8015NM Prep	
890-1695-6	SW24	Total/NA	Solid	8015NM Prep	
890-1695-7	SW24	Total/NA	Solid	8015NM Prep	
890-1695-8	FS16	Total/NA	Solid	8015NM Prep	
890-1695-9	FS17	Total/NA	Solid	8015NM Prep	
MB 880-14599/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14599/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14599/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1695-1 MS	SW22	Total/NA	Solid	8015NM Prep	
890-1695-1 MSD	SW22	Total/NA	Solid	8015NM Prep	

Analysis Batch: 14652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Total/NA	Solid	8015 NM	
890-1695-2	SW22	Total/NA	Solid	8015 NM	
890-1695-3	FS15	Total/NA	Solid	8015 NM	
890-1695-4	SW23	Total/NA	Solid	8015 NM	
890-1695-5	SW23	Total/NA	Solid	8015 NM	
890-1695-6	SW24	Total/NA	Solid	8015 NM	
890-1695-7	SW24	Total/NA	Solid	8015 NM	
890-1695-8	FS16	Total/NA	Solid	8015 NM	
890-1695-9	FS17	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 14608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Soluble	Solid	DI Leach	
890-1695-2	SW22	Soluble	Solid	DI Leach	
890-1695-3	FS15	Soluble	Solid	DI Leach	
890-1695-4	SW23	Soluble	Solid	DI Leach	
890-1695-5	SW23	Soluble	Solid	DI Leach	
890-1695-6	SW24	Soluble	Solid	DI Leach	
890-1695-7	SW24	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

HPLC/IC (Continued)

Leach Batch: 14608 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-8	FS16	Soluble	Solid	DI Leach	
890-1695-9	FS17	Soluble	Solid	DI Leach	
MB 880-14608/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14608/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14608/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9251-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9251-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 14657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1695-1	SW22	Soluble	Solid	300.0	14608
890-1695-2	SW22	Soluble	Solid	300.0	14608
890-1695-3	FS15	Soluble	Solid	300.0	14608
890-1695-4	SW23	Soluble	Solid	300.0	14608
890-1695-5	SW23	Soluble	Solid	300.0	14608
890-1695-6	SW24	Soluble	Solid	300.0	14608
890-1695-7	SW24	Soluble	Solid	300.0	14608
890-1695-8	FS16	Soluble	Solid	300.0	14608
890-1695-9	FS17	Soluble	Solid	300.0	14608
MB 880-14608/1-A	Method Blank	Soluble	Solid	300.0	14608
LCS 880-14608/2-A	Lab Control Sample	Soluble	Solid	300.0	14608
LCSD 880-14608/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14608
880-9251-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	14608
880-9251-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14608

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW22
Date Collected: 12/09/21 10:40
Date Received: 12/10/21 11:20

Lab Sample ID: 890-1695-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 10:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 10:48	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 12:07	CH	XEN MID

Client Sample ID: SW22
Date Collected: 12/09/21 10:50
Date Received: 12/10/21 11:20

Lab Sample ID: 890-1695-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 11:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 11:49	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 12:15	CH	XEN MID

Client Sample ID: FS15
Date Collected: 12/09/21 11:01
Date Received: 12/10/21 11:20

Lab Sample ID: 890-1695-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 11:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 12:10	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 12:24	CH	XEN MID

Client Sample ID: SW23
Date Collected: 12/09/21 13:00
Date Received: 12/10/21 11:20

Lab Sample ID: 890-1695-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 11:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW23
Lab Sample ID: 890-1695-4
Date Collected: 12/09/21 13:00
Matrix: Solid
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 12:31	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 12:32	CH	XEN MID

Client Sample ID: SW23
Lab Sample ID: 890-1695-5
Date Collected: 12/09/21 13:21
Matrix: Solid
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 12:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 12:51	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 12:57	CH	XEN MID

Client Sample ID: SW24
Lab Sample ID: 890-1695-6
Date Collected: 12/09/21 13:35
Matrix: Solid
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 12:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 13:11	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 13:06	CH	XEN MID

Client Sample ID: SW24
Lab Sample ID: 890-1695-7
Date Collected: 12/09/21 13:40
Matrix: Solid
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 12:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 13:32	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Client Sample ID: SW24

Lab Sample ID: 890-1695-7
Matrix: Solid
Date Collected: 12/09/21 13:40
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 13:14	CH	XEN MID

Client Sample ID: FS16

Lab Sample ID: 890-1695-8
Matrix: Solid
Date Collected: 12/09/21 13:55
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 13:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 13:53	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 13:22	CH	XEN MID

Client Sample ID: FS17

Lab Sample ID: 890-1695-9
Matrix: Solid
Date Collected: 12/09/21 14:05
Date Received: 12/10/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14447	12/13/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14589	12/13/21 13:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14648	12/13/21 11:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14599	12/13/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14594	12/13/21 14:14	AJ	XEN MID
Soluble	Leach	DI Leach			14608	12/13/21 09:14	CH	XEN MID
Soluble	Analysis	300.0		1	14657	12/13/21 13:31	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Goldenchild 6 State 1

Job ID: 890-1695-1
SDG: 31403236.001.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1695-1	SW22	Solid	12/09/21 10:40	12/10/21 11:20	0 - 4
890-1695-2	SW22	Solid	12/09/21 10:50	12/10/21 11:20	5 - 10
890-1695-3	FS15	Solid	12/09/21 11:01	12/10/21 11:20	10
890-1695-4	SW23	Solid	12/09/21 13:00	12/10/21 11:20	0 - 4
890-1695-5	SW23	Solid	12/09/21 13:21	12/10/21 11:20	5 - 10
890-1695-6	SW24	Solid	12/09/21 13:35	12/10/21 11:20	0 - 4
890-1695-7	SW24	Solid	12/09/21 13:40	12/10/21 11:20	5 - 10
890-1695-8	FS16	Solid	12/09/21 13:55	12/10/21 11:20	10
890-1695-9	FS17	Solid	12/09/21 14:05	12/10/21 11:20	10

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849	Email:	Elliot.Lee@wsp.com, Aimee.Cole@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Goldenchild 6 State 1	Turn Around	
Project Number:	31403236.001.0129	Routine	☐
P.O. Number:		Rush:	24HR
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.4/1.2	Thermometer ID		
Received Intact:	(Yes) No	IR-NA-007		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

890-1695 Chain of Custody

Work Order Notes

Cost Center # 1139401001

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Sample Comments
SW22	S	12/9/2021	10:40	0-4'	1	X	X	X	Composite
SW22	S	12/9/2021	10:50	5'-10'	1	X	X	X	Composite
FS15	S	12/9/2021	11:01	10'	1	X	X	X	Composite
SW23	S	12/9/2021	13:00	0-4'	1	X	X	X	Composite
SW23	S	12/9/2021	13:21	5'-10'	1	X	X	X	Composite
SW24	S	12/9/2021	13:35	0-4'	1	X	X	X	Composite
SW24	S	12/9/2021	13:40	5'-10'	1	X	X	X	Composite
FS16	S	12/9/2021	13:55	10'	1	X	X	X	Composite
FS17	S	12/9/2021	14:05	10'	1	X	X	X	Composite

Total 200.7 / 6010 **200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/10/21 11:20	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1695-1
SDG Number: 31403236.001.0129

Login Number: 1695
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1695-1
SDG Number: 31403236.001.0129

Login Number: 1695
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland
List Creation: 12/13/21 07:53 AM

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 78048

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 78048
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Previously Deferred case; remediation complete.	2/16/2022