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October 12, 2021

District I
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Remediation Work Plan
Battle Ax Water Well C-03942-POD1 (32.178199, -103.440470)
Incident Number NAPP2120869635
Lea County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of ConocoPhillips Company (COP), presents the following Remediation Work Plan detailing remediation activities completed to date and proposed additional remedial actions to address the impacted soil resulting from a release at the Water Well C-03942-POD1 (Site). The Site (32.178199, -103.440470) is located in Unit B, Section 35, Township 24 South, Range 34 East, in Lea County, New Mexico (Figure 1).

RELEASE BACKGROUND

On July 26, 2021, an inactive water well was found to be releasing fluids due to artesian pressure, which resulted in the release of approximately 150 barrels (bbls) of fluid onto the ground surface. The release flowed into the adjacent pasture and along the side of Battle Ax Road covering an approximate 5,204 square-foot area. Approximately 130 bbls of free-standing fluid were recovered. Since the date of discovery, an additional 200 bbls of fluid were recovered from the actively flowing well bore and transferred directly into a containment tank, then transported for proper disposal. The release is no longer active. The New Mexico Office of the State Engineer (NMOSE) directed COP not to take any action to plug or cap the well until NMOSE has completed an evaluation.

COP reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on July 27, 2021. The release was assigned Incident Number NAPP2120869635.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. Although the release location is a

groundwater well, WSP is referencing the next nearest well to estimate depth to groundwater. The nearest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321025103263601, located approximately 530 feet northwest of the Site. The groundwater well has a depth to groundwater of approximately 224 feet bgs and an unknown total depth. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent stream located approximately 1.48 miles southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is not within a 100-year floodplain or overlying a subsurface mine. The Site is not located within an area underlain by unstable geology (low potential karst designation area). The Site is located less than 1,000 feet to a freshwater well. The Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On July 28, 2021, WSP personnel inspected the Site to evaluate the release extent and collect preliminary assessment soil samples based on visual observations and information provided by COP personnel. WSP personnel collected four preliminary soil samples (SS01 through SS04) within the release extent from a depth of ground surface to 0.5 feet bgs. The release extent and preliminary soil sample locations were mapped using a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation of the release area is included as Attachment 2.

The preliminary soil samples were screened for volatile aromatic hydrocarbons and chloride using a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Each soil sample was placed directly into a pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were transported to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, at or

below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH by EPA Method 8015M/D, and chloride by EPA Method 300.0.

Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were compliant with the Closure Criteria in preliminary soil samples SS02 through SS04; TPH concentrations exceeded the Closure Criteria in preliminary soil sample SS01. Laboratory analytical results indicated chloride concentrations exceeded the Closure Criteria in preliminary soil samples SS01 through SS04. Visible surface staining was observed within the release extent. Based on the approximate unrecovered volume of fluid (20 bbls), visible staining, and laboratory analytical results for the preliminary soil samples, further site assessment activities were warranted.

DELINEATION SOIL SAMPLING ACTIVITIES

WSP personnel returned to the Site on August 16, 2021, to conduct a subsurface investigation. Potholes PH01 through PH06 were advanced via trackhoe within the release extent to delineate the vertical extent of impacted soil. The potholes were advanced to depths ranging from 1-foot to 16 feet bgs (the maximum reach of the trackhoe). Discrete delineation soil samples were collected from potholes PH01 through PH06 from depths ranging from 1-foot to 16 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach© chloride QuanTab© test strips, respectively. Two delineation soil samples were submitted for laboratory analysis from each pothole; the sample with highest field screening result and the sample from the final depth of the pothole. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. Due to depth limitations of the trackhoe, a drill rig was scheduled to complete additional vertical delineation.

WSP personnel returned to the Site on September 8, 2021 to complete additional lateral and vertical delineation of impacted soil. Surface samples SS05 through SS10 were collected from a depth of ground surface to 0.5 feet bgs to confirm the lateral extent of the surface release along Battle Ax Road. Boreholes BH01 through BH05 were advanced via drill rig to a depth of 20 feet bgs within and around the release extent to complete delineation of the lateral and vertical extent of impacted soil. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation pothole and borehole soil samples were collected, handled, and analyzed as described above and submitted to Eurofins in Carlsbad, New Mexico. The delineation soil sample locations are depicted on Figure 3.

SOIL ANALYTICAL RESULTS

No benzene, BTEX, or TPH was detected in the majority of surface samples and delineation samples and only one soil sample exceeded NMOCD Table 1 Closure Criteria for TPH (SS01).

Elevated chloride concentrations were detected in surface and subsurface samples collected within the release footprint. Lateral delineation soil samples collected from the surface and subsurface were compliant with the Closure Criteria. Additionally, the terminal sample in each pothole and borehole was below 600 mg/kg for chloride, except for pothole PH02. Vertical delineation at the pothole PH02 location was achieved with a sample collected from a depth of 20 feet from subsequent borehole BH01.

Based on the laboratory analytical results, the chloride impacted soil is delineated vertically to the most stringent Table 1 Closure Criteria and impacted soil does not exceed a depth of 16 feet bgs. The analytical results are summarized on Table 1 and laboratory analytical reports are included in Attachment 4.

PROPOSED REMEDIATION WORK PLAN

An estimated 3,285 cubic yards of chloride impacted soil is present within the subsurface at the Site. WSP and COP propose to excavate the impacted soil in the release area and along Battle Ax Road to depths ranging from 1-foot to 16 feet bgs. Excavation activities will proceed until the final excavation extent confirms compliance with the Site Closure Criteria. The impacted soil will be disposed of at a licensed disposal facility. The proposed excavation depths are depicted on Figure 4.

Impacted soil near Battle Ax Road will be removed to the maximum extent possible while maintaining compliance with COP safety policy. Due to the close proximity of the release to the high traffic road, COP will stay a minimum of 10 feet from the pavement to protect workers and reduce the likelihood of compromising the foundation of the road. If impacts encroach the road, COP will defer the road and request to leave impacts in place due to safety concerns.

Following removal of impacted soil, 5-point composite confirmation samples will be collected from the sidewalls and floor of the excavation. Sidewall samples will be collected when the excavation depth exceeds 1.5 feet bgs. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The composite samples will represent a 200 square foot sampling area. The excavation soil samples will be collected and handled following the same procedures as described above and analyzed at Eurofins in Carlsbad, New Mexico. Once COP has confirmed all impacted soil has been successfully removed, the excavation will be backfilled with material purchase locally and recontoured to match pre-existing site conditions. The disturbed pasture will be re-seeded with an approved BLM seed mixture with landowner approval.

COP anticipates beginning remediation within 3 weeks of receipt of the approved remediation work plan. A final report requesting closure will be submitted within 2 weeks of receipt of final laboratory analytical results. The Form C-141 requesting approval of this work plan is included in Attachment 5.

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

Sincerely,

WSP USA Inc.

Kalei Jennings
Associate Consultant

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

cc: Ike Tavarez, ConocoPhillips

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Figure 4	Proposed Excavation Depths
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Photographic Log
Attachment 3	Lithologic/Sampling Logs
Attachment 4	Laboratory Analytical Reports
Attachment 5	Form C-141

FIGURES

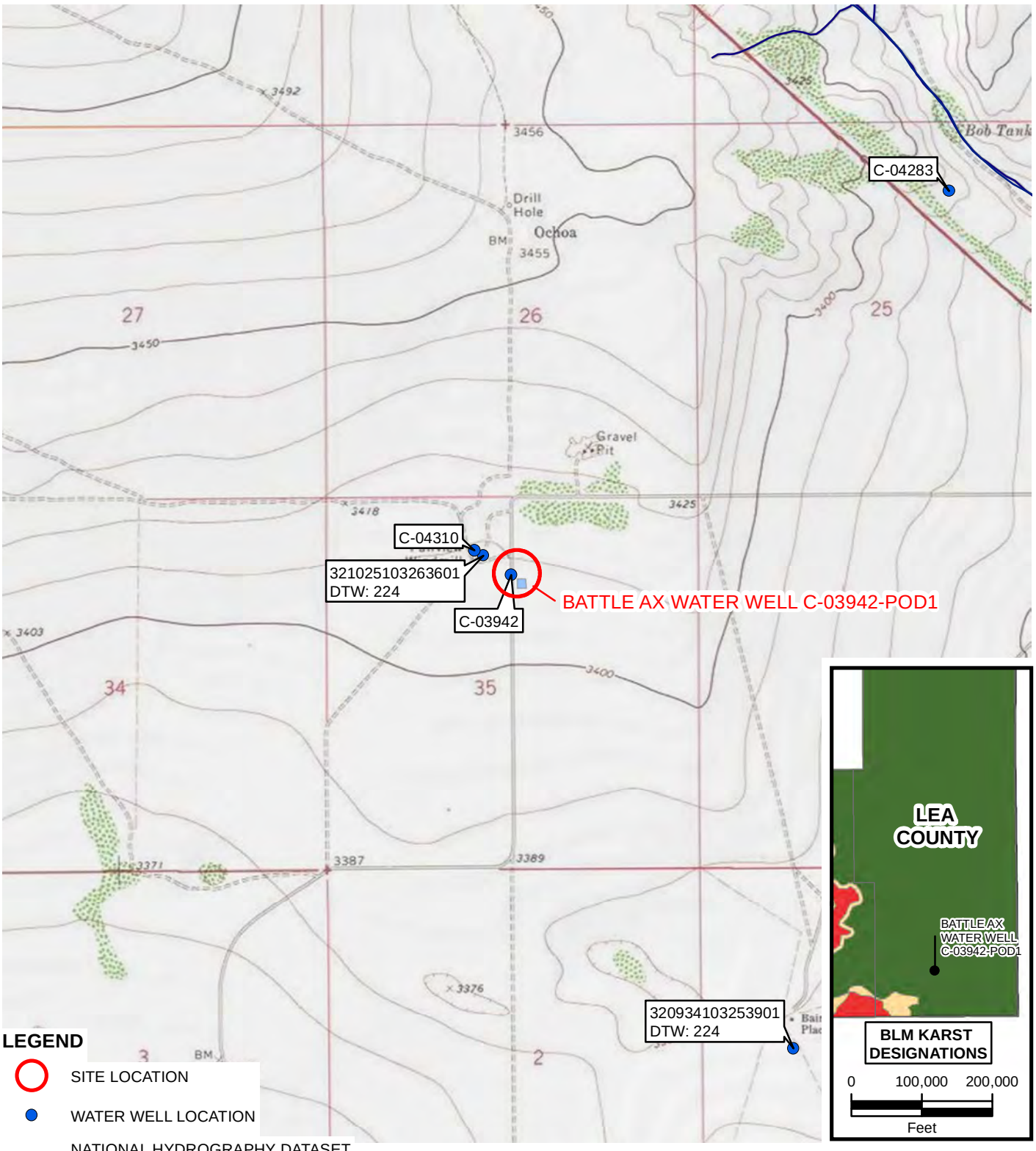

FIGURE 1
SITE LOCATION MAP
BATTLE AX WATER WELL C-03942-POD1
UNIT B SEC 35 T24S R34E
LEA COUNTY, NEW MEXICO
CONOCOPHILLIPS COMPANY

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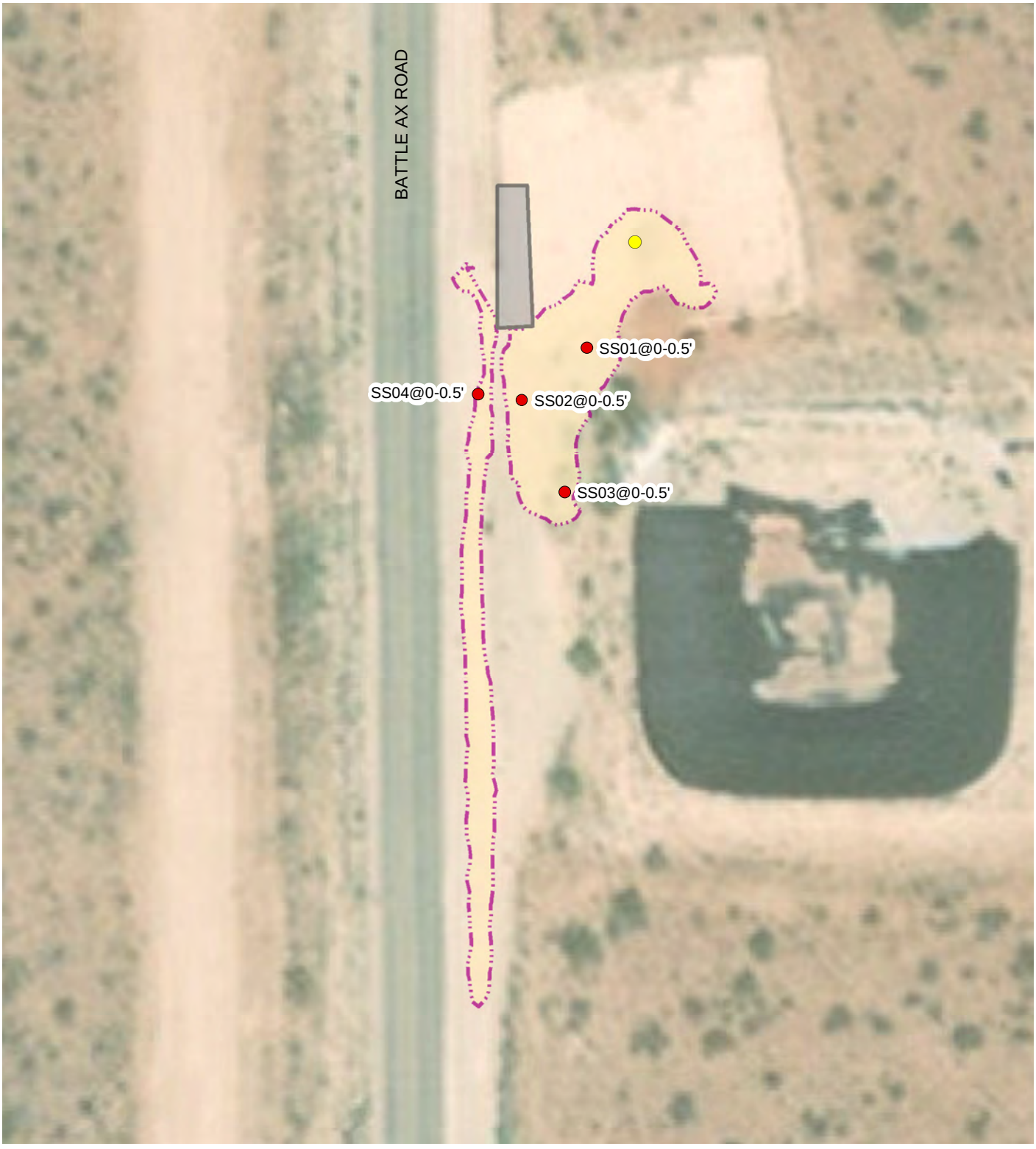


IMAGE COURTESY OF ESRI

LEGEND

- WATER WELL RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- TEMPORARY FRAC TANK

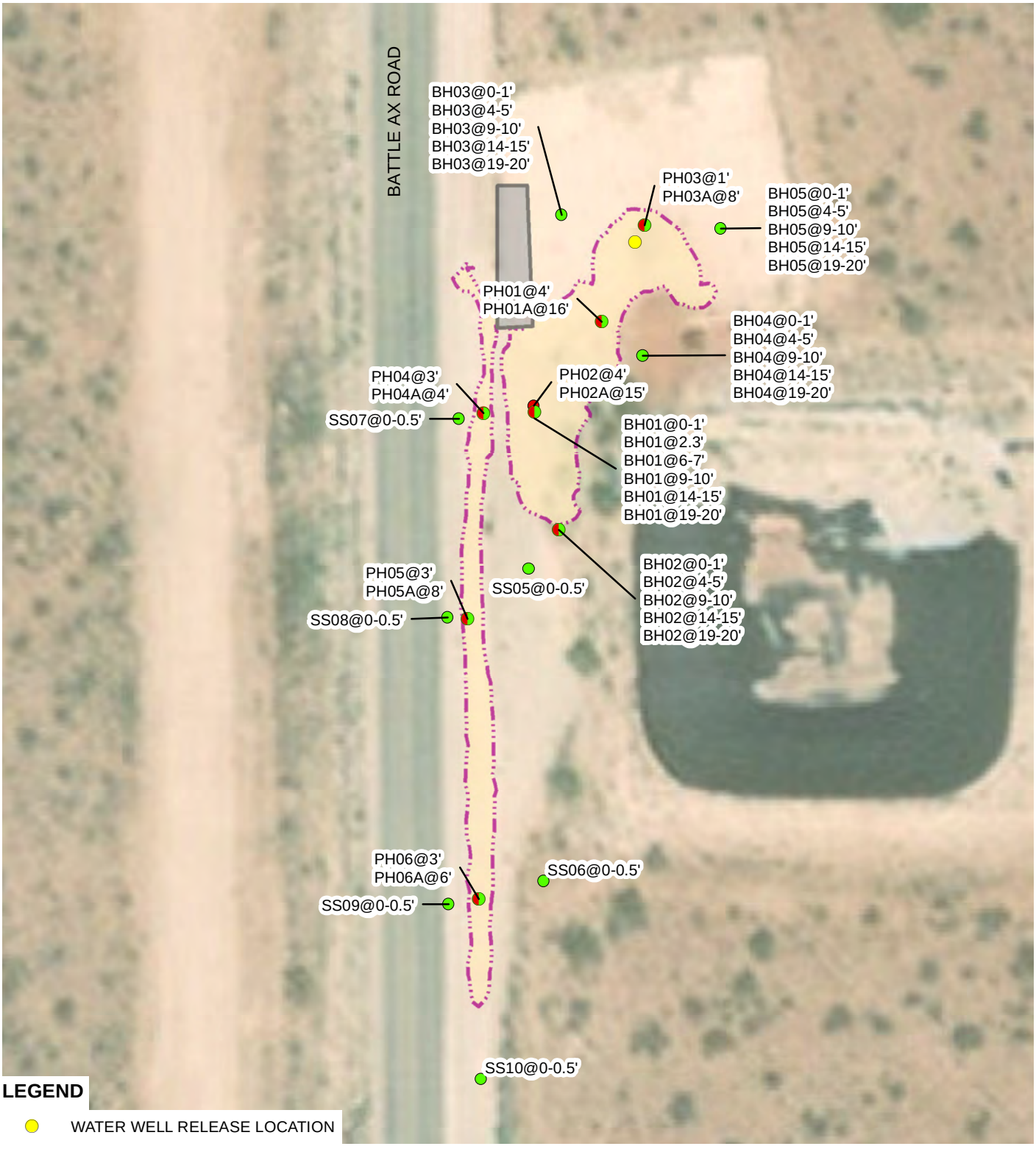
0 50 100
Feet

N

NOTE: INCIDENT NUMBER NAPP2120869635
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
BATTLE AX WATER WELL C-03942-POD1
UNIT B SEC 35 T24S R34E
LEA COUNTY, NEW MEXICO
CONOCOPHILLIPS COMPANY

