State of New Mexico Oil Conservation Division

Incident ID	nAPP2204733624
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the following items m	ust be included in the closure report.
✓ A scaled site and sampling diagram as described in 19.15.29.11 NMA	AC
Photographs of the remediated site prior to backfill or photos of the must be notified 2 days prior to liner inspection)	liner integrity if applicable (Note: appropriate OCD District office
✓ Laboratory analyses of final sampling (Note: appropriate ODC Distri	ct office must be notified 2 days prior to final sampling)
✓ Description of remediation activities	
Signature: Date: email: cjbryant@paalp.com Telep	se notifications and perform corrective actions for releases which it report by the OCD does not relieve the operator of liability contamination that pose a threat to groundwater, surface water, it report does not relieve the operator of responsibility for The responsible party acknowledges they must substantially so that existed prior to the release or their final land use in
OCD Only	40/04/0000
Received by: Jocelyn Harimon	Date:10/04/2022
Closure approval by the OCD does not relieve the responsible party of liable remediate contamination that poses a threat to groundwater, surface water, I party of compliance with any other federal, state, or local laws and/or regulation.	numan health, or the environment nor does not relieve the responsible
Closure Approved by: Robert Hamlet	Date:1/27/2023
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

	Page 2 of 30	1
Incident ID	nAPP2204733624	
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?	(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.			

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

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

State of New Mexico Oil Conservation Division

Incident ID	nAPP2204733624
District RP	
Facility ID	
Application ID	

Released to Imaging: 1/27/2023 10:04:50 AM

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: Camille Bryant Title: Remediation Supervisor Signature Telephone: (575) 441-1099 email: cjbryant@paalp.com **OCD Only** Jocelyn Harimon Received by: Date: 10/04/2022

State of New Mexico Oil Conservation Division

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

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

Incident ID	nAPP2204733624
District RP	
Facility ID	
Application ID	

Released to Imaging: 1/27/2023 10:04:50 AM

Closure

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

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable must be notified 2 days prior to liner inspection)	(Note: appropriate OCD District office
✓ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2	days prior to final sampling)
✓ Description of remediation activities	\$
I hereby certify that the information given above is true and complete to the best of my knowledge and and regulations all operators are required to report and/or file certain release notifications and perform may endanger public health or the environment. The acceptance of a C-141 report by the OCD does reshould their operations have failed to adequately investigate and remediate contamination that pose as human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledge and restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the laws and the occupance of a C-141 report does not relieve the compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledge and remediate contamination and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetate the impacted surface area to the conditions that existed prior to the reaccordance with 19.15.29.13 NMAC including notification to the	n corrective actions for releases which not relieve the operator of liability threat to groundwater, surface water, e operator of responsibility for owledges they must substantially elease or their final land use in etation are complete.
OCD Only	
Received by: Date: Date:	_
Closure approval by the OCD does not relieve the responsible party of liability should their operations remediate contamination that poses a threat to groundwater, surface water, human health, or the enviror party of compliance with any other federal, state, or local laws and/or regulations.	have failed to adequately investigate and ament nor does not relieve the responsible
Closure Approved by: Date:	
Printed Name: Title:	

Remediation Summary & Soil Closure Request

Plains Pipeline, LP Astro Dog 6-Inch

Eddy County, New Mexico
Unit Letter "M", Section 35, Township 22 South, Range 28 East
Latitude 32.3424733 North, Longitude 104.062457 West
NMOCD Reference Numbers nAPP2204566669 & nAPP2204733624

Prepared By:

Etech Environmental & Safety Solutions, Inc.

2507 79th Street, Unit A Lubbock, Texas 79423

Ben J. Arguijo

Joel W/Lov

Environmental & Safety Solutions, Inc.

Midland • San Antonio • Lubbock • Hobbs • Lafayette

TABLE OF CONTENTS

	Section
PROJECT INFORMATION	1.0
SITE CHARACTERIZATION	2.0
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE	3.0
REMEDIATION ACTIVITIES SUMMARY	4 . 0
RESTORATION, RECLAMATION & RE-VEGETATION PLAN	5.0
SOIL CLOSURE REQUEST	6 . 0
LIMITATIONS	7 . 0
DISTRIBUTION	8 . 0

FIGURES

- Figure 1 Topographic Map
- Figure 2 Site Characterization Map
- Figure 3 Site & Sample Location Map

TABLES

Table 1 - Concentrations of BTEX, TPH & Chloride in Soil

APPENDICES

- Appendix A Depth to Groundwater Information
- Appendix B Field Data & Soil Profile Logs
- Appendix C Photographic Log
- Appendix D Laboratory Analytical Reports
- Appendix E Regulatory Correspondence

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Plains Pipeline, LP (Plains), has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Astro Dog 6-Inch. On February 14, 2022, a contractor for an unaffiliated third-party inadvertently struck a 6-inch pipeline belonging to Plains while conducting pipelining activities in the area. Matador/San Mateo immediately submitted a "Notice of Release" (NOR) to the New Mexico Oil Conservation Division (NMOCD), and the release was assigned Incident ID nAPP2204566669. On February 16, 2022, Plains submitted its own NOR and "Release Notification" (Form C-141), and the release was assigned incident number nAPP2204733624.

The information provided in the Form C-141 is summarized below.