P:\Concho Operating\GIS\31402909.080_BATTLE AXE WATER WELL\MXD\31402909.080_FIG02_PRELIMINARY_2021.mxd



LEGEND

- WATER WELL RELEASE LOCATION
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- TEMPORARY FRAC TANK

NOTE: INCIDENT NUMBER NAPP2120869635
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
BATTLE AX WATER WELL C-03942-POD1
UNIT B SEC 35 T24S R34E
LEA COUNTY, NEW MEXICO
CONOCOPHILLIPS COMPANY

P:\Concho Operating\GIS\31402909.080_BATTLE AXE WATER WELL\MXD\31402909.080_FIG03_DELINEATION_2021.mxd

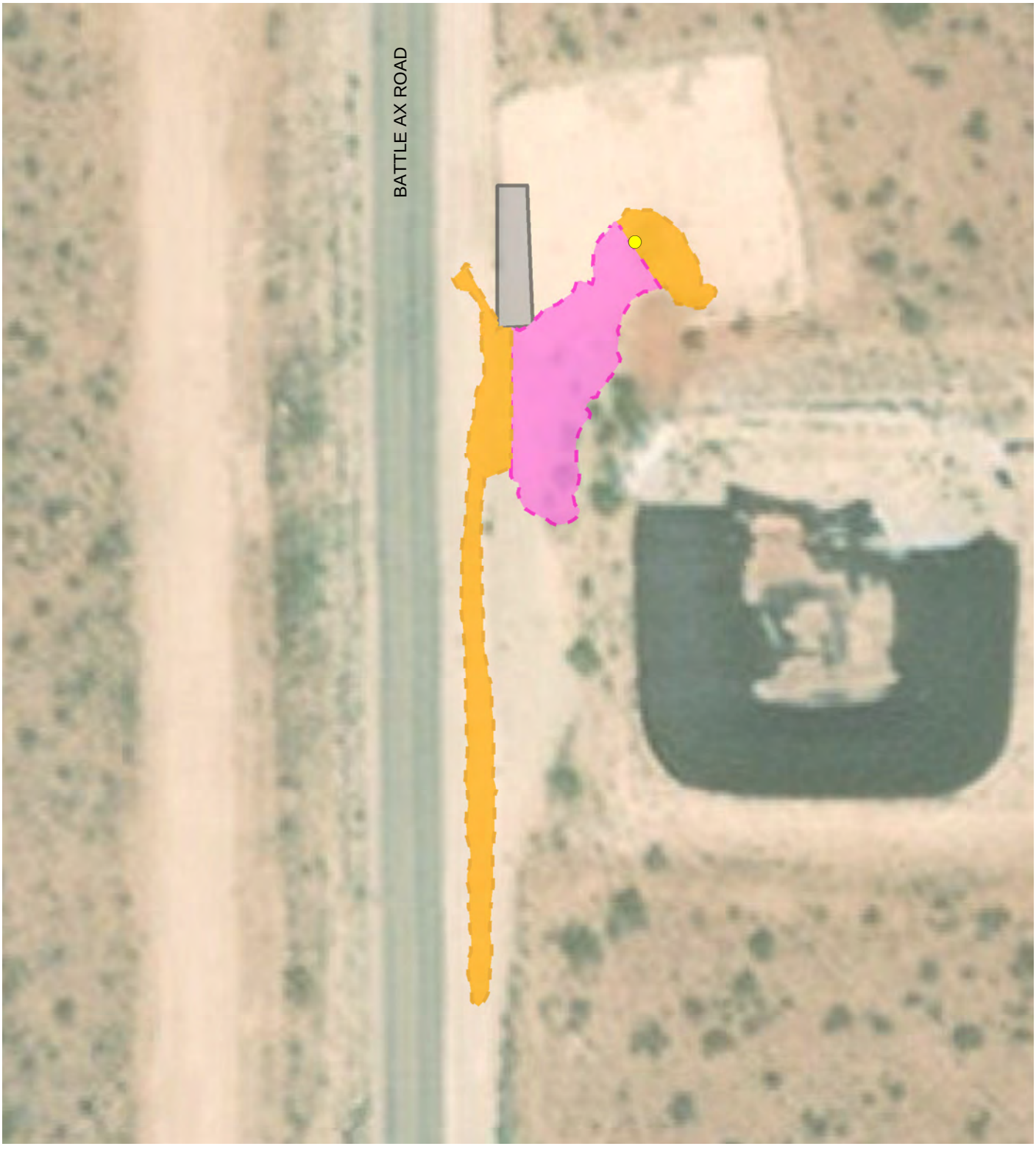


IMAGE COURTESY OF ESRI

LEGEND

- WATER WELL RELEASE LOCATION
- TEMPORARY FRAC TANK
- EXCAVATION EXTENT 4-8'
- EXCAVATION EXTENT 15-16'

NOTE: INCIDENT NUMBER NAPP2120869635

0 50 100

Feet

N

FIGURE 4
PROPOSED EXCAVATION DEPTHS
BATTLE AX WATER WELL C-03942-POD1
UNIT B SEC 35 T24S R34E
LEA COUNTY, NEW MEXICO
CONOCOPHILLIPS COMPANY

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TABLES

Table 1

Soil Analytical Results
Water Well C-03942-POD1
Incident Number NAPP2120869635
Lea 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
Preliminary Soil Samples										
SS01	07/28/2021	0-0.5	0.00458	0.0179	<50.0	140	<50.0	**140**	**140**	**23,800**
SS02	07/28/2021	0-0.5	0.00322	0.0118	<250	<250	<250	<250	<250	**33,300**
SS03	07/28/2021	0-0.5	0.00201	0.00592	<50.0	<50.0	<50.0	<50.0	<50.0	**29,900**
SS04	07/28/2021	0-0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**22,900**
SS05	09/08/2021	0-0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	20.3
SS06	09/08/2021	0-0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	13.2
SS07	09/08/2021	0-0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	39.7
SS08	09/08/2021	0-0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	20.6
SS09	09/08/2021	0-0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	22.1
SS10	09/08/2021	0-0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	12.9
Delineation Soil Samples										
PH01	*08/16/2021*	*1*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***10,044***
PH01A	*08/16/2021*	3	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***11,916***
PH01B	08/16/2021	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	**16,100**
PH01C	*08/16/2021*	*6*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***17,360***
PH01D	*08/16/2021*	*8*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***7,240***
PH01E	*08/16/2021*	*12*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***2,604***
PH01F	*08/16/2021*	*14*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***1,648***
PH01G	08/16/2021	16	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	474
PH02	*08/16/2021*	*1*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***21,670***
PH02A	*08/16/2021*	3	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***17,360***
PH02B	08/16/2021	4	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	**19,000**
PH02C	*08/16/2021*	*6*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***13,020***
PH02D	*08/16/2021*	*8*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***3,440***

Table 1

Soil Analytical Results
Water Well C-03942-POD1
Incident Number NAPP2120869635
Lea 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
PH02E	*08/16/2021*	*12*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***4,444***
PH02F	*08/16/2021*	*14*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***10,928***
PH02G	08/16/2021	15	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**16,800**
PH03	08/16/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	**16,700**
PH03A	*08/16/2021*	*2*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***11,916***
PH03B	*08/16/2021*	*3*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***19,316***
PH03C	*08/16/2021*	*4*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***11,916***
PH03D	*08/16/2021*	*6*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***1,576***
PH03E	08/16/2021	8	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	185
PH04	*08/16/2021*	*1*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***14,272***
PH04A	*08/16/2021*	*2*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***17,300***
PH04B	08/16/2021	3	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**14,900**
PH04C	08/16/2021	4	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	370
PH05	*08/16/2021*	*1*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***13,000***
PH05A	*08/16/2021*	*2*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***15,704***
PH05B	08/16/2021	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**20,100**
PH05C	*08/16/2021*	*4*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***11,916***
PH05D	*08/16/2021*	*6*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***676***
PH05E	08/16/2021	8	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	202
PH06	*08/16/2021*	*1*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***6,680***
PH06A	*08/16/2021*	*2*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***6,680***
PH06B	08/16/2021	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	**19,700**
PH06C	*08/16/2021*	*4*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	***14,264***
PH06D	08/16/2021	6	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	133

Table 1

Soil Analytical Results
Water Well C-03942-POD1
Incident Number NAPP2120869635
Lea 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
BH01	09/08/2021	0 - 1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	**4,920**
BH01	09/08/2021	2 - 3	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	**17,200**
BH01	09/08/2021	6 - 7	<0.00200	<0.00399	<49.9	72.5	<49.9	72.5	72.5	**5,890**
BH01	09/08/2021	9 - 10	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	**2,010**
BH01	09/08/2021	14 - 15	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	221
BH01	09/08/2021	19 - 20	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	172
BH02	09/08/2021	0 - 1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**901**
BH02	09/08/2021	4 - 5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	**748**
BH02	09/08/2021	9 - 10	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	**645**
BH02	09/08/2021	14 - 15	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	20.7
BH02	09/08/2021	19 - 20	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	18.4
BH03	09/08/2021	0 - 1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	84.9
BH03	09/08/2021	4 - 5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	30.2
BH03	09/08/2021	9 - 10	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	18.3
BH03	09/08/2021	14 - 15	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	91.4
BH03	09/08/2021	19 - 20	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	91.8
BH04	09/08/2021	0 - 1	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	76.0
BH04	09/08/2021	4 - 5	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	19.2
BH04	09/08/2021	9 - 10	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	11.1
BH04	09/08/2021	14 - 15	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	15.4
BH04	09/08/2021	19 - 20	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	51.6
BH05	09/08/2021	0 - 1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	16.7
BH05	09/08/2021	4 - 5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	38.5
BH05	09/08/2021	9 - 10	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	37.1
BH05	09/08/2021	14 - 15	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	29.7

WSP

Table 1

Soil Analytical Results
Water Well C-03942-POD1
Incident Number NAPP2120869635
Lea 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
BH05	09/08/2021	19 - 20	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	35.6

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
Text field screening results only, no samples were submitted for laboratory analysis

ATTACHMENT 1: REFERENCED WELL RECORD

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 03942 **Subbasin:** CUB **Cross Reference:** -

Primary Purpose: EXP EXPLORATION

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Agent: GREGORY ROCKHOUSE RANCH INC

Contact: MIKE STAPLETON LLC

Owner: BERT MADERA

Contact: MIKE STAPLETON LLC

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	585604	EXPL	2016-04-20	PMT	LOG	C 03942 POD1	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 03942 POD1		Shallow	3	1	2	35	24S	34E	647005	3561246	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 03942 POD1	3	1	2	35	24S	34E	647005	3561246

Driller License: 1737 **Driller Company:** SHADE TREE DRILLING

Driller Name: MULLINS, JUSTINIEL.NER

Drill Start Date:	05/12/2016	**Drill Finish Date:**	05/17/2016	**Plug Date:**	
Log File Date:	08/05/2021	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	5 GPM
Casing Size:	6.00	**Depth Well:**	420 feet	**Depth Water:**	222 feet

Water Bearing Stratifications:	Top	Bottom	Description
	180	308	Sandstone/Gravel/Conglomerate
	366	385	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	240	260
	360	380
	400	420

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321025103263601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321025103263601 24S.34E.35.12411

Lea County, New Mexico
Latitude 32°10'44.0", Longitude 103°26'31.2" NAD83
Land-surface elevation 3,409.00 feet above NGVD29
The depth of the well is 257 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1953-03-29		D	62610		3185.10	NGVD29	1	Z		
1953-03-29		D	62611		3186.69	NAVD88	1	Z		
1953-03-29		D	72019	223.90			1	Z		
1971-01-13		D	62610		3190.96	NGVD29	1	Z		
1971-01-13		D	62611		3192.55	NAVD88	1	Z		
1971-01-13		D	72019	218.04			1	Z		
1976-01-15		D	62610		3189.94	NGVD29	1	Z		
1976-01-15		D	62611		3191.53	NAVD88	1	Z		
1976-01-15		D	72019	219.06			1	Z		
1981-03-20		D	62610		3191.29	NGVD29	1	Z		
1981-03-20		D	62611		3192.88	NAVD88	1	Z		
1981-03-20		D	72019	217.71			1	Z		
1986-03-06		D	62610		3185.50	NGVD29	1	Z		
1986-03-06		D	62611		3187.09	NAVD88	1	Z		
1986-03-06		D	72019	223.50			1	Z		
1991-05-31		D	62610		3189.82	NGVD29	1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1991-05-31		D	62611		3191.41	NAVD88	1	Z		
1991-05-31		D	72019	219.18			1	Z		
1996-03-14		D	62610		3189.81	NGVD29	1	S		
1996-03-14		D	62611		3191.40	NAVD88	1	S		
1996-03-14		D	72019	219.19			1	S		
2013-01-16	22:00 UTC	m	62610		3185.06	NGVD29	1	S	USGS	
2013-01-16	22:00 UTC	m	62611		3186.65	NAVD88	1	S	USGS	
2013-01-16	22:00 UTC	m	72019	223.94			1	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-10-07 10:58:24 EDT
0.28 0.24 nadww02

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 321025103263601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

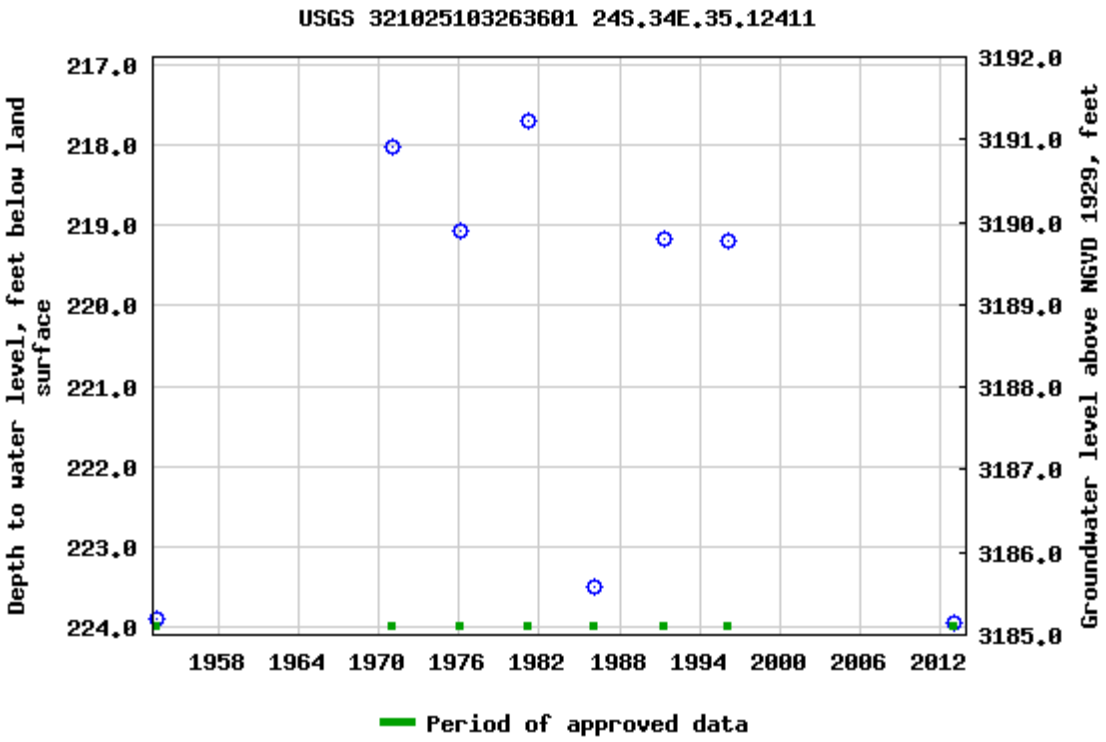
USGS 321025103263601 24S.34E.35.12411

Available data for this site Groundwater: Field measurements GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°10'44.0", Longitude 103°26'31.2" NAD83
Land-surface elevation 3,409.00 feet above NGVD29
The depth of the well is 257 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-10-07 10:58:20 EDT
0.6 0.51 nadww02

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
ConocoPhillips	**Water Well C-03942-POD1** **Lea County, New Mexico**	**31402909.080**

Photo No.	**Date**
1	July 27,2021

View of release extent during initial site assessment.

Photo No.	**Date**
2	July 27, 2021

View of release extent during initial site assessment.

PHOTOGRAPHIC LOG		
ConocoPhillips	**Water Well C-03942-POD1** **Lea County, New Mexico**	**31402909.080**

Photo No.	**Date**
3	July 27, 2021

View of release extent during initial site assessment along Battle Ax Road.

Photo No.	**Date**
4	September 8, 2021

View of delineation activities via drill rig.

ATTACHMENT 3: LITHOLOGIC/SAMPLING LOGS

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH01	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08
Logged By: Anna B	Method: Track hoe
Lat/Long:	Field Screening: Hatch Chloride Strips, PID
Hole Diameter: 36"	Total Depth: 17 feet

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
TD @ 17 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	10,044	0.1	N			1	SM	Fine, Silty Sand. Dark Brown. No Odor, No plasticity.
M	10,920	0.6	N			2	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	11,916	2.6	N			3	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	17,360	2.2	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	17,360	1.0	N			6	CCHE	Poorly consolidated Caliche. No odor, no plasticity. Reddish
M	7,240	0.8	N			8	CCHE	Poorly consolidated Caliche. No odor, no plasticity. Red/tan
M	4,444	0.6	N			10	CCHE	Poorly consolidated Caliche. No odor, no plasticity. Red/tan
M	1,648	0.8	N			12	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	2,604	0.7	N			14	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	572	0.6	N			16	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	852	0.8	N			17	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **Refusal depth**

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH02	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 36"	Total Depth: 15 feet

Comments:
TD @ 15 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	21,672	0.6	N			1	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
S	21,672	0.8	N			2	SM	Fine, Silty Sand. Saturated. Brown. No Odor, No plasticity.
M	17,360	0.7	N			3	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	21,672	0.9	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	13,020	1.2	N			6	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	3,440	0.9	N			8	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	11,916	0.9	N			10	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	4,444	1.3	N			12	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	10,928	1.1	N			14	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	17,360	1.0	N			15	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **Refusal depth**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH03	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 36"	Total Depth: 8 feet

Comments:
TD @ 8 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	19,316	1.2	N			1	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	11,916	1.4	N			2	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	19,316	0.7	N			3	GW	Well graded gravel with sand. No odor, no plasticity. Pink-tan
M	11,916	0.5	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	1,576	0.6	N			6	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.9	N			8	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH04	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 36"	Total Depth: 4 feet

Comments:
TD @ 4 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	14,232	0.6	N			1	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	17,360	0.7	N			2	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	17,360	0.8	N			3	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	356	0.7	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH05	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 36"	Total Depth: 8 feet

Comments:
TD @ 8 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	13,020	1.1	N			1	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	15,704	1.0	N			2	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	21,672	1.0	N			3	GW	Well graded gravel with sand. No odor, no plasticity. Pink-tan
M	11,916	0.9	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	676	1.5	N			6	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	220	1.2	N			8	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH06	Date: 8/16/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 36"	Total Depth: 6 feet

Comments:
TD @ 6 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	<108	0.8	N			1	SM	Fine, Silty Sand. Brown. No Odor, No plasticity.
M	6,680	1.2	N			2	GW	Well graded gravel with sand. No odor, no plasticity. Pink-tan
M	19,316	0.9	N			3	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	14,264	0.7	N			4	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
M	108	1.2	N			6	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 9/8/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Drill Rig		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 6"	Total Depth: 20 feet

Comments:
TD @ 20 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	5,716	0.6	N			0'-1'	SP-SM	Fine, poorly grade sand with silt. Brown. No Odor, No plasticity.
M	19,316	0.8	N			2'-3'	CCHE	Well consolidated Caliche. No odor, no plasticity. Tan
D	14,264	0.4	N			4'-5'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	7,420	0.7	N			6'-7'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	1,760	0.2	N			9'-10'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	252	0.3	N			14'-15'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	220	0.4	N			19'-20'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH02	Date: 9/8/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Drill Rig		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 6"	Total Depth: 20 feet

Comments:
TD @ 20 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<108	0.2	N			0'-1'	SP-SM	Fine, poorly grade sand with silt. Brown. No Odor, No plasticity.
D	<108	0.1	N			2'-3'	SP-SM	Fine, poorly grade sand with silt. Brown. No Odor, No plasticity.
D	1,908	0.3	N			4'-5'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	920	0.2	N			6'-7'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	480	0.3	N			9'-10'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	136	0.2	N			14'-15'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	160	0.1	N			19'-20'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH03	Date: 9/8/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Drill Rig		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 6"	Total Depth: 20 feet

Comments:
TD @ 20 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	108	0.2	N			0'-1'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.2	N			2'-3'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.1	N			4'-5'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.2	N			6'-7'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.3	N			9'-10'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	188	0.2	N			14'-15'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	320	0.1	N			19'-20'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH04	Date: 9/8/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Track hoe		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 6"	Total Depth: 20 feet

Comments:
TD @ 20 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<108	0.3	N			0'-1'	SP-SM	Fine, poorly grade sand with silt. Brown. No Odor, No plasticity.
D	<108	0.1	N			2'-3'	SP-SM	Fine, poorly grade sand with silt. Brown. No Odor, No plasticity.
D	<108	0.2	N			4'-5'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.2	N			6'-7'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.1	N			9'-10'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.0	N			14'-15'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	108	0.1	N			19'-20'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH05	Date: 9/8/2021
Site Name:	Battle Ax Water Well
RP or Incident Number:	NAPP2120869635
WSP Job Number:	31402909.08

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna B	Method: Drill Rig		
Lat/Long:	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 6"	Total Depth: 20 feet

Comments:
TD @ 20 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<108	0.3	N			0'-1'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.1	N			2'-3'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.2	N			4'-5'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.2	N			6'-7'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	<108	0.1	N			9'-10'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	108	0.0	N			14'-15'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan
D	188	0.1	N			19'-20'	CCHE	Well consolidated Caliche. No odor, no plasticity. Pink-tan **TD**

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

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ANALYTICAL REPORT

Job Number: 890-1022-1

SDG Number: Battle Axe Rd Jal, NM 88252

Job Description: C-03942 POD1

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

Attention: Kalei Jennings

Approved for release.
Jessica Kramer
Project Manager
8/2/2021 12:20 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
08/02/2021

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

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.

Eurofins Xenco, Carlsbad
1089 N Canal St., Carlsbad, NM 88220
Tel (575) 988-3199 Fax (575) 988-3199 www.EurofinsUS.com

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-1022-1
Project/Site: C-03942 POD1
SDG: Battle Axe Rd Jal, NM 88252

Lab Sample ID:	890-1022-1	890-1022-2	890-1022-3	890-1022-4
Client Sample ID:	SS01	SS02	SS03	SS04
Depth:	0.5	0.5	0.5	0.5
Matrix:	Solid	Solid	Solid	Solid
Date Collected:	07/28/2021 16:45	07/28/2021 16:50	07/28/2021 16:55	07/28/2021 17:14

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:		07/30/2021 13:00		07/30/2021 13:00		07/30/2021 13:00		07/30/2021 13:00	
Analyzed:		07/30/2021 14:53		07/30/2021 15:14		07/30/2021 15:34		07/30/2021 15:55	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		**0.00458**	0.00202	**0.00322**	0.00199	**0.00201**	0.00200	<0.00200 U	0.00200
Toluene		**0.0109**	0.00202	**0.00853**	0.00199	**0.00391**	0.00200	<0.00200 U	0.00200
Ethylbenzene		<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00400 U	0.00400	<0.00400 U	0.00400
o-Xylene		**0.00246**	0.00202	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00200 U	0.00200
Xylenes, Total		<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00400 U	0.00400	<0.00400 U	0.00400
Total BTEX		**0.0179**	0.00403	**0.0118**	0.00398	**0.00592**	0.00400	<0.00400 U	0.00400

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

Prepared:		07/30/2021 10:13		07/30/2021 10:13		07/30/2021 10:13		07/30/2021 10:13	
Analyzed:		07/30/2021 14:42		07/30/2021 15:16		07/30/2021 15:40		07/30/2021 16:01	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0	<250 U	250	<50.0 U	50.0	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		**140**	50.0	<250 U	250	<50.0 U	50.0	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<250 U	250	<50.0 U	50.0	<50.0 U	50.0
Total TPH		**140**	50.0	<250 U	250	<50.0 U	50.0	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:									
Analyzed:		07/31/2021 15:26		07/31/2021 15:32		07/31/2021 15:37		07/31/2021 15:43	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**23800**	248	**33300**	251	**29900**	250	**22900**	249

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1125-1
Laboratory Sample Delivery Group: 31402909.080
Client Project/Site: Battle Ax Water Well

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
8/23/2021 4:28:40 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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: Battle Ax Water Well

Laboratory Job ID: 890-1125-1
SDG: 31402909.080

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%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: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Job ID: 890-1125-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1125-1

Receipt
The samples were received on 8/18/2021 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-6785 and analytical batch 880-6831 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH01 (890-1125-2). Evidence of matrix interferences is not obvious.

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 880-6805 and analytical batch 880-6837 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
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: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH01

Lab Sample ID: 890-1125-1
Matrix: Solid
Date Collected: 08/16/21 10:10
Date Received: 08/18/21 16:40
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- F1	0.00199		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		08/20/21 07:30	08/20/21 11:33	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		08/20/21 07:30	08/20/21 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*08/20/21 07:30*	*08/20/21 11:33*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*08/20/21 07:30*	*08/20/21 11:33*	*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		08/20/21 11:00	08/20/21 13:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 13:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 13:52	1
Total TPH	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*08/20/21 11:00*	*08/20/21 13:52*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/20/21 11:00*	*08/20/21 13:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16100**		99.2		mg/Kg			08/20/21 18:34	20

Client Sample ID: PH01

Lab Sample ID: 890-1125-2
Matrix: Solid
Date Collected: 08/16/21 12:25
Date Received: 08/18/21 16:40
Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 12:15	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*08/20/21 07:30*	*08/20/21 12:15*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/20/21 07:30*	*08/20/21 12:15*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH01

Lab Sample ID: 890-1125-2
Matrix: Solid
Date Collected: 08/16/21 12:25
Date Received: 08/18/21 16:40
Sample Depth: 16

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		08/20/21 11:00	08/20/21 14:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 14:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 14:14	1
Total TPH	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*08/20/21 11:00*	*08/20/21 14:14*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/20/21 11:00*	*08/20/21 14:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**474**		5.00		mg/Kg			08/20/21 18:39	1

Client Sample ID: PH02

Lab Sample ID: 890-1125-3
Matrix: Solid
Date Collected: 08/16/21 13:02
Date Received: 08/18/21 16:40
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *-	0.00198		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/20/21 07:30	08/20/21 12:36	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		08/20/21 07:30	08/20/21 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/20/21 07:30*	*08/20/21 12:36*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*08/20/21 07:30*	*08/20/21 12:36*	*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		08/20/21 11:00	08/20/21 15:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:02	1
Total TPH	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:02*	*1*
o-Terphenyl	*100*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19000**		250		mg/Kg			08/20/21 18:45	50

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH02

Lab Sample ID: 890-1125-4
Matrix: Solid
Date Collected: 08/16/21 14:15
Date Received: 08/18/21 16:40
Sample Depth: 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *-	0.00199		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
Toluene	**0.00296**		0.00199		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 12:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/20/21 07:30*	*08/20/21 12:57*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*08/20/21 07:30*	*08/20/21 12:57*	*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		08/20/21 11:00	08/20/21 15:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 15:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 15:24	1
Total TPH	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:24*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16800**		99.2		mg/Kg			08/20/21 18:51	20

Client Sample ID: PH03

Lab Sample ID: 890-1125-5
Matrix: Solid
Date Collected: 08/16/21 14:30
Date Received: 08/18/21 16:40
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 15:58	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/20/21 07:30*	*08/20/21 15:58*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*08/20/21 07:30*	*08/20/21 15:58*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH03

Lab Sample ID: 890-1125-5
Matrix: Solid
Date Collected: 08/16/21 14:30
Date Received: 08/18/21 16:40
Sample Depth: 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		08/20/21 11:00	08/20/21 15:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:45	1
Total TPH	<49.8	U	49.8		mg/Kg		08/20/21 11:00	08/20/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:45*	*1*
o-Terphenyl	*99*		*70 - 130*	*08/20/21 11:00*	*08/20/21 15:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16700**		248		mg/Kg			08/20/21 18:56	50

Client Sample ID: PH03

Lab Sample ID: 890-1125-6
Matrix: Solid
Date Collected: 08/16/21 15:00
Date Received: 08/18/21 16:40
Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *-	0.00198		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/20/21 07:30	08/20/21 16:19	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		08/20/21 07:30	08/20/21 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*08/20/21 07:30*	*08/20/21 16:19*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*08/20/21 07:30*	*08/20/21 16:19*	*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		08/20/21 11:00	08/20/21 16:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 16:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 16:06	1
Total TPH	<49.9	U	49.9		mg/Kg		08/20/21 11:00	08/20/21 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*08/20/21 11:00*	*08/20/21 16:06*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/20/21 11:00*	*08/20/21 16:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**185**		4.97		mg/Kg			08/20/21 19:02	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH04

Lab Sample ID: 890-1125-7
Matrix: Solid
Date Collected: 08/16/21 15:22
Date Received: 08/18/21 16:40
Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 16:40	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/20/21 07:30*	*08/20/21 16:40*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*08/20/21 07:30*	*08/20/21 16:40*	*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		08/20/21 08:26	08/20/21 20:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:18	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:18*	*1*
o-Terphenyl	*105*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14900**	**F1**	99.0		mg/Kg			08/20/21 17:26	20

Client Sample ID: PH04

Lab Sample ID: 890-1125-8
Matrix: Solid
Date Collected: 08/16/21 15:25
Date Received: 08/18/21 16:40
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *-	0.00202		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/20/21 07:30	08/20/21 17:00	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		08/20/21 07:30	08/20/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/20/21 07:30*	*08/20/21 17:00*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*08/20/21 07:30*	*08/20/21 17:00*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Client Sample ID: PH04 Lab Sample ID: 890-1125-8

Date Collected: 08/16/21 15:25 **Matrix: Solid**
Date Received: 08/18/21 16:40
Sample Depth: 4

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		08/20/21 08:26	08/20/21 20:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/20/21 08:26	08/20/21 20:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/20/21 08:26	08/20/21 20:39	1
Total TPH	<49.8	U	49.8		mg/Kg		08/20/21 08:26	08/20/21 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:39*	*1*
o-Terphenyl	*107*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**370**		5.04		mg/Kg			08/20/21 17:43	1

Client Sample ID: PH05 Lab Sample ID: 890-1125-9

Date Collected: 08/16/21 15:46 **Matrix: Solid**
Date Received: 08/18/21 16:40
Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *-	0.00199		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
Toluene	**0.00241**		0.00199		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 17:21	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/20/21 07:30	08/20/21 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/20/21 07:30*	*08/20/21 17:21*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/20/21 07:30*	*08/20/21 17:21*	*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		08/20/21 08:26	08/20/21 20:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:59	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:59*	*1*
o-Terphenyl	*84*		*70 - 130*	*08/20/21 08:26*	*08/20/21 20:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20100**		249		mg/Kg			08/20/21 17:49	50

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH05

Lab Sample ID: 890-1125-10
Matrix: Solid
Date Collected: 08/16/21 16:08
Date Received: 08/18/21 16:40
Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 18:43	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*08/20/21 07:30*	*08/20/21 18:43*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*08/20/21 07:30*	*08/20/21 18:43*	*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		08/20/21 08:26	08/20/21 21:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 21:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 21:20	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/20/21 08:26*	*08/20/21 21:20*	*1*
o-Terphenyl	*99*		*70 - 130*	*08/20/21 08:26*	*08/20/21 21:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**202**		4.95		mg/Kg			08/20/21 17:54	1

Client Sample ID: PH06

Lab Sample ID: 890-1125-11
Matrix: Solid
Date Collected: 08/16/21 16:25
Date Received: 08/18/21 16:40
Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 19:04	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/20/21 07:30	08/20/21 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*08/20/21 07:30*	*08/20/21 19:04*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/20/21 07:30*	*08/20/21 19:04*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH06

Lab Sample ID: 890-1125-11
Matrix: Solid
Date Collected: 08/16/21 16:25
Date Received: 08/18/21 16:40
Sample Depth: 3

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		08/20/21 08:28	08/20/21 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 18:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 18:33	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*08/20/21 08:28*	*08/20/21 18:33*	*1*
o-Terphenyl	*123*		*70 - 130*	*08/20/21 08:28*	*08/20/21 18:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19700**		100		mg/Kg			08/20/21 18:00	20

Client Sample ID: PH06

Lab Sample ID: 890-1125-12
Matrix: Solid
Date Collected: 08/16/21 16:33
Date Received: 08/18/21 16:40
Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00303**	*-	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 19:25	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/20/21 07:30	08/20/21 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*08/20/21 07:30*	*08/20/21 19:25*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*08/20/21 07:30*	*08/20/21 19:25*	*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		08/20/21 08:28	08/20/21 18:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/20/21 08:28	08/20/21 18:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/20/21 08:28	08/20/21 18:54	1
Total TPH	<49.9	U	49.9		mg/Kg		08/20/21 08:28	08/20/21 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*08/20/21 08:28*	*08/20/21 18:54*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/20/21 08:28*	*08/20/21 18:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**133**		5.05		mg/Kg			08/20/21 18:17	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1125-1	PH01	105	96
890-1125-1 MS	PH01	103	87
890-1125-1 MSD	PH01	92	101
890-1125-2	PH01	152 S1+	91
890-1125-3	PH02	113	104
890-1125-4	PH02	101	87
890-1125-5	PH03	98	106
890-1125-6	PH03	107	105
890-1125-7	PH04	100	85
890-1125-8	PH04	98	101
890-1125-9	PH05	97	93
890-1125-10	PH05	84	84
890-1125-11	PH06	114	91
890-1125-12	PH06	114	76
LCS 880-6785/1-A	Lab Control Sample	93	83
LCSD 880-6785/2-A	Lab Control Sample Dup	106	95
MB 880-6785/5-A	Method Blank	103	84

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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5187-A-1-H MS	Matrix Spike	79	83
880-5187-A-1-I MSD	Matrix Spike Duplicate	78	84
880-5187-A-5-E MS	Matrix Spike	115	111
880-5187-A-5-F MSD	Matrix Spike Duplicate	89	9 S1-
880-5187-A-7-E MS	Matrix Spike	94	96
880-5187-A-7-F MSD	Matrix Spike Duplicate	95	98
890-1125-1	PH01	84	97
890-1125-2	PH01	84	97
890-1125-3	PH02	86	100
890-1125-4	PH02	84	97
890-1125-5	PH03	86	99
890-1125-6	PH03	84	97
890-1125-7	PH04	102	105
890-1125-8	PH04	107	107
890-1125-9	PH05	85	84
890-1125-10	PH05	98	99
890-1125-11	PH06	107	123
890-1125-12	PH06	102	115
LCS 880-6805/2-A	Lab Control Sample	86	95
LCS 880-6833/2-A	Lab Control Sample	89	80
LCS 880-6834/2-A	Lab Control Sample	114	124
LCSD 880-6805/3-A	Lab Control Sample Dup	95	107

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
LCSD 880-6833/3-A	Lab Control Sample Dup	104	103								
LCSD 880-6834/3-A	Lab Control Sample Dup	113	120								
MB 880-6805/1-A	Method Blank	89	104								
MB 880-6833/1-A	Method Blank	106	111								
MB 880-6834/1-A	Method Blank	105	120								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6785/5-A
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6785

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 11:11	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/20/21 07:30	08/20/21 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/20/21 07:30*	*08/20/21 11:11*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*08/20/21 07:30*	*08/20/21 11:11*	*1*

Lab Sample ID: LCS 880-6785/1-A
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6785

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08058		mg/Kg		81	70 - 130		
Toluene			0.100	0.07698		mg/Kg		77	70 - 130		
Ethylbenzene			0.100	0.08496		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene			0.200	0.1482		mg/Kg		74	70 - 130		
o-Xylene			0.100	0.07292		mg/Kg		73	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: LCSD 880-6785/2-A
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6785

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08021		mg/Kg		80	70 - 130	0	35
Toluene			0.100	0.08665		mg/Kg		87	70 - 130	12	35
Ethylbenzene			0.100	0.09404		mg/Kg		94	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.1726		mg/Kg		86	70 - 130	15	35
o-Xylene			0.100	0.08547		mg/Kg		85	70 - 130	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-1125-1 MS
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 6785

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U *- F1	0.100	0.09015		mg/Kg		89	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

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

Lab Sample ID: 890-1125-1 MS
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 6785

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U	0.100	0.08233		mg/Kg		81	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.07997		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1579		mg/Kg		79	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.07524		mg/Kg		75	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 890-1125-1 MSD
Matrix: Solid
Analysis Batch: 6831

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 6785

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U *- F1	0.0998	0.08072		mg/Kg		80	70 - 130	11	35
Toluene	<0.00199	U	0.0998	0.07216		mg/Kg		71	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.0998	0.07295		mg/Kg		72	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1306	F1	mg/Kg		65	70 - 130	19	35
o-Xylene	<0.00199	U F1	0.0998	0.06195	F1	mg/Kg		62	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 880-6805/1-A
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6805

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		08/19/21 13:10	08/20/21 10:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/19/21 13:10	08/20/21 10:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/19/21 13:10	08/20/21 10:38	1
Total TPH	<50.0	U	50.0		mg/Kg		08/19/21 13:10	08/20/21 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/19/21 13:10*	*08/20/21 10:38*	*1*
o-Terphenyl	*104*		*70 - 130*	*08/19/21 13:10*	*08/20/21 10:38*	*1*

Lab Sample ID: LCS 880-6805/2-A
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6805

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	780.0		mg/Kg		78	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