Location of Release Source						
Latitude:		32.34	24733	Longitude:	-104.062457	
			Provide	d GPS are in WGS84 forms	at.	
Site Name: Astro Dog 6-Inch Site Type: Pipeline						
Date Release Di	scovere	ed:	2/14/2022	API # (if applic	able): N/A	
Unit Letter	Sec	tion	Township	Range	County	
"M"	3	5	22S	28E	Eddy	
Surface Owner:	Sta	te X	Federal Tribal	Private (Nan	ne	
			Nature ar	nd Volume of F	Release	
X Crude Oil		Volum	e Released (bbls)	12	Volume Recovered (bbls) 11	
Produced Water		Volume Released (bbls)			Volume Recovered (bbls)	
		oncentration of total on the produced water		Yes No N/A		
Condensate Volume Released (bbls) Volume Recovered (bbls)				Volume Recovered (bbls)		
Natural Gas Volume Released (Mcf		e Released (Mcf)		Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released Volume/Weight Recovered						
Cause of Relea 3rd Party Pipel The release was	ine Stri		open bellhole.			
			In	itial Response		
X The source	of the r	elease ha	s been stopped.			
X The impact	ed area	has been	secured to protect hur	man health and the en	nvironment.	
X Release ma	terials h	ave been	contained via the use	of berms or dikes, a	bsorbent pad, or other containment devices	
X All free liqu	uids and	recovera	able materials have be	en removed and man	aged appropriately.	

The NORs and previously submitted portions of the Form C-141 are available in the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Astro Dog 6-Inch release site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	35'		
Did the release impact groundwater or surface water?	Yes X	No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X	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 X	No	
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	Yes X	X 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 X	No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X	No	
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X	No	
Are the lateral extents of the release within 300 feet of a wetland?	Yes X	No	
Are the lateral extents of the release overlying a subsurface mine?	Yes X	No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	X Yes	No	
Are the lateral extents of the release within a 100-year floodplain?	Yes X	No	
Did the release impact areas not on an exploration, development, production or storage site?	X Yes	No	

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Fish & Wildlife Services (FWS) shapefiles, topographic maps, NMOSE and USGS databases, and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater, and NMOCD Siting Criteria, the NMOCD Closure Criteria and NMOCD Reclamation Standards for the Astro Dog 6-Inch release site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	600	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	100	100
35'	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	N/A	N/A
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

^{*} Measured in milligrams per kilogram (mg/kg)

[†] Table I, Section 19.15.29.12 of the New Mexico Administrative Code (NMAC).

[‡] The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

4.0 REMEDIATION ACTIVITIES SUMMARY

On February 22, 2022, remediation activities commenced at the release site. Due to the nature of the impacted material (i.e., well-indurated bedrock, see the "Soil Profile Log" in Appendix B), it was determined that an excavator equipped with a hydraulic rock hammer would be required to further advance the excavation. In accordance with NMOCD regulatory guidelines, impacted material affected above the NMOCD Closure Criteria and NMOCD Reclamation Standards was excavated and stockpiled on-site, atop an impermeable liner, pending transfer to an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and/or test results suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards. Representative five-point composite confirmation soil samples were collected every 50 linear feet from the excavation sidewalls and every 200 square feet from the floor of the excavated area to be submitted for laboratory analysis.

On March 3, 2022, Etech collected six (6) confirmation soil samples (NSW #1, ESW #1, ESW #2, SSW #1, FL-1 @ 14', and FL-2 @ 12') from the sidewalls and floor of the excavated area. The soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the laboratory method detection limit (MDL), with the exception of soil sample ESW #1, which exhibted a TPH concentration of 55.5 mg/kg. Chloride concentrations ranged from 18.8 mg/kg in soil sample NWS #1 to 357 mg/kg in soil sample FL-2 @ 12'. Excavation of impacted material continued to the west.

On March 10, 2022, Etech collected six (6) confirmation soil samples (NW #2, SW #2, FL-3 @ 14', FL-4 @ 14', FL-5 @ 14.5', and FL-6 @ 14.5') from the sidewalls and floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX concentrations were also less than the laboratory MDL, with the exception of soil sample NW #2, which exhibited a BTEX concentration of 0.111 mg/kg. TPH concentrations ranged from less than the laboratory MDL in soil sample SW #2 to 999 mg/kg in soil sample FL-3 @ 14'. TPH concentrations exceeded the NMOCD Closure Criterion in each of the submitted soil samples, with the exception of soil sample SW #2. Chloride concentrations ranged from 28.6 mg/kg in soil sample NW #2 to 492 mg/kg in soil sample FL-3 @ 14'. Based on laboratory analytical results, the floor and sidewalls of the excavated area were further advanced in the areas characterized by soil samples FL-3 @ 14', FL-4 @ 14', FL-5 @ 14.5', FL-6 @ 14.5' and NW #2. Excavation of impacted material also continued to the west.