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

Lab Sample ID: LCS 880-6805/2-A
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6805

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	958.0		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-6805/3-A
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6805

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	842.4		mg/Kg		84	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	1081		mg/Kg		108	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: 880-5187-A-1-H MS
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 6805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	995	690.6	F1	mg/Kg		69	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	995	757.2		mg/Kg		76	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Lab Sample ID: 880-5187-A-1-I MSD
Matrix: Solid
Analysis Batch: 6837

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 6805

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	<50.0	U F1	998	682.1	F1	mg/Kg		68	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	762.6		mg/Kg		76	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

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

Lab Sample ID: MB 880-6833/1-A
Matrix: Solid
Analysis Batch: 6841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6833

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		08/20/21 08:26	08/20/21 11:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 11:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 11:28	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:26	08/20/21 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*08/20/21 08:26*	*08/20/21 11:28*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/20/21 08:26*	*08/20/21 11:28*	*1*

Lab Sample ID: LCS 880-6833/2-A
Matrix: Solid
Analysis Batch: 6841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6833

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1005		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	787.4		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: LCSD 880-6833/3-A
Matrix: Solid
Analysis Batch: 6841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6833

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	829.6		mg/Kg		83	70 - 130	19	20
Diesel Range Organics (Over C10-C28)			1000	872.7		mg/Kg		87	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: 880-5187-A-5-E MS
Matrix: Solid
Analysis Batch: 6841

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 6833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	885.9		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	995	946.3		mg/Kg		93	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

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

Lab Sample ID: 880-5187-A-5-E MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6841 **Prep Batch: 6833**

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 880-5187-A-5-F MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6841 **Prep Batch: 6833**

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	<50.0	U	998	962.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	812.7		mg/Kg		80	70 - 130	15	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	9	S1-	70 - 130

Lab Sample ID: MB 880-6834/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6843 **Prep Batch: 6834**

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		08/20/21 08:28	08/20/21 11:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 11:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 11:28	1
Total TPH	<50.0	U	50.0		mg/Kg		08/20/21 08:28	08/20/21 11:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	08/20/21 08:28	08/20/21 11:28	1
o-Terphenyl	120		70 - 130	08/20/21 08:28	08/20/21 11:28	1

Lab Sample ID: LCS 880-6834/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6843 **Prep Batch: 6834**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1016		mg/Kg		102	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	973.4		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	124		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

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

Lab Sample ID: LCSD 880-6834/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6843 **Prep Batch: 6834**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	947.8		mg/Kg		95	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	947.2		mg/Kg		95	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 880-5187-A-7-E MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6843 **Prep Batch: 6834**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	926.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	810.0		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-5187-A-7-F MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 6843 **Prep Batch: 6834**

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	<50.0	U	998	964.1		mg/Kg		94	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	796.7		mg/Kg		78	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6853/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 6865

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/20/21 16:12	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-6853/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6865

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	262.4		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-6853/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6865

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	262.2		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-1130-A-15-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6865

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	107		248	329.7		mg/Kg		90	90 - 110		

Lab Sample ID: 890-1130-A-15-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6865

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	107		248	358.0		mg/Kg		101	90 - 110	8	20

Lab Sample ID: MB 880-6856/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6866

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/20/21 17:10	1

Lab Sample ID: LCS 880-6856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6866

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	253.2		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-6856/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6866

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	254.8		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-1125-7 MS — **Client Sample ID: PH04**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 6866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	14900	F1	4950	21450	F1	mg/Kg		132	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1125-7 MSD
Matrix: Solid
Analysis Batch: 6866

Client Sample ID: PH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14900	F1	4950	21490	F1	mg/Kg		133	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

GC VOA

Prep Batch: 6785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Total/NA	Solid	5035	
890-1125-2	PH01	Total/NA	Solid	5035	
890-1125-3	PH02	Total/NA	Solid	5035	
890-1125-4	PH02	Total/NA	Solid	5035	
890-1125-5	PH03	Total/NA	Solid	5035	
890-1125-6	PH03	Total/NA	Solid	5035	
890-1125-7	PH04	Total/NA	Solid	5035	
890-1125-8	PH04	Total/NA	Solid	5035	
890-1125-9	PH05	Total/NA	Solid	5035	
890-1125-10	PH05	Total/NA	Solid	5035	
890-1125-11	PH06	Total/NA	Solid	5035	
890-1125-12	PH06	Total/NA	Solid	5035	
MB 880-6785/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6785/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6785/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1125-1 MS	PH01	Total/NA	Solid	5035	
890-1125-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 6831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Total/NA	Solid	8021B	6785
890-1125-2	PH01	Total/NA	Solid	8021B	6785
890-1125-3	PH02	Total/NA	Solid	8021B	6785
890-1125-4	PH02	Total/NA	Solid	8021B	6785
890-1125-5	PH03	Total/NA	Solid	8021B	6785
890-1125-6	PH03	Total/NA	Solid	8021B	6785
890-1125-7	PH04	Total/NA	Solid	8021B	6785
890-1125-8	PH04	Total/NA	Solid	8021B	6785
890-1125-9	PH05	Total/NA	Solid	8021B	6785
890-1125-10	PH05	Total/NA	Solid	8021B	6785
890-1125-11	PH06	Total/NA	Solid	8021B	6785
890-1125-12	PH06	Total/NA	Solid	8021B	6785
MB 880-6785/5-A	Method Blank	Total/NA	Solid	8021B	6785
LCS 880-6785/1-A	Lab Control Sample	Total/NA	Solid	8021B	6785
LCSD 880-6785/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6785
890-1125-1 MS	PH01	Total/NA	Solid	8021B	6785
890-1125-1 MSD	PH01	Total/NA	Solid	8021B	6785

GC Semi VOA

Prep Batch: 6805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Total/NA	Solid	8015NM Prep	
890-1125-2	PH01	Total/NA	Solid	8015NM Prep	
890-1125-3	PH02	Total/NA	Solid	8015NM Prep	
890-1125-4	PH02	Total/NA	Solid	8015NM Prep	
890-1125-5	PH03	Total/NA	Solid	8015NM Prep	
890-1125-6	PH03	Total/NA	Solid	8015NM Prep	
MB 880-6805/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6805/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

GC Semi VOA (Continued)

Prep Batch: 6805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5187-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5187-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 6833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-7	PH04	Total/NA	Solid	8015NM Prep	
890-1125-8	PH04	Total/NA	Solid	8015NM Prep	
890-1125-9	PH05	Total/NA	Solid	8015NM Prep	
890-1125-10	PH05	Total/NA	Solid	8015NM Prep	
MB 880-6833/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6833/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6833/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5187-A-5-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5187-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 6834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-11	PH06	Total/NA	Solid	8015NM Prep	
890-1125-12	PH06	Total/NA	Solid	8015NM Prep	
MB 880-6834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5187-A-7-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5187-A-7-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Total/NA	Solid	8015B NM	6805
890-1125-2	PH01	Total/NA	Solid	8015B NM	6805
890-1125-3	PH02	Total/NA	Solid	8015B NM	6805
890-1125-4	PH02	Total/NA	Solid	8015B NM	6805
890-1125-5	PH03	Total/NA	Solid	8015B NM	6805
890-1125-6	PH03	Total/NA	Solid	8015B NM	6805
MB 880-6805/1-A	Method Blank	Total/NA	Solid	8015B NM	6805
LCS 880-6805/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6805
LCSD 880-6805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6805
880-5187-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	6805
880-5187-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6805

Analysis Batch: 6841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-7	PH04	Total/NA	Solid	8015B NM	6833
890-1125-8	PH04	Total/NA	Solid	8015B NM	6833
890-1125-9	PH05	Total/NA	Solid	8015B NM	6833
890-1125-10	PH05	Total/NA	Solid	8015B NM	6833
MB 880-6833/1-A	Method Blank	Total/NA	Solid	8015B NM	6833
LCS 880-6833/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6833
LCSD 880-6833/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6833
880-5187-A-5-E MS	Matrix Spike	Total/NA	Solid	8015B NM	6833
880-5187-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6833

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

GC Semi VOA

Analysis Batch: 6843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-11	PH06	Total/NA	Solid	8015B NM	6834
890-1125-12	PH06	Total/NA	Solid	8015B NM	6834
MB 880-6834/1-A	Method Blank	Total/NA	Solid	8015B NM	6834
LCS 880-6834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6834
LCSD 880-6834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6834
880-5187-A-7-E MS	Matrix Spike	Total/NA	Solid	8015B NM	6834
880-5187-A-7-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6834

HPLC/IC

Leach Batch: 6853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Soluble	Solid	DI Leach	
890-1125-2	PH01	Soluble	Solid	DI Leach	
890-1125-3	PH02	Soluble	Solid	DI Leach	
890-1125-4	PH02	Soluble	Solid	DI Leach	
890-1125-5	PH03	Soluble	Solid	DI Leach	
890-1125-6	PH03	Soluble	Solid	DI Leach	
MB 880-6853/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6853/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6853/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1130-A-15-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1130-A-15-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 6856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-7	PH04	Soluble	Solid	DI Leach	
890-1125-8	PH04	Soluble	Solid	DI Leach	
890-1125-9	PH05	Soluble	Solid	DI Leach	
890-1125-10	PH05	Soluble	Solid	DI Leach	
890-1125-11	PH06	Soluble	Solid	DI Leach	
890-1125-12	PH06	Soluble	Solid	DI Leach	
MB 880-6856/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6856/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6856/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1125-7 MS	PH04	Soluble	Solid	DI Leach	
890-1125-7 MSD	PH04	Soluble	Solid	DI Leach	

Analysis Batch: 6865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-1	PH01	Soluble	Solid	300.0	6853
890-1125-2	PH01	Soluble	Solid	300.0	6853
890-1125-3	PH02	Soluble	Solid	300.0	6853
890-1125-4	PH02	Soluble	Solid	300.0	6853
890-1125-5	PH03	Soluble	Solid	300.0	6853
890-1125-6	PH03	Soluble	Solid	300.0	6853
MB 880-6853/1-A	Method Blank	Soluble	Solid	300.0	6853
LCS 880-6853/2-A	Lab Control Sample	Soluble	Solid	300.0	6853
LCSD 880-6853/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6853
890-1130-A-15-D MS	Matrix Spike	Soluble	Solid	300.0	6853
890-1130-A-15-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	6853

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

HPLC/IC

Analysis Batch: 6866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1125-7	PH04	Soluble	Solid	300.0	6856
890-1125-8	PH04	Soluble	Solid	300.0	6856
890-1125-9	PH05	Soluble	Solid	300.0	6856
890-1125-10	PH05	Soluble	Solid	300.0	6856
890-1125-11	PH06	Soluble	Solid	300.0	6856
890-1125-12	PH06	Soluble	Solid	300.0	6856
MB 880-6856/1-A	Method Blank	Soluble	Solid	300.0	6856
LCS 880-6856/2-A	Lab Control Sample	Soluble	Solid	300.0	6856
LCSD 880-6856/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6856
890-1125-7 MS	PH04	Soluble	Solid	300.0	6856
890-1125-7 MSD	PH04	Soluble	Solid	300.0	6856

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Client Sample ID: PH01
Date Collected: 08/16/21 10:10
Date Received: 08/18/21 16:40

Lab Sample ID: 890-1125-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 11:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 13:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		20			6865	08/20/21 18:34	CH	XEN MID

Client Sample ID: PH01
Date Collected: 08/16/21 12:25
Date Received: 08/18/21 16:40

Lab Sample ID: 890-1125-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 12:15	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 14:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		1			6865	08/20/21 18:39	CH	XEN MID

Client Sample ID: PH02
Date Collected: 08/16/21 13:02
Date Received: 08/18/21 16:40

Lab Sample ID: 890-1125-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 12:36	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 15:02	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		50			6865	08/20/21 18:45	CH	XEN MID

Client Sample ID: PH02
Date Collected: 08/16/21 14:15
Date Received: 08/18/21 16:40

Lab Sample ID: 890-1125-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 12:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 15:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		20			6865	08/20/21 18:51	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Client Sample ID: PH03 — Lab Sample ID: 890-1125-5

Date Collected: 08/16/21 14:30 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 15:58	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 15:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		50			6865	08/20/21 18:56	CH	XEN MID

Client Sample ID: PH03 — Lab Sample ID: 890-1125-6

Date Collected: 08/16/21 15:00 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 16:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6805	08/20/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6837	08/20/21 16:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6853	08/20/21 10:51	SC	XEN MID
Soluble	Analysis	300.0		1			6865	08/20/21 19:02	CH	XEN MID

Client Sample ID: PH04 — Lab Sample ID: 890-1125-7

Date Collected: 08/16/21 15:22 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 16:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6833	08/20/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6841	08/20/21 20:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		20			6866	08/20/21 17:26	CH	XEN MID

Client Sample ID: PH04 — Lab Sample ID: 890-1125-8

Date Collected: 08/16/21 15:25 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 17:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6833	08/20/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6841	08/20/21 20:39	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		1			6866	08/20/21 17:43	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

Client Sample ID: PH05 Lab Sample ID: 890-1125-9

Date Collected: 08/16/21 15:46 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 17:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6833	08/20/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6841	08/20/21 20:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		50			6866	08/20/21 17:49	CH	XEN MID

Client Sample ID: PH05 Lab Sample ID: 890-1125-10

Date Collected: 08/16/21 16:08 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 18:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6833	08/20/21 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6841	08/20/21 21:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		1			6866	08/20/21 17:54	CH	XEN MID

Client Sample ID: PH06 Lab Sample ID: 890-1125-11

Date Collected: 08/16/21 16:25 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 19:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6834	08/20/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6843	08/20/21 18:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		20			6866	08/20/21 18:00	CH	XEN MID

Client Sample ID: PH06 Lab Sample ID: 890-1125-12

Date Collected: 08/16/21 16:33 **Matrix: Solid**
Date Received: 08/18/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6785	08/20/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/20/21 19:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6834	08/20/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6843	08/20/21 18:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6856	08/20/21 10:55	SC	XEN MID
Soluble	Analysis	300.0		1			6866	08/20/21 18:17	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. Job ID: 890-1125-1
Project/Site: Battle Ax Water Well SDG: 31402909.080

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	T104704400-20-21	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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

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: Battle Ax Water Well

Job ID: 890-1125-1
SDG: 31402909.080

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1125-1	PH01	Solid	08/16/21 10:10	08/18/21 16:40	4
890-1125-2	PH01	Solid	08/16/21 12:25	08/18/21 16:40	16
890-1125-3	PH02	Solid	08/16/21 13:02	08/18/21 16:40	4
890-1125-4	PH02	Solid	08/16/21 14:15	08/18/21 16:40	15
890-1125-5	PH03	Solid	08/16/21 14:30	08/18/21 16:40	1
890-1125-6	PH03	Solid	08/16/21 15:00	08/18/21 16:40	8
890-1125-7	PH04	Solid	08/16/21 15:22	08/18/21 16:40	3
890-1125-8	PH04	Solid	08/16/21 15:25	08/18/21 16:40	4
890-1125-9	PH05	Solid	08/16/21 15:46	08/18/21 16:40	3
890-1125-10	PH05	Solid	08/16/21 16:08	08/18/21 16:40	8
890-1125-11	PH06	Solid	08/16/21 16:25	08/18/21 16:40	3
890-1125-12	PH06	Solid	08/16/21 16:33	08/18/21 16:40	6

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carisbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Kalei Jennings	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 N A St	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2303 Email:	anna.byers@wsp.com	

Work Order Comments

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

Project Name:	Battle Ax Water Well	Turn Around	
Project Number:	31402909.0080	☐ Routine ☒ Rush	
Project Location:	Lea County	Due Date:	3 DAY
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	T-NM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX (EPA 8021B)	TPH (EPA 8015 Mod)	Chloride (EPA 300.0)	Sample Comments
PH01	S	8/16/21	1010	4'	Grab	1					
PH01			1225	16'		1					
PH02			1302	4'		1					
PH02			1415	15'		1					
PH03			1430	1'		1					
PH03			1500	8'		1					
PH04			1522	3'		1					
PH04			1525	4'		1					
PH05			1546	3'		1					
PH05			1608	8'		1					

890-1125 Chain of Custody

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Cle	8/18/21 4:40			
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Kalei Jennings	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 N A St	Address:	
City, State ZIP:	Midland TX, 79705	City, State ZIP:	
Phone:	817-683-2303	Email:	

Work Order Comments

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

Project Name:	Battle Ax Water Well	Turn Around	
Project Number:	31402909.080	☐ Routine ☒ Rush	
Project Location:	Lea County	Due Date:	3 DAY
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.0	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	First	
Total Containers:		Corrected Temperature:	Pase	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX (EPA 8021B)	TPH (EPA 8015 Mod)	Chloride (EPA 300.0)	Sample Comments
PH06	S	8/16/21	1625	3'	Grab	1		X	X	X	
PH06	S	8/16/21	1633	6'	Grab	1		X	X	X	

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

8/18/21

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Ola	8/18/21 4:40	2		
3			4		
5			6		

Revised Date. 08/25/2020 Rev. 2020 2

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Released to Imaging: 11/17/2021 10:17:45 AM

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-359 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1125-1
Address: 1211 W Florida Ave	Due Date Requested: 8/20/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
PH01 (890-1125-1)	8/16/21	10 10 Mountain		Solid			X	X	X	1	
PH01 (890-1125-2)	8/16/21	12 25 Mountain		Solid			X	X	X	1	
PH02 (890-1125-3)	8/16/21	13 02 Mountain		Solid			X	X	X	1	
PH02 (890-1125-4)	8/16/21	14 15 Mountain		Solid			X	X	X	1	
PH03 (890-1125-5)	8/16/21	14 30 Mountain		Solid			X	X	X	1	
PH03 (890-1125-6)	8/16/21	15 00 Mountain		Solid			X	X	X	1	
PH04 (890-1125-7)	8/16/21	15 22 Mountain		Solid			X	X	X	1	
PH04 (890-1125-8)	8/16/21	15 25 Mountain		Solid			X	X	X	1	
PH05 (890-1125-9)	8/16/21	15 46 Mountain		Solid			X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Ave Cuba 8.19.21	Date/Time	Company	Received by:	Date/Time: 8-20-21 11:00 am	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 2.5/3.0

Ver: 06/08/2021

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Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-359 2
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1125-1
Address: 1211 W Florida Ave	Due Date Requested: 8/20/2021			
City: Midland	TAT Requested (days)			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #			
Email	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site	SSOW#			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
PH05 (890-1125-10)	8/16/21	16 08 Mountain		Solid			X	X	X	1	
PH06 (890-1125-11)	8/16/21	16 25 Mountain		Solid			X	X	X	1	
PH06 (890-1125-12)	8/16/21	16 33 Mountain		Solid			X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Dee Cuss 8.19.21				8-20-21 11:00	
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
Δ Yes Δ No		

Ver: 06/08/2021

Received by OCD: 10/14/2021 11:10:58 AM

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Released to Imaging: 11/17/2021 10:17:45 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1125-1
SDG Number: 31402909.080

Login Number: 1125
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: 890-1125-1
SDG Number: 31402909.080

Login Number: 1125
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 08/20/21 10:57 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	2.5/3.0
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1240-1
Laboratory Sample Delivery Group: Lea County
Client Project/Site: Battle Ax Water Well

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
9/15/2021 12:52:47 PM

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

LINKS

Review your project results through TotalAccess

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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: Battle Ax Water Well

Laboratory Job ID: 890-1240-1
SDG: Lea County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

Job ID: 890-1240-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1240-1

Receipt
The samples were received on 9/9/2021 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SS09 (890-1240-5). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-7797/2-A) and (890-1239-A-1-B). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Client Sample ID: SS05

Lab Sample ID: 890-1240-1
Matrix: Solid
Date Collected: 09/08/21 15:05
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 07:06	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:06*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:06*	*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		09/13/21 09:36	09/13/21 14:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 14:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 14:17	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/13/21 09:36*	*09/13/21 14:17*	*1*
o-Terphenyl	*112*		*70 - 130*	*09/13/21 09:36*	*09/13/21 14:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.3**		5.00		mg/Kg			09/15/21 03:31	1

Client Sample ID: SS06

Lab Sample ID: 890-1240-2
Matrix: Solid
Date Collected: 09/08/21 15:10
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/13/21 10:02	09/14/21 07:26	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		09/13/21 10:02	09/14/21 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:26*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:26*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: SS06 Lab Sample ID: 890-1240-2

Date Collected: 09/08/21 15:10 **Matrix: Solid**
Date Received: 09/09/21 16:40
Sample Depth: 0.5

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		09/13/21 09:36	09/13/21 14:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 14:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 14:38	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*09/13/21 09:36*	*09/13/21 14:38*	*1*
o-Terphenyl	*118*		*70 - 130*	*09/13/21 09:36*	*09/13/21 14:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.2**		4.98		mg/Kg			09/15/21 03:37	1

Client Sample ID: SS07 Lab Sample ID: 890-1240-3

Date Collected: 09/08/21 15:25 **Matrix: Solid**
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:02	09/14/21 07:47	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:02	09/14/21 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:47*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*09/13/21 10:02*	*09/14/21 07:47*	*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		09/13/21 09:36	09/13/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 15:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 15:00	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:00*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.7**		5.00		mg/Kg			09/15/21 03:43	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Client Sample ID: SS08

Lab Sample ID: 890-1240-4
Matrix: Solid
Date Collected: 09/08/21 15:45
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 08:07	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:02	09/14/21 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/21 10:02*	*09/14/21 08:07*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*09/13/21 10:02*	*09/14/21 08:07*	*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		09/13/21 09:36	09/13/21 15:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 15:22	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 15:22	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:22*	*1*
o-Terphenyl	*121*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.6**		4.99		mg/Kg			09/15/21 03:59	1

Client Sample ID: SS09

Lab Sample ID: 890-1240-5
Matrix: Solid
Date Collected: 09/08/21 15:40
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:28	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/13/21 10:02*	*09/14/21 08:28*	*1*
1,4-Difluorobenzene (Surr)	*55*	*S1-*	*70 - 130*	*09/13/21 10:02*	*09/14/21 08:28*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: SS09 Lab Sample ID: 890-1240-5

Date Collected: 09/08/21 15:40 **Matrix: Solid**
Date Received: 09/09/21 16:40
Sample Depth: 0.5

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		09/13/21 09:36	09/13/21 15:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 15:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 15:43	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:43*	*1*
o-Terphenyl	*116*		*70 - 130*	*09/13/21 09:36*	*09/13/21 15:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.1**		4.97		mg/Kg			09/15/21 04:05	1

Client Sample ID: SS10 Lab Sample ID: 890-1240-6

Date Collected: 09/08/21 15:15 **Matrix: Solid**
Date Received: 09/09/21 16:40
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:48	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		09/13/21 10:02	09/14/21 08:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*09/13/21 10:02*	*09/14/21 08:48*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*09/13/21 10:02*	*09/14/21 08:48*	*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		09/13/21 09:36	09/13/21 16:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:26	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*09/13/21 09:36*	*09/13/21 16:26*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/13/21 09:36*	*09/13/21 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**		5.01		mg/Kg			09/15/21 04:22	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

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)
880-5964-A-1-F MS	Matrix Spike	117	88
880-5964-A-1-G MSD	Matrix Spike Duplicate	118	84
890-1240-1	SS05	121	79
890-1240-2	SS06	108	82
890-1240-3	SS07	125	83
890-1240-4	SS08	112	75
890-1240-5	SS09	110	55 S1-
890-1240-6	SS10	109	74
LCS 880-7800/1-A	Lab Control Sample	116	88
LCSD 880-7800/2-A	Lab Control Sample Dup	112	88
MB 880-7798/5-A	Method Blank	112	79
MB 880-7800/5-A	Method Blank	98	77

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)
890-1239-A-1-C MS	Matrix Spike	114	118
890-1239-A-1-D MSD	Matrix Spike Duplicate	111	116
890-1240-1	SS05	106	112
890-1240-2	SS06	109	118
890-1240-3	SS07	122	125
890-1240-4	SS08	111	121
890-1240-5	SS09	113	116
890-1240-6	SS10	115	123
LCS 880-7797/2-A	Lab Control Sample	127	131 S1+
LCSD 880-7797/3-A	Lab Control Sample Dup	116	118
MB 880-7797/1-A	Method Blank	102	111

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7798/5-A
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7798

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 09:54	09/13/21 14:06	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 09:54	09/13/21 14:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/21 09:54*	*09/13/21 14:06*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/13/21 09:54*	*09/13/21 14:06*	*1*

Lab Sample ID: MB 880-7800/5-A
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7800

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:02	09/14/21 00:57	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:02	09/14/21 00:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*09/13/21 10:02*	*09/14/21 00:57*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*09/13/21 10:02*	*09/14/21 00:57*	*1*

Lab Sample ID: LCS 880-7800/1-A
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7800

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09887		mg/Kg		99	70 - 130		
Toluene			0.100	0.09103		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09746		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1997		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.1003		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-7800/2-A
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7800

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09422		mg/Kg		94	70 - 130	5	35
Toluene			0.100	0.08851		mg/Kg		89	70 - 130	3	35
Ethylbenzene			0.100	0.08945		mg/Kg		89	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1838		mg/Kg		92	70 - 130	8	35
o-Xylene			0.100	0.09190		mg/Kg		92	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-5964-A-1-F MS
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.100	0.08982		mg/Kg		90	70 - 130
Toluene	<0.00199	U	0.100	0.08552		mg/Kg		86	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.08699		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1814		mg/Kg		91	70 - 130
o-Xylene	<0.00199	U	0.100	0.09016		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-5964-A-1-G MSD
Matrix: Solid
Analysis Batch: 7814

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.08402		mg/Kg		84	70 - 130	7	35
Toluene	<0.00199	U	0.0996	0.08184		mg/Kg		82	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.0996	0.08245		mg/Kg		83	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1711		mg/Kg		86	70 - 130	6	35
o-Xylene	<0.00199	U	0.0996	0.08533		mg/Kg		86	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

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

Lab Sample ID: MB 880-7797/1-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7797

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		09/13/21 09:36	09/13/21 10:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/13/21 09:36*	*09/13/21 10:45*	*1*
o-Terphenyl	*111*		*70 - 130*	*09/13/21 09:36*	*09/13/21 10:45*	*1*

Lab Sample ID: LCS 880-7797/2-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7797

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	985.0		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1022		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*131*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-7797/3-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7797

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1017		mg/Kg		102	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	916.9		mg/Kg		92	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: 890-1239-A-1-C MS
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	1009		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1009		mg/Kg		98	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

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

Lab Sample ID: 890-1239-A-1-C MS
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7797

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-1239-A-1-D MSD
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7797

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	<49.8	U	999	997.1		mg/Kg		100	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	998.3		mg/Kg		97	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	116		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7767/1-A
Matrix: Solid
Analysis Batch: 7831

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			09/15/21 02:07	1

Lab Sample ID: LCS 880-7767/2-A
Matrix: Solid
Analysis Batch: 7831

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	260.5		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-7767/3-A
Matrix: Solid
Analysis Batch: 7831

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	261.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-1240-3 MS
Matrix: Solid
Analysis Batch: 7831

Client Sample ID: SS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	39.7		250	301.6		mg/Kg		105	90 - 110		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1240-3 MSD **Client Sample ID: SS07**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 7831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	39.7		250	302.1		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

GC VOA

Prep Batch: 7798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7798/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 7800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Total/NA	Solid	5035	
890-1240-2	SS06	Total/NA	Solid	5035	
890-1240-3	SS07	Total/NA	Solid	5035	
890-1240-4	SS08	Total/NA	Solid	5035	
890-1240-5	SS09	Total/NA	Solid	5035	
890-1240-6	SS10	Total/NA	Solid	5035	
MB 880-7800/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7800/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7800/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5964-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-5964-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 7814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Total/NA	Solid	8021B	7800
890-1240-2	SS06	Total/NA	Solid	8021B	7800
890-1240-3	SS07	Total/NA	Solid	8021B	7800
890-1240-4	SS08	Total/NA	Solid	8021B	7800
890-1240-5	SS09	Total/NA	Solid	8021B	7800
890-1240-6	SS10	Total/NA	Solid	8021B	7800
MB 880-7798/5-A	Method Blank	Total/NA	Solid	8021B	7798
MB 880-7800/5-A	Method Blank	Total/NA	Solid	8021B	7800
LCS 880-7800/1-A	Lab Control Sample	Total/NA	Solid	8021B	7800
LCSD 880-7800/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7800
880-5964-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	7800
880-5964-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7800

GC Semi VOA

Analysis Batch: 7790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Total/NA	Solid	8015B NM	7797
890-1240-2	SS06	Total/NA	Solid	8015B NM	7797
890-1240-3	SS07	Total/NA	Solid	8015B NM	7797
890-1240-4	SS08	Total/NA	Solid	8015B NM	7797
890-1240-5	SS09	Total/NA	Solid	8015B NM	7797
890-1240-6	SS10	Total/NA	Solid	8015B NM	7797
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015B NM	7797
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7797
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7797
890-1239-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	7797
890-1239-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7797

Prep Batch: 7797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Total/NA	Solid	8015NM Prep	
890-1240-2	SS06	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 7797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-3	SS07	Total/NA	Solid	8015NM Prep	
890-1240-4	SS08	Total/NA	Solid	8015NM Prep	
890-1240-5	SS09	Total/NA	Solid	8015NM Prep	
890-1240-6	SS10	Total/NA	Solid	8015NM Prep	
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1239-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1239-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Soluble	Solid	DI Leach	
890-1240-2	SS06	Soluble	Solid	DI Leach	
890-1240-3	SS07	Soluble	Solid	DI Leach	
890-1240-4	SS08	Soluble	Solid	DI Leach	
890-1240-5	SS09	Soluble	Solid	DI Leach	
890-1240-6	SS10	Soluble	Solid	DI Leach	
MB 880-7767/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1240-3 MS	SS07	Soluble	Solid	DI Leach	
890-1240-3 MSD	SS07	Soluble	Solid	DI Leach	

Analysis Batch: 7831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1240-1	SS05	Soluble	Solid	300.0	7767
890-1240-2	SS06	Soluble	Solid	300.0	7767
890-1240-3	SS07	Soluble	Solid	300.0	7767
890-1240-4	SS08	Soluble	Solid	300.0	7767
890-1240-5	SS09	Soluble	Solid	300.0	7767
890-1240-6	SS10	Soluble	Solid	300.0	7767
MB 880-7767/1-A	Method Blank	Soluble	Solid	300.0	7767
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	300.0	7767
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7767
890-1240-3 MS	SS07	Soluble	Solid	300.0	7767
890-1240-3 MSD	SS07	Soluble	Solid	300.0	7767

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Client Sample ID: SS05

Date Collected: 09/08/21 15:05
Date Received: 09/09/21 16:40

Lab Sample ID: 890-1240-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 07:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 14:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 03:31	CH	XEN MID

Client Sample ID: SS06

Date Collected: 09/08/21 15:10
Date Received: 09/09/21 16:40

Lab Sample ID: 890-1240-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 07:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 14:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 03:37	CH	XEN MID

Client Sample ID: SS07

Date Collected: 09/08/21 15:25
Date Received: 09/09/21 16:40

Lab Sample ID: 890-1240-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 07:47	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 03:43	CH	XEN MID

Client Sample ID: SS08

Date Collected: 09/08/21 15:45
Date Received: 09/09/21 16:40

Lab Sample ID: 890-1240-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 08:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 15:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 03:59	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Client Sample ID: SS09

Lab Sample ID: 890-1240-5
Matrix: Solid
Date Collected: 09/08/21 15:40
Date Received: 09/09/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 08:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 15:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 04:05	CH	XEN MID

Client Sample ID: SS10

Lab Sample ID: 890-1240-6
Matrix: Solid
Date Collected: 09/08/21 15:15
Date Received: 09/09/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	7800	09/13/21 10:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7814	09/14/21 08:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 04:22	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. Job ID: 890-1240-1
Project/Site: Battle Ax Water Well SDG: Lea County

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

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: Battle Ax Water Well

Job ID: 890-1240-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1240-1	SS05	Solid	09/08/21 15:05	09/09/21 16:40	0.5
890-1240-2	SS06	Solid	09/08/21 15:10	09/09/21 16:40	0.5
890-1240-3	SS07	Solid	09/08/21 15:25	09/09/21 16:40	0.5
890-1240-4	SS08	Solid	09/08/21 15:45	09/09/21 16:40	0.5
890-1240-5	SS09	Solid	09/08/21 15:40	09/09/21 16:40	0.5
890-1240-6	SS10	Solid	09/08/21 15:15	09/09/21 16:40	0.5

Released to Imaging: 11/17/2021 10:17:45 AM
Received by OCD: 10/14/2021 11:10:58 AM

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: ____

www.xenco.com Page ____

Project Manager:	Kalei Jennings	Bill to: (if different)	WSP Attn: Kalei Jennings
Company Name:	WSP	Company Name:	
Address:	3300 N A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503 Email:		anna.byers@wsp.com

Work Order Comments

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

Project Name:	Battle Ax Water Well	Turn Around	
Project Number:	314029090800	☒ Routine ☐ Rush	
Project Location:	Lea County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	T-NM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.6	
Total Containers:		Corrected Temperature:	3.4	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

ANALYSIS REQUEST

890-1240 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
SS05	S	9/8/21	1505	0.5'	Grab	1		X	X	X	
SS06			1510	0.5'		1		X	X	X	
SS07			1525	0.5'		1		X	X	X	
SS08			1545	0.5'		1		X	X	X	
SS09			1540	0.5'		1		X	X	X	
SS10			1515	0.5'		1		X	X	X	

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Allen	9/9/21 4:40	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Xenco, Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-402 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1240-1
Address: 1211 W Florida Ave	Due Date Requested: 9/15/2021			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
SS05 (890-1240-1)	9/8/21	15 05 Mountain		Solid			X	X	X	1	
SS06 (890-1240-2)	9/8/21	15 10 Mountain		Solid			X	X	X	1	
SS07 (890-1240-3)	9/8/21	15 25 Mountain		Solid			X	X	X	1	
SS08 (890-1240-4)	9/8/21	15 45 Mountain		Solid			X	X	X	1	
SS09 (890-1240-5)	9/8/21	15 40 Mountain		Solid			X	X	X	1	
SS10 (890-1240-6)	9/8/21	15 15 Mountain		Solid			X	X	X	1	

Note. Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clear Coy 9.10.21				9-13-21 9:30 am	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.1 2.6

Ver 06/08/2021

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Received by OCD: 10/14/2021 11:10:58 AM
9/15/2021
Page 23 of 25
Released to Imaging: 11/17/2021 10:17:45 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1240-1
SDG Number: Lea County

Login Number: 1240
List Number: 1
Creator: Clifton, Cloe

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: 890-1240-1
SDG Number: Lea County

Login Number: 1240
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 09/13/21 09:26 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	2.1 / 2.6
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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1241-1
Laboratory Sample Delivery Group: Lea County
Client Project/Site: Battle Ax Water Well

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
9/16/2021 9:04:58 AM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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: Battle Ax Water Well

Laboratory Job ID: 890-1241-1
SDG: Lea County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%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. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Job ID: 890-1241-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1241-1

Receipt
The samples were received on 9/9/2021 4:39 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: BH01 (890-1241-5), BH01 (890-1241-6), BH02 (890-1241-8) and (890-1241-A-1-F MSD). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH02 (890-1241-7). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH05 (890-1241-24), BH05 (890-1241-26), (LCS 880-7797/2-A) and (890-1239-A-1-B). Evidence of matrix interferences is not obvious.