On March 23, 2022, Etech collected six (6) confirmation soil samples (NSW #2b, NSW #3, SSW #3, FL-3b @ 16', FL-4b @ 16', and FL-5b @ 14') from the sidewalls and floor of the newly excavated area. The soil samples were submitted to the laboratory for analysis of TPH. Soil samples NSW #3 and SSW #3 were also analyzed for BTEX and chloride. Laboratory analytical results indicated the BTEX and chloride concentrations in soil samples NSW #3 and SSW #3 were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards. BTEX concentrations were also less than the laboratory MDL. TPH concentrations ranged from less than the laboratory MDL in soil samples SSW #3, FL-3b @ 16', and FL-5b @ 14' to 886 mg/kg in soil sample NSW #2b. TPH concentrations exceeded the NMOCD Closure Criterion in soil samples NSW #2b, NSW #3, and FL-4b @ 16'. Chloride concentrations were 55.3 mg/kg in soil sample NSW #3 and 76.5 mg/kg in soil sample SSW #3. Based on laboratory analytical results, the excavation was further advanced in the area characterized by soil sample FL-4b @ 16'. Further advancement of the north sidewall in the area characterized by soil samples NSW #2b and NSW #3 was limited due to safety and environmental concerns associated with continued use of the hydraulic rock hammer in such close proximity to an active, 16-inch, high-pressure gas pipeline adjacent to the excavation.

On March 24, 2022, Etech collected one (1) confirmation soil sample (FL-6b @ 17') from the floor of the newly excavated area. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was below the NMOCD Closure Criterion, NMOCD Reclamation Standard, and laboratory MDL. Excavation of impacted material continued to the west.

On April 1, 2022, Etech collected one (1) confirmation soil sample (FL-4c @ 17') from the floor of the newly excavated area. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 93.4 mg/kg and below the NMOCD Closure Criterion and NMOCD Reclamation Standard. Excavation of impacted material continued to the west.

On April 8, 2022, Etech advanced an investigative trench (NT) to the north of the high-pressure gas line, in the area characterized by soil samples NSW #2b and NSW #3. The trench was advanced to a total depth of approximately 20 feet below ground surface (bgs). During the advancement of the investigative trench, soil samples were collected and field-screened for the presence of volatile organic compounds (VOCs) utilizing olfactory/visual senses. Based on field observations, three (3) delineation soil samples (NT-10', NT-15', and NT-20') were submitted to the laboratory for analysis of BTEX and TPH. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples. Based on laboratory analytical results, horizontal delineation had been achieved, and impacted soil did not extend beyond the high-pressure gas line to the north.

On April 27, 2022, Etech collected three (3) confirmation soil samples (SWSW, FL-7 16-18', and FL-10 @ 18') from the sidewalls and floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX concentrations ranged from less than the laboratory MDL in soil samples SWSW and FL-10 @ 18' to 0.0132 mg/kg in soil sample FL-7 16-18'. TPH concentrations ranged from less than the laboratory MDL in soil sample FL-7 16-18' to 1,840 mg/kg in soil sample SWSW, which exceeded the NMOCD Closure Criterion. Chloride concentrations ranged from 47.0 mg/kg in soil sample SWSW to 372 mg/kg in soil sample FL-10 @ 18'. Based on laboratory analytical results, the sidewall of the excavated area was further advanced in the area characterized by soil sample SWSW. Excavation of impacted material also continued to the west.

On May 10, 2022, Etech collected three (3) confirmation soil samples (FL-5b, FL-8, and FL-9) from the floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX concentrations ranged from less than the laboratory MDL in soil sample FL-9 to 0.0105 mg/kg in soil sample FL-8. TPH concentrations ranged from 70.4 mg/kg in soil sample FL-5b to 1,680 mg/kg in soil sample FL-8. TPH concentrations exceeded the NMOCD Closure Criterion in soil samples FL-8 and FL-9. Chloride concentrations ranged from 96.1 mg/kg in soil sample FL-8 to 132 mg/kg in soil sample FL-9. Based on laboratory analytical results, the floor of the excavated area was further advanced in the area characterized by soil samples FL-8 and FL-9. Excavation of impacted material also continued to the west.

On May 11, 2022, representatives of Plains, the NMOCD, and the BLM met to discuss the remediation site and determine a path forward to regulatory closure. During the meeting, it was determined that the removal of hydrocarbon-impacted soil from the north sidewall, beneath the high-pressure gas line, posed a significant safety risk and was impracticable. Since the impacted areas were limited to two (2) small, porous lenses between 12 and 14 feet bgs and did not extend beyond the high-pressure gas line to the north, saturating the affected areas with a 30% hydrogen peroxide solution might be sufficient to mitigate the contamination.

On May 12, 2022, Etech collected two (2) confirmation soil samples (SWSWb and WSW #1) from the sidewalls of the excavated area. The soil samples were submitted to the laboratory for analysis of TPH. Soil sample WSW #1 was also analyzed for concentrations of BTEX and chloride. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples. The chloride concentration in soil sample WSW #1 was 964 mg/kg, which exceeded the NMOCD Closure Criterion. Based on laboratory analytical results, the sidewall of the excavated area was further advanced in the area charaterized by soil sample WSW #1. Excavation of impacted soil also continued to the west.

On May 20, 2022, Etech treated the impacted areas in the north sidewall proximate to the high-pressure gas line (characterized by soil samples NSW #2b and NSW #3) by saturating them with a 30% hydrogen peroxide solution. In addition, Etech collected six (6) confirmation soil samples (WSW #1b, WSW #2, FL-8b, FL-9b, FL-11, and FL-12) from the sidewalls and floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples, with the exception of soil sample FL-11, which exhibited a TPH concentration of 79.9 mg/kg. Chloride concentrations ranged from 78.0 mg/kg in soil sample WSW #2 to 124 mg/kg in soil sample WSW #1b.