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 880-7767 and analytical batch 880-7831 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: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH01

Lab Sample ID: 890-1241-1
Matrix: Solid
Date Collected: 09/08/21 10:35
Date Received: 09/09/21 16:39
Sample Depth: 0 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 17:07	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:07*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:07*	*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		09/13/21 09:35	09/13/21 11:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 11:49	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 11:49	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*09/13/21 09:35*	*09/13/21 11:49*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/13/21 09:35*	*09/13/21 11:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4920**		25.2		mg/Kg			09/15/21 04:27	5

Client Sample ID: BH01

Lab Sample ID: 890-1241-2
Matrix: Solid
Date Collected: 09/08/21 10:37
Date Received: 09/09/21 16:39
Sample Depth: 2 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 17:27	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:27*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:27*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH01

Lab Sample ID: 890-1241-2
Matrix: Solid
Date Collected: 09/08/21 10:37
Date Received: 09/09/21 16:39
Sample Depth: 2 - 3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 12:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 12:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 12:52	1
Total TPH	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/21 09:35*	*09/13/21 12:52*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/13/21 09:35*	*09/13/21 12:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17200**		249		mg/Kg			09/15/21 04:33	50

Client Sample ID: BH01

Lab Sample ID: 890-1241-3
Matrix: Solid
Date Collected: 09/08/21 10:48
Date Received: 09/09/21 16:39
Sample Depth: 6 - 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 17:48	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:48*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/13/21 10:16*	*09/13/21 17:48*	*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		09/13/21 09:35	09/13/21 13:13	1
Diesel Range Organics (Over C10-C28)	**72.5**		49.9		mg/Kg		09/13/21 09:35	09/13/21 13:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 13:13	1
Total TPH	**72.5**		49.9		mg/Kg		09/13/21 09:35	09/13/21 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:13*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5890**		49.5		mg/Kg			09/15/21 04:39	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH01

Lab Sample ID: 890-1241-4
Matrix: Solid
Date Collected: 09/08/21 10:50
Date Received: 09/09/21 16:39
Sample Depth: 9 - 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		09/13/21 10:16	09/13/21 18:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:09	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*09/13/21 10:16*	*09/13/21 18:09*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/13/21 10:16*	*09/13/21 18:09*	*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	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 13:34	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 13:34	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 13:34	1
Total TPH	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:34*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2010**		25.3		mg/Kg			09/15/21 04:44	5

Client Sample ID: BH01

Lab Sample ID: 890-1241-5
Matrix: Solid
Date Collected: 09/08/21 10:52
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:29	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*09/13/21 10:16*	*09/13/21 18:29*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*09/13/21 10:16*	*09/13/21 18:29*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: BH01 — Lab Sample ID: 890-1241-5

Date Collected: 09/08/21 10:52 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

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		09/13/21 09:35	09/13/21 13:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 13:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 13:56	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:56*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/13/21 09:35*	*09/13/21 13:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**221**		4.97		mg/Kg			09/15/21 04:50	1

Client Sample ID: BH01 — Lab Sample ID: 890-1241-6

Date Collected: 09/08/21 11:05 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 18:50	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*09/13/21 10:16*	*09/13/21 18:50*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/13/21 10:16*	*09/13/21 18:50*	*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		09/13/21 09:35	09/13/21 14:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 14:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 14:17	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 14:17*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/13/21 09:35*	*09/13/21 14:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**172**		5.00		mg/Kg			09/15/21 04:55	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH02

Lab Sample ID: 890-1241-7
Matrix: Solid
Date Collected: 09/08/21 11:20
Date Received: 09/09/21 16:39
Sample Depth: 0 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 19:11	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/13/21 10:16*	*09/13/21 19:11*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/13/21 10:16*	*09/13/21 19:11*	*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		09/13/21 09:35	09/13/21 14:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 14:38	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 14:38	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*09/13/21 09:35*	*09/13/21 14:38*	*1*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*09/13/21 09:35*	*09/13/21 14:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**901**	**F1**	4.95		mg/Kg			09/15/21 05:40	1

Client Sample ID: BH02

Lab Sample ID: 890-1241-8
Matrix: Solid
Date Collected: 09/08/21 11:24
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 19:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/13/21 10:16*	*09/13/21 19:31*	*1*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/13/21 10:16*	*09/13/21 19:31*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH02

Lab Sample ID: 890-1241-8
Matrix: Solid
Date Collected: 09/08/21 11:24
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

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		09/13/21 09:35	09/13/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:00	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:00*	*1*
o-Terphenyl	*120*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**748**		5.04		mg/Kg			09/15/21 05:57	1

Client Sample ID: BH02

Lab Sample ID: 890-1241-9
Matrix: Solid
Date Collected: 09/08/21 11:28
Date Received: 09/09/21 16:39
Sample Depth: 9 - 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		09/13/21 10:16	09/13/21 19:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 19:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 19:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/13/21 10:16	09/13/21 19:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 19:52	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/13/21 10:16	09/13/21 19:52	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		09/13/21 10:16	09/13/21 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/13/21 10:16*	*09/13/21 19:52*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*09/13/21 10:16*	*09/13/21 19:52*	*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		09/13/21 09:35	09/13/21 15:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:22	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:22*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**645**		4.97		mg/Kg			09/15/21 06:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH02

Lab Sample ID: 890-1241-10
Matrix: Solid
Date Collected: 09/08/21 11:30
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 20:13	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/13/21 10:16*	*09/13/21 20:13*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*09/13/21 10:16*	*09/13/21 20:13*	*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		09/13/21 09:35	09/13/21 15:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 15:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 15:43	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:43*	*1*
o-Terphenyl	*127*		*70 - 130*	*09/13/21 09:35*	*09/13/21 15:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.7**		4.99		mg/Kg			09/15/21 06:08	1

Client Sample ID: BH02

Lab Sample ID: 890-1241-11
Matrix: Solid
Date Collected: 09/08/21 13:02
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/13/21 10:16	09/13/21 21:34	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		09/13/21 10:16	09/13/21 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/13/21 10:16*	*09/13/21 21:34*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*09/13/21 10:16*	*09/13/21 21:34*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH02

Date Collected: 09/08/21 13:02
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Lab Sample ID: 890-1241-11
Matrix: Solid

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		09/13/21 09:35	09/13/21 16:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:26	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/21 09:35*	*09/13/21 16:26*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/13/21 09:35*	*09/13/21 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.4**		5.00		mg/Kg			09/15/21 06:14	1

Client Sample ID: BH03

Date Collected: 09/08/21 12:42
Date Received: 09/09/21 16:39
Sample Depth: 0 - 1

Lab Sample ID: 890-1241-12
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		09/13/21 10:16	09/13/21 21:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 21:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 21:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 21:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 21:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 21:55	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/13/21 10:16*	*09/13/21 21:55*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/13/21 10:16*	*09/13/21 21:55*	*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		09/13/21 09:35	09/13/21 16:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:47	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:35	09/13/21 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 16:47*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/13/21 09:35*	*09/13/21 16:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84.9**		4.98		mg/Kg			09/15/21 06:31	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH03

Lab Sample ID: 890-1241-13
Matrix: Solid
Date Collected: 09/08/21 12:46
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:16	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:16*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:16*	*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	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 17:08	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 17:08	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 17:08	1
Total TPH	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:08*	*1*
o-Terphenyl	*117*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.2**		4.98		mg/Kg			09/15/21 06:36	1

Client Sample ID: BH03

Lab Sample ID: 890-1241-14
Matrix: Solid
Date Collected: 09/08/21 12:50
Date Received: 09/09/21 16:39
Sample Depth: 9 - 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		09/13/21 10:16	09/13/21 22:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 22:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:36	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:16	09/13/21 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:36*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:36*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH03

Lab Sample ID: 890-1241-14
Matrix: Solid
Date Collected: 09/08/21 12:50
Date Received: 09/09/21 16:39
Sample Depth: 9 - 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	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 17:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 17:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 17:29	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:29*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.3**		5.00		mg/Kg			09/15/21 06:42	1

Client Sample ID: BH03

Lab Sample ID: 890-1241-15
Matrix: Solid
Date Collected: 09/08/21 12:52
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/13/21 10:16	09/13/21 22:57	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		09/13/21 10:16	09/13/21 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:57*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/13/21 10:16*	*09/13/21 22:57*	*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		09/13/21 09:35	09/13/21 17:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 17:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 17:50	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:50*	*1*
o-Terphenyl	*116*		*70 - 130*	*09/13/21 09:35*	*09/13/21 17:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**91.4**		5.01		mg/Kg			09/15/21 06:48	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH03

Lab Sample ID: 890-1241-16
Matrix: Solid
Date Collected: 09/08/21 12:54
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 23:18	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/13/21 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:18*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:18*	*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		09/13/21 09:35	09/13/21 18:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 18:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 18:11	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:11*	*1*
o-Terphenyl	*116*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**91.8**		4.98		mg/Kg			09/15/21 06:53	1

Client Sample ID: BH04

Lab Sample ID: 890-1241-17
Matrix: Solid
Date Collected: 09/08/21 13:12
Date Received: 09/09/21 16:39
Sample Depth: 0 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 23:38	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		09/13/21 10:16	09/13/21 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:38*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:38*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: BH04 — Lab Sample ID: 890-1241-17

Date Collected: 09/08/21 13:12 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 0 - 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		09/13/21 09:35	09/13/21 18:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 18:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 18:31	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:31*	*1*
o-Terphenyl	*117*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**76.0**		25.0		mg/Kg			09/15/21 06:59	5

Client Sample ID: BH04 — Lab Sample ID: 890-1241-18

Date Collected: 09/08/21 13:16 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/13/21 10:16	09/13/21 23:59	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		09/13/21 10:16	09/13/21 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:59*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/13/21 10:16*	*09/13/21 23:59*	*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	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 18:51	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 18:51	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 18:51	1
Total TPH	<49.7	U	49.7		mg/Kg		09/13/21 09:35	09/13/21 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:51*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/13/21 09:35*	*09/13/21 18:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.2**		4.97		mg/Kg			09/15/21 07:16	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH04

Lab Sample ID: 890-1241-19
Matrix: Solid
Date Collected: 09/08/21 13:20
Date Received: 09/09/21 16:39
Sample Depth: 9 - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/13/21 10:16	09/14/21 00:19	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		09/13/21 10:16	09/14/21 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*09/13/21 10:16*	*09/14/21 00:19*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/13/21 10:16*	*09/14/21 00:19*	*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		09/13/21 09:35	09/13/21 19:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 19:12	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 19:12	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:35	09/13/21 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/13/21 09:35*	*09/13/21 19:12*	*1*
o-Terphenyl	*117*		*70 - 130*	*09/13/21 09:35*	*09/13/21 19:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.1**		4.95		mg/Kg			09/15/21 07:21	1

Client Sample ID: BH04

Lab Sample ID: 890-1241-20
Matrix: Solid
Date Collected: 09/08/21 13:22
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/14/21 00:40	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:16	09/14/21 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*09/13/21 10:16*	*09/14/21 00:40*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*09/13/21 10:16*	*09/14/21 00:40*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH04
Date Collected: 09/08/21 13:22
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Lab Sample ID: 890-1241-20
Matrix: Solid

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		09/13/21 09:35	09/13/21 19:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 19:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 19:32	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/21 09:35*	*09/13/21 19:32*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/13/21 09:35*	*09/13/21 19:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.4**		5.00		mg/Kg			09/15/21 07:38	1

Client Sample ID: BH04
Date Collected: 09/08/21 13:24
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Lab Sample ID: 890-1241-21
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		09/13/21 10:18	09/13/21 17:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 17:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 17:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 17:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 17:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 17:35	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:35*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:35*	*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		09/13/21 09:36	09/13/21 16:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:47	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*09/13/21 09:36*	*09/13/21 16:47*	*1*
o-Terphenyl	*127*		*70 - 130*	*09/13/21 09:36*	*09/13/21 16:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.6**		4.99		mg/Kg			09/15/21 01:17	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH05

Lab Sample ID: 890-1241-22
Matrix: Solid
Date Collected: 09/08/21 13:36
Date Received: 09/09/21 16:39
Sample Depth: 0 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/13/21 10:18	09/13/21 17:56	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		09/13/21 10:18	09/13/21 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:56*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:56*	*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		09/13/21 09:36	09/13/21 17:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 17:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 17:08	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*09/13/21 09:36*	*09/13/21 17:08*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/13/21 09:36*	*09/13/21 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.7**		4.97		mg/Kg			09/15/21 01:22	1

Client Sample ID: BH05

Lab Sample ID: 890-1241-23
Matrix: Solid
Date Collected: 09/08/21 13:40
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/13/21 18:16	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/13/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/13/21 10:18*	*09/13/21 18:16*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/13/21 10:18*	*09/13/21 18:16*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: BH05 Lab Sample ID: 890-1241-23

Date Collected: 09/08/21 13:40 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 4 - 5

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		09/13/21 09:36	09/13/21 17:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 17:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 17:29	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/13/21 09:36*	*09/13/21 17:29*	*1*
o-Terphenyl	*124*		*70 - 130*	*09/13/21 09:36*	*09/13/21 17:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.5**		5.00		mg/Kg			09/15/21 01:28	1

Client Sample ID: BH05 Lab Sample ID: 890-1241-24

Date Collected: 09/08/21 13:44 **Matrix: Solid**
Date Received: 09/09/21 16:39
Sample Depth: 9 - 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		09/13/21 10:18	09/13/21 18:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:18	09/13/21 18:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:18	09/13/21 18:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/13/21 10:18	09/13/21 18:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 10:18	09/13/21 18:37	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/13/21 10:18	09/13/21 18:37	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		09/13/21 10:18	09/13/21 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*09/13/21 10:18*	*09/13/21 18:37*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/13/21 10:18*	*09/13/21 18:37*	*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		09/13/21 09:36	09/13/21 17:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 17:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 17:50	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*09/13/21 09:36*	*09/13/21 17:50*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*09/13/21 09:36*	*09/13/21 17:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.1**		5.00		mg/Kg			09/15/21 01:34	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH05

Lab Sample ID: 890-1241-25
Matrix: Solid
Date Collected: 09/08/21 13:46
Date Received: 09/09/21 16:39
Sample Depth: 14 - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:09	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/13/21 15:09*	*09/14/21 05:09*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/13/21 15:09*	*09/14/21 05:09*	*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		09/13/21 09:36	09/13/21 18:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 18:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 18:11	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/13/21 09:36*	*09/13/21 18:11*	*1*
o-Terphenyl	*124*		*70 - 130*	*09/13/21 09:36*	*09/13/21 18:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.7**		4.95		mg/Kg			09/15/21 01:39	1

Client Sample ID: BH05

Lab Sample ID: 890-1241-26
Matrix: Solid
Date Collected: 09/08/21 13:48
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:29	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		09/13/21 15:09	09/14/21 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/13/21 15:09*	*09/14/21 05:29*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/13/21 15:09*	*09/14/21 05:29*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH05
Date Collected: 09/08/21 13:48
Date Received: 09/09/21 16:39
Sample Depth: 19 - 20

Lab Sample ID: 890-1241-26
Matrix: Solid

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		09/13/21 09:36	09/13/21 18:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 18:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 18:31	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*09/13/21 09:36*	*09/13/21 18:31*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*09/13/21 09:36*	*09/13/21 18:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		5.00		mg/Kg			09/15/21 18:52	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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)
890-1241-1	BH01	100	79
890-1241-1 MS	BH01	115	112
890-1241-1 MSD	BH01	106	69 S1-
890-1241-2	BH01	108	106
890-1241-3	BH01	85	93
890-1241-4	BH01	127	94
890-1241-5	BH01	131 S1+	80
890-1241-6	BH01	138 S1+	117
890-1241-7	BH02	111	94
890-1241-8	BH02	96	69 S1-
890-1241-9	BH02	104	78
890-1241-10	BH02	114	114
890-1241-11	BH02	104	86
890-1241-12	BH03	100	97
890-1241-13	BH03	107	102
890-1241-14	BH03	112	71
890-1241-15	BH03	96	90
890-1241-16	BH03	102	86
890-1241-17	BH04	101	96
890-1241-18	BH04	126	95
890-1241-19	BH04	122	79
890-1241-20	BH04	91	72
890-1241-21	BH04	102	108
890-1241-21 MS	BH04	126	78
890-1241-21 MSD	BH04	101	101
890-1241-22	BH05	112	108
890-1241-23	BH05	107	108
890-1241-24	BH05	130	95
890-1241-25	BH05	111	104
890-1241-25 MS	BH05	99	92
890-1241-25 MSD	BH05	100	98
890-1241-26	BH05	106	107
LCS 880-7801/1-A	Lab Control Sample	109	88
LCS 880-7802/1-A	Lab Control Sample	98	98
LCS 880-7833/1-A	Lab Control Sample	100	87
LCSD 880-7801/2-A	Lab Control Sample Dup	102	96
LCSD 880-7802/2-A	Lab Control Sample Dup	98	99
LCSD 880-7833/2-A	Lab Control Sample Dup	94	94
MB 880-7801/5-A	Method Blank	126	98
MB 880-7802/5-A	Method Blank	124	109
MB 880-7833/5-A	Method Blank	128	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

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)								
890-1239-A-1-C MS	Matrix Spike	114	118								
890-1239-A-1-D MSD	Matrix Spike Duplicate	111	116								
890-1241-1	BH01	114	123								
890-1241-1 MS	BH01	114	112								
890-1241-1 MSD	BH01	113	112								
890-1241-2	BH01	105	115								
890-1241-3	BH01	113	123								
890-1241-4	BH01	105	114								
890-1241-5	BH01	112	123								
890-1241-6	BH01	104	113								
890-1241-7	BH02	103	61 S1-								
890-1241-8	BH02	111	120								
890-1241-9	BH02	104	113								
890-1241-10	BH02	117	127								
890-1241-11	BH02	105	114								
890-1241-12	BH03	104	114								
890-1241-13	BH03	105	117								
890-1241-14	BH03	104	114								
890-1241-15	BH03	106	116								
890-1241-16	BH03	105	116								
890-1241-17	BH04	106	117								
890-1241-18	BH04	104	115								
890-1241-19	BH04	106	117								
890-1241-20	BH04	104	115								
890-1241-21	BH04	119	127								
890-1241-22	BH05	107	113								
890-1241-23	BH05	113	124								
890-1241-24	BH05	122	136 S1+								
890-1241-25	BH05	113	124								
890-1241-26	BH05	116	131 S1+								
LCS 880-7796/2-A	Lab Control Sample	123	123								
LCS 880-7797/2-A	Lab Control Sample	127	131 S1+								
LCSD 880-7796/3-A	Lab Control Sample Dup	122	122								
LCSD 880-7797/3-A	Lab Control Sample Dup	116	118								
MB 880-7796/1-A	Method Blank	98	110								
MB 880-7797/1-A	Method Blank	102	111								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7801/5-A
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7801

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 16:45	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:16	09/13/21 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/13/21 10:16*	*09/13/21 16:45*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/13/21 10:16*	*09/13/21 16:45*	*1*

Lab Sample ID: LCS 880-7801/1-A
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7801

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08228		mg/Kg		82	70 - 130		
Toluene			0.100	0.1067		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.1069		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2016		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.09593		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 880-7801/2-A
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08306		mg/Kg		83	70 - 130	1	35
Toluene			0.100	0.09539		mg/Kg		95	70 - 130	11	35
Ethylbenzene			0.100	0.1017		mg/Kg		102	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1877		mg/Kg		94	70 - 130	7	35
o-Xylene			0.100	0.09108		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-1241-1 MS
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.100	0.09321		mg/Kg		93	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

Lab Sample ID: 890-1241-1 MS
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U	0.100	0.09497		mg/Kg		95	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.09106		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1678		mg/Kg		84	70 - 130
o-Xylene	<0.00199	U	0.100	0.07778		mg/Kg		78	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 890-1241-1 MSD
Matrix: Solid
Analysis Batch: 7815

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7801

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.07363		mg/Kg		74	70 - 130	23	35
Toluene	<0.00199	U	0.0998	0.09466		mg/Kg		95	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0998	0.07971		mg/Kg		80	70 - 130	13	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1490		mg/Kg		75	70 - 130	12	35
o-Xylene	<0.00199	U	0.0998	0.07023		mg/Kg		70	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-7802/5-A
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7802

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:06*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/13/21 10:18*	*09/13/21 17:06*	*1*

Lab Sample ID: LCS 880-7802/1-A
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7802

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.100	0.09562		mg/Kg		96	70 - 130
Toluene			0.100	0.09515		mg/Kg		95	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

Lab Sample ID: LCS 880-7802/1-A
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7802

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene			0.100	0.1017		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.1829		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.09161		mg/Kg		92	70 - 130		

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

Lab Sample ID: LCSD 880-7802/2-A
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7802

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09300		mg/Kg		93	70 - 130	3	35
Toluene			0.100	0.1019		mg/Kg		102	70 - 130	7	35
Ethylbenzene			0.100	0.09909		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1777		mg/Kg		89	70 - 130	3	35
o-Xylene			0.100	0.09112		mg/Kg		91	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-1241-21 MS
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: BH04
Prep Type: Total/NA
Prep Batch: 7802

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.100	0.08471		mg/Kg		84	70 - 130		
Toluene	<0.00199	U	0.100	0.07912		mg/Kg		79	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.09964		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1678		mg/Kg		83	70 - 130		
o-Xylene	<0.00199	U	0.100	0.08330		mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*