On June 3, 2022, Etech collected one (1) soil sample (6/3 NSW) from the treated areas characterized by soil samples NSW #2b and NSW #3. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 1,440 mg/kg, which exceeded the NMOCD Closure Criterion. Following sample collection, the affected area was saturated with a 30% hydrogen peroxide solution in an effort to mitigate hydrocarbon impacts.

On June 6, 2022, Etech collected one (1) sample (6/6 NSW) from the treated areas characterized by soil samples NSW #2b and NSW #3. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 1,630 mg/kg, which exceeded the NMOCD Closure Criterion. Following sample collection, the affected area was saturated with a 30% hydrogen peroxide solution in an effort to mitigate hydrocarbon impacts.

On June 8, 2022, Etech collected one (1) sample (6/8 NSW) from the treated areas characterized by soil samples NSW #2b and NSW #3. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 784 mg/kg, which exceeded the NMOCD Closure Criterion. Following sample collection, the affected area was saturated with a 30% hydrogen peroxide solution in an effort to mitigate hydrocarbon impacts.

On June 9, 2022, Etech collected one (1) sample (6/9 NSW) from the treated areas characterized by soil samples NSW #2b and NSW #3. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 382 mg/kg, which exceeded the NMOCD Closure Criterion.

On June 14, 2022, based on the limited area of impact remaining in-situ, an Information Packet and backfill request was prepared and submitted to the NMOCD and BLM detailing laboratory analytical results and remediation activities conducted to date. The backfill request was subsequently approved by both agencies.

The final dimensions of the excavated area were approximately 90 feet in length, 42 to 62 feet in width, and 14 to 20 feet in depth. During the course of remediation activities, Etech transported approximately 5,928 cubic yards of impacted soil to an NMOCD-permitted surface waste facility for disposal and imported approximately 5,834 cubic yards of locally sourced, non-impacted material to the site for use as backfill.

Soil sample locations and the extents of the excavated and treated areas are depicted in Figure 3, "Site & Sample Location Map". Soil chemistry data is summarized in Table 1. A soil profile log is provided in Appendix B. General photographs of the release site are provided in Appendix C. Laboratory analytical reports are provided in Appendix D. Copies of all regulatory correspondence are provided in Appendix E.

5.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

Upon receiving NMOCD and BLM approval, the excavated area was backfilled with locally sourced, non-impacted, "like" material placed at or near original relative positions. The affected area was contoured and compacted to achieve erosion control, stability, and preservation of surface water flow to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an agency- and/or landowner-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the site.

6.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with the NMOCD and BLM. Impacted soil affected above the NMOCD Closure Criteria and NMOCD Reclamation Standard was excavated and transported to an NMOCD-permitted surface waste facility for disposal. The floor and sidewalls of the excavated area were advanced until laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the NMOCD Closure Criteria. Laboratory analytical results from excavation confirmation soil samples indicated BTEX, TPH, and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples, with the exceptions of the TPH concentrations in soil samples NSW #2b and NSW #3. Further excavation of impacted rock in the areas characterized by soil samples NSW #2b and NSW #3 was precluded due to safety concerns associated with their close proximity to an active, 16-inch, high-pressure gas pipeline and the resilient nature of the rock.

In accordance with the NMOCD and BLM, the impacted areas characterized by soil samples NSW #2b and NSW #3 were repeatedly treated with a 30% hydrogen peroxide solution and resampled until laboratory analytical results indicated hydrocarbon impacts had been mitigated to the extent practicable.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Plains provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Astro Dog 6-Inch release site.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary & Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Pipeline, LP. Use of the information contained in this report is prohibited without the consent of Etech and/or Plains Pipeline, LP.

8.0 DISTRIBUTION

Plains Pipeline, LP 1106 Griffith Drive Midland, Texas 79706

Matador Resources Company 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240

New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 2 811 S. First Street Artesia, NM 88210

United States Department of the Interior Bureau of Land Management 620 E. Greene Street Carlsbad, NM 88220

(Electronic Submission)

Released to Imaging: 1/27/2023 10:04:50 AM

Figure 1 Topographic Map

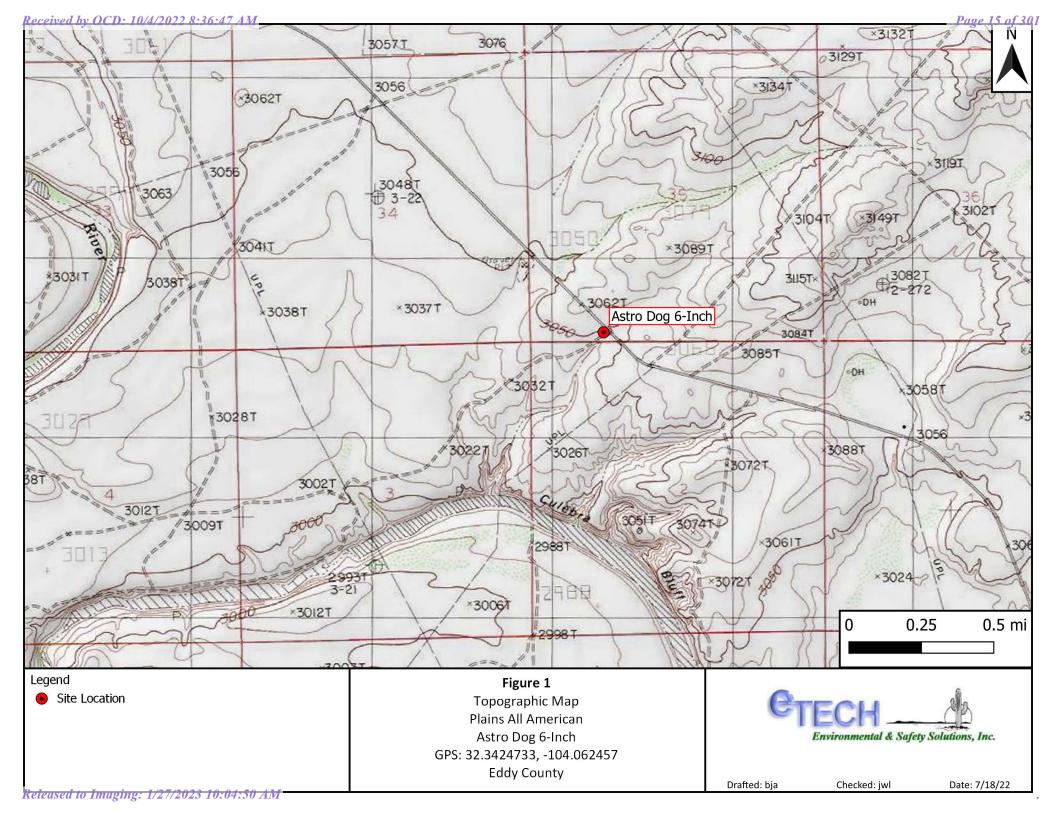


Figure 2 Site Characterization Map

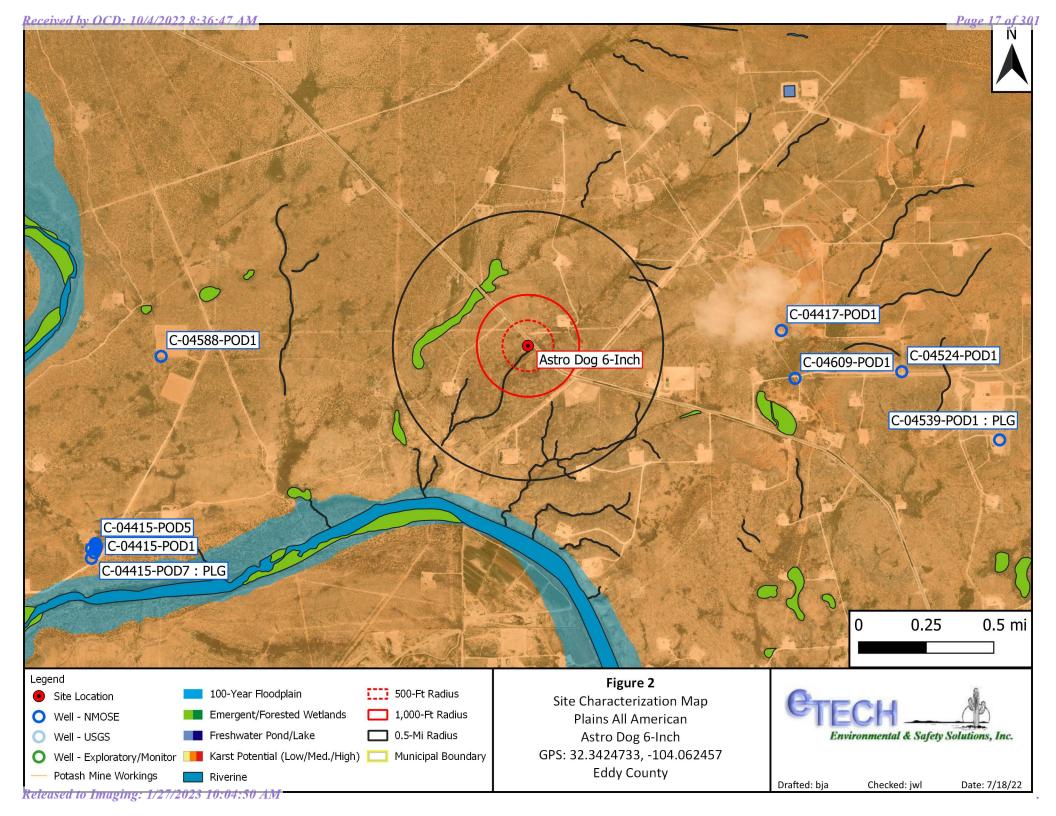


Figure 3 Site & Sample Location Map

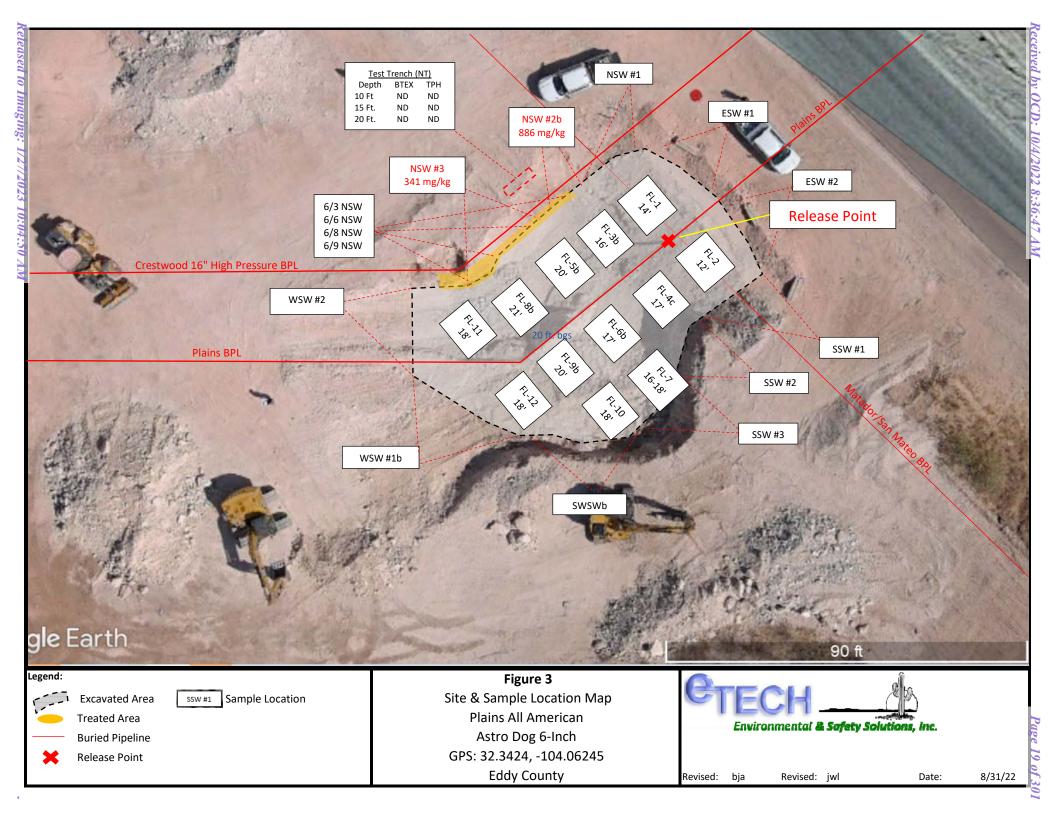


Table 1 Concentrations of BTEX, TPH & Chloride in Soil

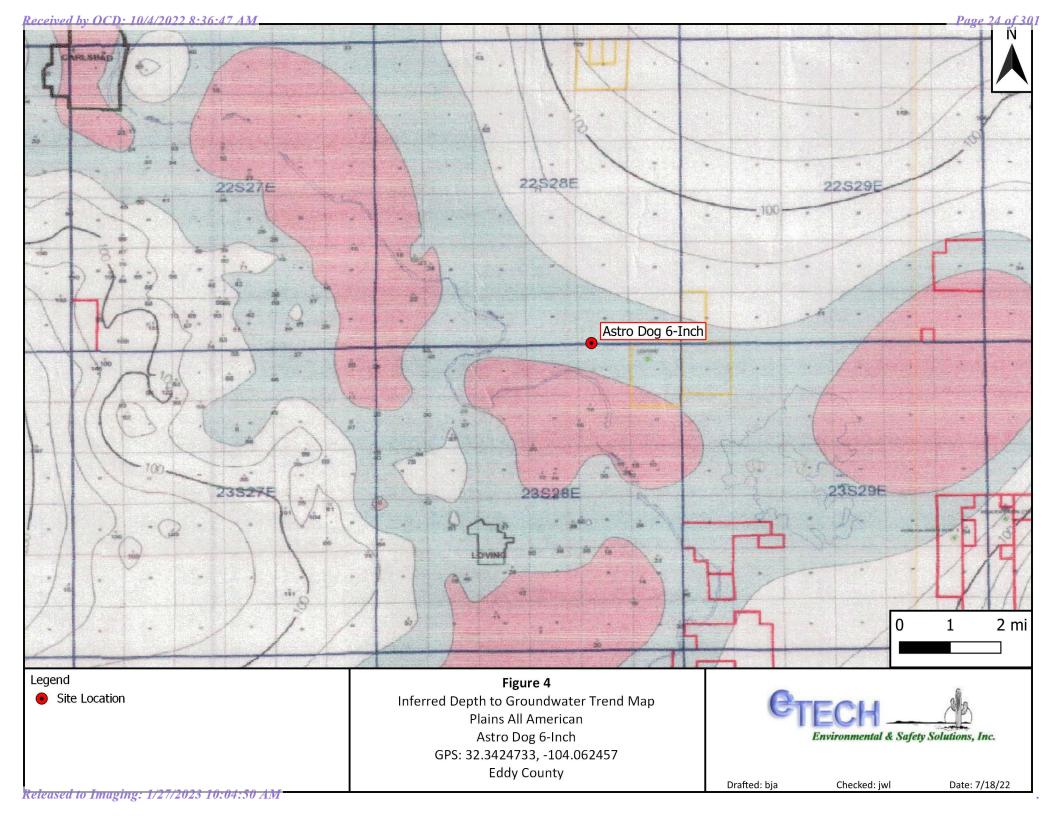
					Tabl	e 1					
			Conce	entrations	of BTEX,		Chloride in	Soil			
]	Plains Pip	eline, LP					
					Astro Dog	g 6-Inch					
		NM(OCD Re	ference #'	s: nAPP22	04566669	& nAPP2	220473362	4		
NMO	CD Closure C	riteria		10	50	N/A	N/A	N/A	N/A	100	600
NMOCD	Reclamation	Standard		10	50	N/A	N/A	N/A	N/A	100	600
				SW 840	6 8021B		SW	846 8015M	Ext.		4500 Cl
Sample ID	Date	Depth	Soil	ъ	DEEX	GRO	DRO	GRO + DRO	ORO	ТРН	CI I I
Sample 1D	Date	(Feet)	Status	Benzene (mg/kg)	BTEX (mg/kg)	C_6-C_{10}	C_{10} - C_{28}	C ₆ -C ₂₈	C_{28} - C_{36}	C ₆ -C ₃₆	Chloride (mg/kg)
				(9/9/	(g/g/	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(g/g/
					Delineation						
NT-10'	4/8/2022	10	In-Situ	< 0.00200	< 0.00399	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	-
NT-15'	4/8/2022	15	In-Situ		< 0.00398	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	-
NT-20'	4/8/2022	20	In-Situ	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	-
			1		Excavation	_					