Lab Sample ID: 890-1241-21 MSD
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: BH04
Prep Type: Total/NA
Prep Batch: 7802

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08388		mg/Kg		84	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.08548		mg/Kg		85	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.100	0.08437		mg/Kg		82	70 - 130	17	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1558		mg/Kg		77	70 - 130	7	35
o-Xylene	<0.00199	U	0.100	0.07695		mg/Kg		76	70 - 130	8	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

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

Lab Sample ID: MB 880-7833/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 7820 — **Prep Batch: 7833**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 15:09	09/14/21 04:40	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 15:09	09/14/21 04:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	09/13/21 15:09	09/14/21 04:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/13/21 15:09	09/14/21 04:40	1

Lab Sample ID: LCS 880-7833/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 7820 — **Prep Batch: 7833**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07932		mg/Kg		79	70 - 130		
Toluene			0.100	0.09582		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09779		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1814		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.09163		mg/Kg		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: LCSD 880-7833/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 7820 — **Prep Batch: 7833**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07982		mg/Kg		80	70 - 130	1	35
Toluene			0.100	0.09232		mg/Kg		92	70 - 130	4	35
Ethylbenzene			0.100	0.09475		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1762		mg/Kg		88	70 - 130	3	35
o-Xylene			0.100	0.08775		mg/Kg		88	70 - 130	4	35

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

Lab Sample ID: 890-1241-25 MS
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: BH05
Prep Type: Total/NA
Prep Batch: 7833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.101	0.07520		mg/Kg		74	70 - 130
Toluene	<0.00202	U	0.101	0.08454		mg/Kg		84	70 - 130
Ethylbenzene	<0.00202	U	0.101	0.08782		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1594		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.101	0.08199		mg/Kg		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-1241-25 MSD
Matrix: Solid
Analysis Batch: 7820

Client Sample ID: BH05
Prep Type: Total/NA
Prep Batch: 7833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08072		mg/Kg		80	70 - 130	7	35
Toluene	<0.00202	U	0.100	0.09004		mg/Kg		90	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.100	0.09294		mg/Kg		93	70 - 130	6	35
m-Xylene & p-Xylene	<0.00403	U	0.201	0.1736		mg/Kg		86	70 - 130	9	35
o-Xylene	<0.00202	U	0.100	0.08554		mg/Kg		85	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-7796/1-A
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7796

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		09/13/21 09:35	09/13/21 10:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 10:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 10:45	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:35	09/13/21 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*09/13/21 09:35*	*09/13/21 10:45*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/21 09:35*	*09/13/21 10:45*	*1*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

Lab Sample ID: LCS 880-7796/2-A
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7796

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	939.5		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	873.4		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*123*		*70 - 130*

Lab Sample ID: LCSD 880-7796/3-A
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7796

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	866.3		mg/Kg		87	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	917.6		mg/Kg		92	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*122*		*70 - 130*

Lab Sample ID: 890-1241-1 MS
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	950.3		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	901.9		mg/Kg		88	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-1241-1 MSD
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7796

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	<49.8	U	999	953.4		mg/Kg		95	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	905.6		mg/Kg		88	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

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

Lab Sample ID: 890-1241-1 MSD
Matrix: Solid
Analysis Batch: 7788

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 7796

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	112		70 - 130

Lab Sample ID: MB 880-7797/1-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7797

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		09/13/21 09:36	09/13/21 10:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
OIl Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/13/21 09:36	09/13/21 10:45	1
o-Terphenyl	111		70 - 130	09/13/21 09:36	09/13/21 10:45	1

Lab Sample ID: LCS 880-7797/2-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7797

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	985.0		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1022		mg/Kg		102	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-7797/3-A
Matrix: Solid
Analysis Batch: 7790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7797

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1017		mg/Kg		102	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	916.9		mg/Kg		92	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	118		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

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

Lab Sample ID: 890-1239-A-1-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 7790 **Prep Batch: 7797**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	1009		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1009		mg/Kg		98	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: 890-1239-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 7790 **Prep Batch: 7797**

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	<49.8	U	999	997.1		mg/Kg		100	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	998.3		mg/Kg		97	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7739/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 7830

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/14/21 22:51	1

Lab Sample ID: LCS 880-7739/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 7830

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	259.4		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-7739/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 7830

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	261.0		mg/Kg		104	90 - 110	1	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5939-A-5-B MS
Matrix: Solid
Analysis Batch: 7830

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	29.7		249	286.4		mg/Kg		103	90 - 110

Lab Sample ID: 880-5939-A-5-C MSD
Matrix: Solid
Analysis Batch: 7830

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	29.7		249	287.0		mg/Kg		103	90 - 110	0	20

Lab Sample ID: MB 880-7767/1-A
Matrix: Solid
Analysis Batch: 7831

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			09/15/21 02:07	1

Lab Sample ID: LCS 880-7767/2-A
Matrix: Solid
Analysis Batch: 7831

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	260.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-7767/3-A
Matrix: Solid
Analysis Batch: 7831

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	261.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-1236-A-1-D MS
Matrix: Solid
Analysis Batch: 7831

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	9010	F1	2490	13260	F1	mg/Kg		171	90 - 110

Lab Sample ID: 890-1236-A-1-E MSD
Matrix: Solid
Analysis Batch: 7831

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	9010	F1	2490	13280	F1	mg/Kg		172	90 - 110	0	20

Lab Sample ID: 890-1240-A-3-B MS
Matrix: Solid
Analysis Batch: 7831

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	39.7		250	301.6		mg/Kg		105	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1240-A-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	39.7		250	302.1		mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-7769/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/15/21 05:24	1

Lab Sample ID: LCS 880-7769/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	262.6		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-7769/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	263.5		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-1241-7 MS — **Client Sample ID: BH02**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	901	F1	248	1329	F1	mg/Kg		173	90 - 110		

Lab Sample ID: 890-1241-7 MSD — **Client Sample ID: BH02**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	901	F1	248	1330	F1	mg/Kg		173	90 - 110	0	20

Lab Sample ID: 890-1241-17 MS — **Client Sample ID: BH04**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	76.0		1250	1348		mg/Kg		102	90 - 110		

Lab Sample ID: 890-1241-17 MSD — **Client Sample ID: BH04**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	76.0		1250	1347		mg/Kg		102	90 - 110	0	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7740/1-A
Matrix: Solid
Analysis Batch: 7838

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			09/15/21 15:54	1

Lab Sample ID: LCS 880-7740/2-A
Matrix: Solid
Analysis Batch: 7838

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.4		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-7740/3-A
Matrix: Solid
Analysis Batch: 7838

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	250.8		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-5950-A-8-B MS
Matrix: Solid
Analysis Batch: 7838

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	1790		1240	3128		mg/Kg		108	90 - 110		

Lab Sample ID: 880-5950-A-8-C MSD
Matrix: Solid
Analysis Batch: 7838

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	1790		1240	3129		mg/Kg		108	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

GC VOA

Prep Batch: 7801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Total/NA	Solid	5035	
890-1241-2	BH01	Total/NA	Solid	5035	
890-1241-3	BH01	Total/NA	Solid	5035	
890-1241-4	BH01	Total/NA	Solid	5035	
890-1241-5	BH01	Total/NA	Solid	5035	
890-1241-6	BH01	Total/NA	Solid	5035	
890-1241-7	BH02	Total/NA	Solid	5035	
890-1241-8	BH02	Total/NA	Solid	5035	
890-1241-9	BH02	Total/NA	Solid	5035	
890-1241-10	BH02	Total/NA	Solid	5035	
890-1241-11	BH02	Total/NA	Solid	5035	
890-1241-12	BH03	Total/NA	Solid	5035	
890-1241-13	BH03	Total/NA	Solid	5035	
890-1241-14	BH03	Total/NA	Solid	5035	
890-1241-15	BH03	Total/NA	Solid	5035	
890-1241-16	BH03	Total/NA	Solid	5035	
890-1241-17	BH04	Total/NA	Solid	5035	
890-1241-18	BH04	Total/NA	Solid	5035	
890-1241-19	BH04	Total/NA	Solid	5035	
890-1241-20	BH04	Total/NA	Solid	5035	
MB 880-7801/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7801/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7801/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1241-1 MS	BH01	Total/NA	Solid	5035	
890-1241-1 MSD	BH01	Total/NA	Solid	5035	

Prep Batch: 7802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Total/NA	Solid	5035	
890-1241-22	BH05	Total/NA	Solid	5035	
890-1241-23	BH05	Total/NA	Solid	5035	
890-1241-24	BH05	Total/NA	Solid	5035	
MB 880-7802/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7802/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7802/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1241-21 MS	BH04	Total/NA	Solid	5035	
890-1241-21 MSD	BH04	Total/NA	Solid	5035	

Analysis Batch: 7815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Total/NA	Solid	8021B	7801
890-1241-2	BH01	Total/NA	Solid	8021B	7801
890-1241-3	BH01	Total/NA	Solid	8021B	7801
890-1241-4	BH01	Total/NA	Solid	8021B	7801
890-1241-5	BH01	Total/NA	Solid	8021B	7801
890-1241-6	BH01	Total/NA	Solid	8021B	7801
890-1241-7	BH02	Total/NA	Solid	8021B	7801
890-1241-8	BH02	Total/NA	Solid	8021B	7801
890-1241-9	BH02	Total/NA	Solid	8021B	7801
890-1241-10	BH02	Total/NA	Solid	8021B	7801
890-1241-11	BH02	Total/NA	Solid	8021B	7801

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

GC VOA (Continued)

Analysis Batch: 7815 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-12	BH03	Total/NA	Solid	8021B	7801
890-1241-13	BH03	Total/NA	Solid	8021B	7801
890-1241-14	BH03	Total/NA	Solid	8021B	7801
890-1241-15	BH03	Total/NA	Solid	8021B	7801
890-1241-16	BH03	Total/NA	Solid	8021B	7801
890-1241-17	BH04	Total/NA	Solid	8021B	7801
890-1241-18	BH04	Total/NA	Solid	8021B	7801
890-1241-19	BH04	Total/NA	Solid	8021B	7801
890-1241-20	BH04	Total/NA	Solid	8021B	7801
MB 880-7801/5-A	Method Blank	Total/NA	Solid	8021B	7801
LCS 880-7801/1-A	Lab Control Sample	Total/NA	Solid	8021B	7801
LCSD 880-7801/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7801
890-1241-1 MS	BH01	Total/NA	Solid	8021B	7801
890-1241-1 MSD	BH01	Total/NA	Solid	8021B	7801

Analysis Batch: 7820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Total/NA	Solid	8021B	7802
890-1241-22	BH05	Total/NA	Solid	8021B	7802
890-1241-23	BH05	Total/NA	Solid	8021B	7802
890-1241-24	BH05	Total/NA	Solid	8021B	7802
890-1241-25	BH05	Total/NA	Solid	8021B	7833
890-1241-26	BH05	Total/NA	Solid	8021B	7833
MB 880-7802/5-A	Method Blank	Total/NA	Solid	8021B	7802
MB 880-7833/5-A	Method Blank	Total/NA	Solid	8021B	7833
LCS 880-7802/1-A	Lab Control Sample	Total/NA	Solid	8021B	7802
LCS 880-7833/1-A	Lab Control Sample	Total/NA	Solid	8021B	7833
LCSD 880-7802/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7802
LCSD 880-7833/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7833
890-1241-21 MS	BH04	Total/NA	Solid	8021B	7802
890-1241-21 MSD	BH04	Total/NA	Solid	8021B	7802
890-1241-25 MS	BH05	Total/NA	Solid	8021B	7833
890-1241-25 MSD	BH05	Total/NA	Solid	8021B	7833

Prep Batch: 7833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-25	BH05	Total/NA	Solid	5035	
890-1241-26	BH05	Total/NA	Solid	5035	
MB 880-7833/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7833/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7833/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1241-25 MS	BH05	Total/NA	Solid	5035	
890-1241-25 MSD	BH05	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 7788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Total/NA	Solid	8015B NM	7796
890-1241-2	BH01	Total/NA	Solid	8015B NM	7796
890-1241-3	BH01	Total/NA	Solid	8015B NM	7796

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

GC Semi VOA (Continued)

Analysis Batch: 7788 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-4	BH01	Total/NA	Solid	8015B NM	7796
890-1241-5	BH01	Total/NA	Solid	8015B NM	7796
890-1241-6	BH01	Total/NA	Solid	8015B NM	7796
890-1241-7	BH02	Total/NA	Solid	8015B NM	7796
890-1241-8	BH02	Total/NA	Solid	8015B NM	7796
890-1241-9	BH02	Total/NA	Solid	8015B NM	7796
890-1241-10	BH02	Total/NA	Solid	8015B NM	7796
890-1241-11	BH02	Total/NA	Solid	8015B NM	7796
890-1241-12	BH03	Total/NA	Solid	8015B NM	7796
890-1241-13	BH03	Total/NA	Solid	8015B NM	7796
890-1241-14	BH03	Total/NA	Solid	8015B NM	7796
890-1241-15	BH03	Total/NA	Solid	8015B NM	7796
890-1241-16	BH03	Total/NA	Solid	8015B NM	7796
890-1241-17	BH04	Total/NA	Solid	8015B NM	7796
890-1241-18	BH04	Total/NA	Solid	8015B NM	7796
890-1241-19	BH04	Total/NA	Solid	8015B NM	7796
890-1241-20	BH04	Total/NA	Solid	8015B NM	7796
MB 880-7796/1-A	Method Blank	Total/NA	Solid	8015B NM	7796
LCS 880-7796/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7796
LCSD 880-7796/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7796
890-1241-1 MS	BH01	Total/NA	Solid	8015B NM	7796
890-1241-1 MSD	BH01	Total/NA	Solid	8015B NM	7796

Analysis Batch: 7790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Total/NA	Solid	8015B NM	7797
890-1241-22	BH05	Total/NA	Solid	8015B NM	7797
890-1241-23	BH05	Total/NA	Solid	8015B NM	7797
890-1241-24	BH05	Total/NA	Solid	8015B NM	7797
890-1241-25	BH05	Total/NA	Solid	8015B NM	7797
890-1241-26	BH05	Total/NA	Solid	8015B NM	7797
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015B NM	7797
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7797
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7797
890-1239-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	7797
890-1239-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7797

Prep Batch: 7796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Total/NA	Solid	8015NM Prep	
890-1241-2	BH01	Total/NA	Solid	8015NM Prep	
890-1241-3	BH01	Total/NA	Solid	8015NM Prep	
890-1241-4	BH01	Total/NA	Solid	8015NM Prep	
890-1241-5	BH01	Total/NA	Solid	8015NM Prep	
890-1241-6	BH01	Total/NA	Solid	8015NM Prep	
890-1241-7	BH02	Total/NA	Solid	8015NM Prep	
890-1241-8	BH02	Total/NA	Solid	8015NM Prep	
890-1241-9	BH02	Total/NA	Solid	8015NM Prep	
890-1241-10	BH02	Total/NA	Solid	8015NM Prep	
890-1241-11	BH02	Total/NA	Solid	8015NM Prep	
890-1241-12	BH03	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 7796 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-13	BH03	Total/NA	Solid	8015NM Prep	
890-1241-14	BH03	Total/NA	Solid	8015NM Prep	
890-1241-15	BH03	Total/NA	Solid	8015NM Prep	
890-1241-16	BH03	Total/NA	Solid	8015NM Prep	
890-1241-17	BH04	Total/NA	Solid	8015NM Prep	
890-1241-18	BH04	Total/NA	Solid	8015NM Prep	
890-1241-19	BH04	Total/NA	Solid	8015NM Prep	
890-1241-20	BH04	Total/NA	Solid	8015NM Prep	
MB 880-7796/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7796/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7796/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1241-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-1241-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Prep Batch: 7797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Total/NA	Solid	8015NM Prep	
890-1241-22	BH05	Total/NA	Solid	8015NM Prep	
890-1241-23	BH05	Total/NA	Solid	8015NM Prep	
890-1241-24	BH05	Total/NA	Solid	8015NM Prep	
890-1241-25	BH05	Total/NA	Solid	8015NM Prep	
890-1241-26	BH05	Total/NA	Solid	8015NM Prep	
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1239-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1239-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Soluble	Solid	DI Leach	
890-1241-22	BH05	Soluble	Solid	DI Leach	
890-1241-23	BH05	Soluble	Solid	DI Leach	
890-1241-24	BH05	Soluble	Solid	DI Leach	
890-1241-25	BH05	Soluble	Solid	DI Leach	
MB 880-7739/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7739/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7739/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5939-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5939-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 7740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-26	BH05	Soluble	Solid	DI Leach	
MB 880-7740/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7740/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7740/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5950-A-8-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5950-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

HPLC/IC

Leach Batch: 7767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Soluble	Solid	DI Leach	
890-1241-2	BH01	Soluble	Solid	DI Leach	
890-1241-3	BH01	Soluble	Solid	DI Leach	
890-1241-4	BH01	Soluble	Solid	DI Leach	
890-1241-5	BH01	Soluble	Solid	DI Leach	
890-1241-6	BH01	Soluble	Solid	DI Leach	
MB 880-7767/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1236-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1236-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-1240-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1240-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 7769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-7	BH02	Soluble	Solid	DI Leach	
890-1241-8	BH02	Soluble	Solid	DI Leach	
890-1241-9	BH02	Soluble	Solid	DI Leach	
890-1241-10	BH02	Soluble	Solid	DI Leach	
890-1241-11	BH02	Soluble	Solid	DI Leach	
890-1241-12	BH03	Soluble	Solid	DI Leach	
890-1241-13	BH03	Soluble	Solid	DI Leach	
890-1241-14	BH03	Soluble	Solid	DI Leach	
890-1241-15	BH03	Soluble	Solid	DI Leach	
890-1241-16	BH03	Soluble	Solid	DI Leach	
890-1241-17	BH04	Soluble	Solid	DI Leach	
890-1241-18	BH04	Soluble	Solid	DI Leach	
890-1241-19	BH04	Soluble	Solid	DI Leach	
890-1241-20	BH04	Soluble	Solid	DI Leach	
MB 880-7769/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7769/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7769/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1241-7 MS	BH02	Soluble	Solid	DI Leach	
890-1241-7 MSD	BH02	Soluble	Solid	DI Leach	
890-1241-17 MS	BH04	Soluble	Solid	DI Leach	
890-1241-17 MSD	BH04	Soluble	Solid	DI Leach	

Analysis Batch: 7830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-21	BH04	Soluble	Solid	300.0	7739
890-1241-22	BH05	Soluble	Solid	300.0	7739
890-1241-23	BH05	Soluble	Solid	300.0	7739
890-1241-24	BH05	Soluble	Solid	300.0	7739
890-1241-25	BH05	Soluble	Solid	300.0	7739
MB 880-7739/1-A	Method Blank	Soluble	Solid	300.0	7739
LCS 880-7739/2-A	Lab Control Sample	Soluble	Solid	300.0	7739
LCSD 880-7739/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7739
880-5939-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	7739
880-5939-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7739