NSW #1	3/3/2022	0-14				<49.9	<49.9	<49.9	<49.9	<49.9	18.8
NW #2	3/10/2022	0-14	Excavated	< 0.00199	0.111	<49.9	810	810	100	910	28.6
NSW #2b	3/23/2022	0-16	Treated	-	-	<49.9	772	772	114	886	-
NSW #3	3/23/2022	0-21		< 0.00201	< 0.00402	<49.8	341	341	<49.8	341	55.3
6/3 NSW	6/3/2022	12-16	Treated	-	-	< 50.0	1,440	1,440	< 50.0	1,440	-
6/6 NSW	6/6/2022	12-16	Treated	-	-	< 50.0	1,630	1,630	< 50.0	1,630	-
6/8 NSW	6/8/2022	12-16	Treated	-	-	< 50.0	637	637	67.0	784	-
6/9 NSW	6/9/2022	12-16	Treated	-	-	<49.9	382	382	<49.9	382	-
ESW #1	3/3/2022	0-14		< 0.00200		<49.9	55.5	55.5	<49.9	55.5	208
ESW #2	3/3/2022	0-12				<49.8	<49.8	<49.8	<49.8	<49.8	99.8
SSW #1	3/3/2022	0-12		< 0.00198		< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	273
SW #2	3/10/2022	0-18		< 0.00199		<49.9	<49.9	<49.9	<49.9	<49.9	446
SSW #3	3/23/2022	0-18	In-Situ			<49.8	<49.8	<49.8	<49.8	<49.8	76.5
SWSW	4/27/2022	0-18	Excavated	< 0.00199	< 0.00398	869	973	1,840	<49.9	1,840	47.0
SWSWb	5/12/2022	0-18	In-Situ	-	-	<50.0	<50.0	<50.0	< 50.0	<50.0	-
WSW #1	5/12/2022	0-18	Excavated	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	964
WSW #1b	5/20/2022	0-18	In-Situ	-	-	-	-	-	-	-	124
WSW #2	5/20/2022			< 0.00199		<49.9	<49.9	<49.9	<49.9	<49.9	78.0
FL-1 @ 14'	3/3/2022	14		< 0.00200		<50.0	<50.0	<50.0	<50.0	<50.0	328
FL-2 @ 12'	3/3/2022	12		<0.00202		<50.0	<50.0	<50.0	<50.0	<50.0	357
FL-3 @ 14'	3/10/2022	14		<0.00200		<50.0	870	870	129	999	492
FL-3b @ 16'	3/23/2022	16	In-Situ	- <0.00100	-0.00200	<49.7	<49.7	<49.7	<49.7	<49.7	201
FL-4 @ 14'	3/10/2022	14	-	< 0.00199		<49.9	131	131	<49.9	131	391
FL-4b @ 16'	3/23/2022	16	Excavated	-	-	<50.0	155	155	<50.0	155	-
FL-4c @ 17'	4/1/2022	17	In-Situ	- <0.00200	-0.00200	27.6	65.8	93.4	<15.0	93.4	267
FL-5 @ 14.5'	3/10/2022	14.5	Excavated		<0.00399	<50.0	227	227	<50.0	227	267
FL-5b @ 14'	3/23/2022	14	In-Situ	-	-	<49.9	<49.9	<49.9	<49.9	<49.9	-
FL-5b	5/10/2022	20	In-Situ		-0.00200	<49.9	70.4	70.4	<49.9	70.4	246
FL-6 @ 14.5'	3/10/2022			<0.00200	<0.00399	<49.9	274	274	<49.9	274	246
FL-6b @ 17'	3/24/2022	17	In-Situ	- <0.00200	- 0.0122	<50.0	<50.0	<50.0	<50.0	<50.0	106
FL-7 16-18'	4/27/2022			<0.00200	0.0132	<50.0	<50.0	<50.0	<50.0	<50.0	196
FL-8	5/10/2022	17		<0.00202	0.0105	<49.9	1,680	1,680	<49.9	1,680	96.1
FL-8b	5/20/2022		In-Situ	- <0.00100	-0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	122
FL-9	5/10/2022	17		<0.00199		<49.9	341	341	<49.9	341	132
FL-9b	5/20/2022		In-Situ	- 0.00202	- 0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	272
FL-10 @ 18'	4/27/2022	18	In-Situ	< 0.00202	< 0.00403	< 50.0	50.4	50.4	< 50.0	50.4	372

 $\label{eq:Dash of Constituent} \textbf{Dash (-): Sample not analyzed for that constituent.}$

Bold: NMOCD Closure Criteria exceedance.