QC Association Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

HPLC/IC

Analysis Batch: 7831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-1	BH01	Soluble	Solid	300.0	7767
890-1241-2	BH01	Soluble	Solid	300.0	7767
890-1241-3	BH01	Soluble	Solid	300.0	7767
890-1241-4	BH01	Soluble	Solid	300.0	7767
890-1241-5	BH01	Soluble	Solid	300.0	7767
890-1241-6	BH01	Soluble	Solid	300.0	7767
MB 880-7767/1-A	Method Blank	Soluble	Solid	300.0	7767
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	300.0	7767
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7767
890-1236-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	7767
890-1236-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7767
890-1240-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	7767
890-1240-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7767

Analysis Batch: 7837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-7	BH02	Soluble	Solid	300.0	7769
890-1241-8	BH02	Soluble	Solid	300.0	7769
890-1241-9	BH02	Soluble	Solid	300.0	7769
890-1241-10	BH02	Soluble	Solid	300.0	7769
890-1241-11	BH02	Soluble	Solid	300.0	7769
890-1241-12	BH03	Soluble	Solid	300.0	7769
890-1241-13	BH03	Soluble	Solid	300.0	7769
890-1241-14	BH03	Soluble	Solid	300.0	7769
890-1241-15	BH03	Soluble	Solid	300.0	7769
890-1241-16	BH03	Soluble	Solid	300.0	7769
890-1241-17	BH04	Soluble	Solid	300.0	7769
890-1241-18	BH04	Soluble	Solid	300.0	7769
890-1241-19	BH04	Soluble	Solid	300.0	7769
890-1241-20	BH04	Soluble	Solid	300.0	7769
MB 880-7769/1-A	Method Blank	Soluble	Solid	300.0	7769
LCS 880-7769/2-A	Lab Control Sample	Soluble	Solid	300.0	7769
LCSD 880-7769/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7769
890-1241-7 MS	BH02	Soluble	Solid	300.0	7769
890-1241-7 MSD	BH02	Soluble	Solid	300.0	7769
890-1241-17 MS	BH04	Soluble	Solid	300.0	7769
890-1241-17 MSD	BH04	Soluble	Solid	300.0	7769

Analysis Batch: 7838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1241-26	BH05	Soluble	Solid	300.0	7740
MB 880-7740/1-A	Method Blank	Soluble	Solid	300.0	7740
LCS 880-7740/2-A	Lab Control Sample	Soluble	Solid	300.0	7740
LCSD 880-7740/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7740
880-5950-A-8-B MS	Matrix Spike	Soluble	Solid	300.0	7740
880-5950-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7740

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH01
Date Collected: 09/08/21 10:35
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 17:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 11:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		5			7831	09/15/21 04:27	CH	XEN MID

Client Sample ID: BH01
Date Collected: 09/08/21 10:37
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 17:27	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 12:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		50			7831	09/15/21 04:33	CH	XEN MID

Client Sample ID: BH01
Date Collected: 09/08/21 10:48
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 17:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 13:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		10			7831	09/15/21 04:39	CH	XEN MID

Client Sample ID: BH01
Date Collected: 09/08/21 10:50
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 18:09	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 13:34	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		5			7831	09/15/21 04:44	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH01
Date Collected: 09/08/21 10:52
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 18:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 13:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 04:50	CH	XEN MID

Client Sample ID: BH01
Date Collected: 09/08/21 11:05
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 18:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 14:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1			7831	09/15/21 04:55	CH	XEN MID

Client Sample ID: BH02
Date Collected: 09/08/21 11:20
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 19:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 14:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 05:40	CH	XEN MID

Client Sample ID: BH02
Date Collected: 09/08/21 11:24
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 19:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 05:57	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH02

Date Collected: 09/08/21 11:28
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 19:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 15:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:03	CH	XEN MID

Client Sample ID: BH02

Date Collected: 09/08/21 11:30
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 20:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 15:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:08	CH	XEN MID

Client Sample ID: BH02

Date Collected: 09/08/21 13:02
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 21:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:14	CH	XEN MID

Client Sample ID: BH03

Date Collected: 09/08/21 12:42
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 21:55	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 16:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:31	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: BH03 Lab Sample ID: 890-1241-13
Date Collected: 09/08/21 12:46 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 22:16	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 17:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:36	CH	XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-1241-14
Date Collected: 09/08/21 12:50 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 22:36	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 17:29	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:42	CH	XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-1241-15
Date Collected: 09/08/21 12:52 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 22:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 17:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:48	CH	XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-1241-16
Date Collected: 09/08/21 12:54 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 23:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 06:53	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH04
Date Collected: 09/08/21 13:12
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 23:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		5			7837	09/15/21 06:59	CH	XEN MID

Client Sample ID: BH04
Date Collected: 09/08/21 13:16
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/13/21 23:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 18:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 07:16	CH	XEN MID

Client Sample ID: BH04
Date Collected: 09/08/21 13:20
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/14/21 00:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 19:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 07:21	CH	XEN MID

Client Sample ID: BH04
Date Collected: 09/08/21 13:22
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7801	09/13/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7815	09/14/21 00:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7796	09/13/21 09:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7788	09/13/21 19:32	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7769	09/10/21 14:27	CH	XEN MID
Soluble	Analysis	300.0		1			7837	09/15/21 07:38	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

Client Sample ID: BH04 Lab Sample ID: 890-1241-21

Date Collected: 09/08/21 13:24 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/13/21 17:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 16:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	7739	09/10/21 09:39	CH	XEN MID
Soluble	Analysis	300.0		1			7830	09/15/21 01:17	CH	XEN MID

Client Sample ID: BH05 Lab Sample ID: 890-1241-22

Date Collected: 09/08/21 13:36 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/13/21 17:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 17:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7739	09/10/21 09:39	CH	XEN MID
Soluble	Analysis	300.0		1			7830	09/15/21 01:22	CH	XEN MID

Client Sample ID: BH05 Lab Sample ID: 890-1241-23

Date Collected: 09/08/21 13:40 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/13/21 18:16	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 17:29	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7739	09/10/21 09:39	CH	XEN MID
Soluble	Analysis	300.0		1			7830	09/15/21 01:28	CH	XEN MID

Client Sample ID: BH05 Lab Sample ID: 890-1241-24

Date Collected: 09/08/21 13:44 **Matrix: Solid**
Date Received: 09/09/21 16:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/13/21 18:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 17:50	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7739	09/10/21 09:39	CH	XEN MID
Soluble	Analysis	300.0		1			7830	09/15/21 01:34	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Client Sample ID: BH05
Date Collected: 09/08/21 13:46
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7833	09/13/21 15:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/14/21 05:09	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7739	09/10/21 09:39	CH	XEN MID
Soluble	Analysis	300.0		1			7830	09/15/21 01:39	CH	XEN MID

Client Sample ID: BH05
Date Collected: 09/08/21 13:48
Date Received: 09/09/21 16:39

Lab Sample ID: 890-1241-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7833	09/13/21 15:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7820	09/14/21 05:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7790	09/13/21 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7740	09/13/21 09:42	CH	XEN MID
Soluble	Analysis	300.0		1			7838	09/15/21 18:52	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. Job ID: 890-1241-1
Project/Site: Battle Ax Water Well SDG: Lea County

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

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: Battle Ax Water Well

Job ID: 890-1241-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1241-1	BH01	Solid	09/08/21 10:35	09/09/21 16:39	0 - 1
890-1241-2	BH01	Solid	09/08/21 10:37	09/09/21 16:39	2 - 3
890-1241-3	BH01	Solid	09/08/21 10:48	09/09/21 16:39	6 - 7
890-1241-4	BH01	Solid	09/08/21 10:50	09/09/21 16:39	9 - 10
890-1241-5	BH01	Solid	09/08/21 10:52	09/09/21 16:39	14 - 15
890-1241-6	BH01	Solid	09/08/21 11:05	09/09/21 16:39	19 - 20
890-1241-7	BH02	Solid	09/08/21 11:20	09/09/21 16:39	0 - 1
890-1241-8	BH02	Solid	09/08/21 11:24	09/09/21 16:39	4 - 5
890-1241-9	BH02	Solid	09/08/21 11:28	09/09/21 16:39	9 - 10
890-1241-10	BH02	Solid	09/08/21 11:30	09/09/21 16:39	14 - 15
890-1241-11	BH02	Solid	09/08/21 13:02	09/09/21 16:39	19 - 20
890-1241-12	BH03	Solid	09/08/21 12:42	09/09/21 16:39	0 - 1
890-1241-13	BH03	Solid	09/08/21 12:46	09/09/21 16:39	4 - 5
890-1241-14	BH03	Solid	09/08/21 12:50	09/09/21 16:39	9 - 10
890-1241-15	BH03	Solid	09/08/21 12:52	09/09/21 16:39	14 - 15
890-1241-16	BH03	Solid	09/08/21 12:54	09/09/21 16:39	19 - 20
890-1241-17	BH04	Solid	09/08/21 13:12	09/09/21 16:39	0 - 1
890-1241-18	BH04	Solid	09/08/21 13:16	09/09/21 16:39	4 - 5
890-1241-19	BH04	Solid	09/08/21 13:20	09/09/21 16:39	9 - 10
890-1241-20	BH04	Solid	09/08/21 13:22	09/09/21 16:39	14 - 15
890-1241-21	BH04	Solid	09/08/21 13:24	09/09/21 16:39	19 - 20
890-1241-22	BH05	Solid	09/08/21 13:36	09/09/21 16:39	0 - 1
890-1241-23	BH05	Solid	09/08/21 13:40	09/09/21 16:39	4 - 5
890-1241-24	BH05	Solid	09/08/21 13:44	09/09/21 16:39	9 - 10
890-1241-25	BH05	Solid	09/08/21 13:46	09/09/21 16:39	14 - 15
890-1241-26	BH05	Solid	09/08/21 13:48	09/09/21 16:39	19 - 20

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 3

~~Project Manager:~~	Kalei Jennings	Bill to: (if different)	WSP Attn: Kalei Jennings
Company Name:	WSP	Company Name:	
Address:	3300 N A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	Battle Ax Water well	Turn Around	
Project Number:	31402989.080	☒ Routine ☐ Rush	
Project Location:	Lea County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TMM-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.6
Total Containers:		Corrected Temperature:	3.4

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH01	S	9/8/21	1035	0-1'	Grab	1					
BH01			1037	2-3'		1					
BH01			1048	6-7'		1					
BH01			1050	9-10'		1					
BH01			1052	14-15'		1					
BH01			1105	19-20'		1					
BH02			1120	0-1'		1					
BH02			1124	4-5'		1					
BH02			1128	9-10'		1					
BH02	↓	↓	1130	14-15'	↓	1					

890-1241 Chain of Custody

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers	Cole Camp	9.9.21 1639			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager:	Kalei Jennings	Bill to: (if different)	WSP Attn: Kalei Jennings
Company Name:	WSP	Company Name:	
Address:	3300 N A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	Battle Ax Water Well	Turn Around	☒ Routine ☐ Rush
Project Number:	31402909.0800	Due Date:	
Project Location:	Lea County	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Anna Byers		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	83	
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH02	S	9/8/21	1132	19-20'	Grab	1					
BH03			1242	0-1'		1					
BH03			1246	4-5'		1					
BH03			1250	9-10'		1					
BH03			1252	14-15'		1					
BH03			1254	19-20'		1					
BH04			1312	0-1'		1					
BH04			1316	4-5'		1					
BH04			1320	9-10'		1					
BH04	↓	↓	1322	14-15'	↓	1					

ANALYSIS REQUEST

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	Glue Cup	9.9.21 1639			
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

www.xenco.com Page 3 of 3

Work Order No: _____

Project Manager:	Kalei Jennings	Bill to: (if different)	WSP Attn: Kalei Jennings
Company Name:	WSP	Company Name:	
Address:	3300 N A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503 Email:	Anna.byers@wsp.com	

Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Ax Water Well	Turn Around	☒ Routine ☐ Rush
Project Number:	31402909.080	Due Date:	
Project Location:	Lea County	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Anna Byers		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes ~~No~~	
Samples Received Intact:	Yes No	Thermometer ID:	D57	
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes
None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH04	S	9/8/21	1324	19-20'	Grab	1		X	X	X	
BH05			1336	0-1'		1		X	X	X	
BH05			1340	4-5'		1		X	X	X	
BH05			1344	9-10'		1		X	X	X	
BH05			1346	14-15'		1		X	X	X	
BH05			1348	19-20'		1		X	X	X	

Parameters

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers		9.9.21 1639	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone. 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-402 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1241-1
Address: 1211 W Florida Ave	Due Date Requested: 9/15/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site	SSOW#:			

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BH01 (890-1241-1)	9/8/21	10 35 Mountain		Solid			X	X	X	1	
BH01 (890-1241-2)	9/8/21	10 37 Mountain		Solid			X	X	X	1	
BH01 (890-1241-3)	9/8/21	10 48 Mountain		Solid			X	X	X	1	
BH01 (890-1241-4)	9/8/21	10 50 Mountain		Solid			X	X	X	1	
BH01 (890-1241-5)	9/8/21	10 52 Mountain		Solid			X	X	X	1	
BH01 (890-1241-6)	9/8/21	11 05 Mountain		Solid			X	X	X	1	
BH02 (890-1241-7)	9/8/21	11 20 Mountain		Solid			X	X	X	1	
BH02 (890-1241-8)	9/8/21	11 24 Mountain		Solid			X	X	X	1	
BH02 (890-1241-9)	9/8/21	11 28 Mountain		Solid			X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clue Carp 9.10.21				9-13-21 9:30 AM	
2						
3						

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
Δ Yes Δ No		2 1 2.6

Ver: 06/08/2021

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9/16/2021
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Eurofins Xenco, Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-402 2
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1241-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 9/15/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site:	SSOW#:			

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BH02 (890-1241-10)	9/8/21	11 30 Mountain		Solid			X	X	X	1	
BH02 (890-1241-11)	9/8/21	13 02 Mountain		Solid			X	X	X	1	
BH03 (890-1241-12)	9/8/21	12 42 Mountain		Solid			X	X	X	1	
BH03 (890-1241-13)	9/8/21	12 46 Mountain		Solid			X	X	X	1	
BH03 (890-1241-14)	9/8/21	12 50 Mountain		Solid			X	X	X	1	
BH03 (890-1241-15)	9/8/21	12 52 Mountain		Solid			X	X	X	1	
BH03 (890-1241-16)	9/8/21	12 54 Mountain		Solid			X	X	X	1	
BH04 (890-1241-17)	9/8/21	13 12 Mountain		Solid			X	X	X	1	
BH04 (890-1241-18)	9/8/21	13 16 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clue Culp 9.10.21				9-13-21 9:30am	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time.	Company
3	Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.1 2.0

Ver: 06/08/2021

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Received by OCD: 10/14/2021 11:10:58 AM
Released to Imaging: 11/17/2021 10:17:45 AM

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Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-402 3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1241-1
Address: 1211 W Florida Ave	Due Date Requested: 9/15/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Battle Ax Water Well	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BH04 (890-1241-19)	9/8/21	13 20 Mountain		Solid			X	X	X	1	
BH04 (890-1241-20)	9/8/21	13 22 Mountain		Solid			X	X	X	1	
BH04 (890-1241-21)	9/8/21	13 24 Mountain		Solid			X	X	X	1	
BH05 (890-1241-22)	9/8/21	13 36 Mountain		Solid			X	X	X	1	
BH05 (890-1241-23)	9/8/21	13 40 Mountain		Solid			X	X	X	1	
BH05 (890-1241-24)	9/8/21	13 44 Mountain		Solid			X	X	X	1	
BH05 (890-1241-25)	9/8/21	13 46 Mountain		Solid			X	X	X	1	
BH05 (890-1241-26)	9/8/21	13 48 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Cloe Cat 9.10.21				9-13-21 9:30am	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		2.1 2.6

Ver: 06/08/2021

Received by OCD: 10/14/2021 11:10:58 AM
Page 57 of 59
9/16/2021
Released to Imaging: 11/17/2021 10:17:45 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1241-1
SDG Number: Lea County

Login Number: 1241
List Number: 1
Creator: Clifton, Cloe

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: 890-1241-1
SDG Number: Lea County

Login Number: 1241
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 09/13/21 09:27 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	2.1 / 2.6
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	

ATTACHMENT 5: FORM C-141

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	nAPP2120869635
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	ConocoPhillips	OGRID	217817
Contact Name	Kelsy Waggaman	Contact Telephone	505-677-9071
Contact email	Kelsy.Waggaman@conocophillips.com	Incident # *(assigned by OCD)*	nAPP2120869635
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.178199 Longitude -103.440470

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Water Well C-03942-POD1	Site Type	Water Well
Date Release Discovered	7/26/21	API# *(if applicable)*	N/A

Unit Letter	Section	Township	Range	County
B	35	24S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ■ Private (*Name:* Quail Ranch, LLC)

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)	Volume Recovered (bbls)
	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) Brackish Water	Volume/Weight Released (provide units) 150 bbl	Volume/Weight Recovered (provide units) 150 bbl

Cause of Release

On 7/26/21 an inactive water well was found to be releasing fluid. ~130 bbls of fluid was recovered from a 40'x40' area west of the well and a 240' x 3' area along the side of Battle Ax Road. In the past 24 hrs, an additional 200 bbls of fluid was recovered from the actively flowing well bore and transferred directly into a containment tank. The release is still active. NM Office of the State Engineer has directed ConocoPhillips to not take any action to cap or plug the well until OSE completes an evaluation.The release is likely brackish water. ConocoPhillips is working to identify the material released. Vegetation in the area appears to be impacted.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2120869635
District RP	
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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? Volume released was >25 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes. By Kelsy Waggaman. To the NMOCD emergency notification phone line and ocd.enviro@state.nm.us. on 7/26/21.

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:
NM Office of the State Engineer has directed ConocoPhillips to not take any action to cap or plug the well until OSE completes an evaluation.

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: Kelsy Waggaman
Title: Environmental Coordinator
Signature: Kelsy Waggaman
Date: 7/27/21
email: kelsy.waggaman@conocophillips.com
Telephone: (505)577-9071

OCD Only

Received by: Ramona Marcus
Date: 7/30/2021

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 38467

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 38467
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	7/30/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2120869635
District RP	
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?	>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.

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2120869635
District RP	
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: Ike Tavarez Title: Environmental Coordinator

Signature: Ike Tavarez Date: 10/12/2021

email: Ike.Tavarez@conocophillips.com Telephone: 432-685-2573

OCD Only

Received by: Date:

Form C-141 State of New Mexico
Page 5 Oil Conservation Division

Incident ID	NAPP2120869635
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Ike Tavarez Title: Environmental Coordinator

Signature: Ike Tavarez Date: 10/12/2021

email: Ike.Tavarez@conocophillips.com Telephone: 423-701-8630

OCD Only

Received by: Chad Hensley Date: 11/17/2021

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Chad Hensley Date: 11/17/2021

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 56002

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 56002
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	A deferral can only be granted on an active well pad and not on a road, right-of-way, or in the pasture.	11/17/2021