		NMO			Table of BTEX, Plains Pip Astro Dogs: nAPP22	TPH & C eline, LP g 6-Inch			:4		
NMO	CD Closure C	riteria		10	50	N/A	N/A	N/A	N/A	100	600
NMOCD	Reclamation	Standard		10	50	N/A	N/A	N/A	N/A	100	600
				SW 840	6 8021B		SW	846 8015M	Ext.		4500 Cl
Sample ID	Date	Depth (Feet)	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL-11	5/20/2022	18-20	In-Situ	< 0.00200	< 0.00399	<49.9	79.9	79.9	<49.9	79.9	93.3
FL-12	5/20/2022	18-20	In-Situ	< 0.00202	< 0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	105

Appendix A Depth to Groundwater Information





Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

	110014)	POD Sub-			Q	Λ								·	Vatan
POD Number	Code		County				Sec	Tws	Rng	X	Y	DistanceDe	pthWellDep		Vater olumn
C 04417 POD1		CUB	ED	4	3	3	36	22S	28E	589736	3578874	1511	55		
C 04609 POD1		CUB	ED	2	1	1	01	23S	28E	589816	3578589	1601	51		
C 00512 CLW198323	О	CUB	ED	4	1	1	11	23S	28E	588167	3576806*	1978	100		
C 00512 S		CUB	ED	4	1	1	11	23S	28E	588167	3576806*	1978	100		
<u>C 00512</u>		CUB	ED	4	1	1	11	23S	28E	588188	3576775 🌑	2008	175	15	160
C 00512 EXPL	О	CUB	ED			1	11	23S	28E	588272	3576703*	2080	200	16	184
C 04588 POD1		CUB	ED	2	2	2	04	23S	28E	586043	3578720	2184	50		
C 04524 POD1		CUB	ED	1	1	2	01	23S	28E	590452	3578629	2230	55		
C 04216 POD2		CUB	ED	1	4	1	11	23S	28E	588465	3576555	2240	20	10	10
C 04216 POD3		CUB	ED	1	4	1	11	23S	28E	588501	3576556	2244	23	13	10
C 04216 POD1		CUB	ED	2	4	1	11	23S	28E	588488	3576534	2264	20	10	10
<u>C 00109</u>		CUB	ED	1	3	3	04	23S	27E	588486	3576531	2266	168	120	48
C 04216 POD4		CUB	ED	2	4	1	11	23S	28E	588499	3576513	2286	20	10	10
C 00608		C	ED	3	3	1	11	23S	28E	587970	3576401*	2396	200		
C 04418 POD1		CUB	ED	4	2	1	12	23S	28E	590104	3576851	2693	55		
<u>C 00315</u>		CUB	ED	3	1	3	11	23S	28E	587973	3575995*	2800	100	45	55
C 04415 POD5		CUB	ED	4	1	4	04	23S	28E	585652	3577605	2831	10		
C 04415 POD6		CUB	ED	4	1	4	04	23S	28E	585652	3577605	2831	10		
C 04415 POD1		CUB	ED	4	1	4	04	23S	28E	585657	3577591	2832	25	20	5
C 04415 POD8		CUB	ED	4	1	4	04	23S	28E	585656	3577583	2837	27	23	4
C 04415 POD2		CUB	ED	4	1	4	04	23S	28E	585653	3577570	2845	12		
<u>C 04415 POD3</u>		CUB	ED	4	1	4	04	23S	28E	585645	3577552	2860	11		
C 04539 POD1		CUB	ED	2	4	2	01	23S	28E	591034	3578223	2862	55		
<u>C 04415 POD4</u>		CUB	ED	3	1	4	04	23S	28E	585628	3577575	2865	11		
C 04415 POD7		CUB	ED	3	1	4	04	23S	28E	585628	3577518	2890	55	38	17
<u>C_00800</u>		C	ED		4	2	09	23S	28E	586050	3576479*	3170	200	30	170

Average Depth to Water:

29 feet

Minimum Depth:

10 feet

Maximum Depth:

120 feet

Record Count: 26

UTMNAD83 Radius Search (in meters):

Easting (X): 588226.89 **Northing (Y):** 3578783.49 **Radius:** 3218.7

*UTM location was derived from PLSS - see Help



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 T

Q64 Q16 Q4 Sec Tws Rng

X Y

C 00512 CLW198323 4 1 1 11 23S 28E

588167 3576806*

0

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

12/31/1946 **Plug Date:**

PCW Rcv Date: Source:

Log File Date: PCW Rcv Date:
Pump Type: Pipe Discharge Size:

J. F. KIMMELL

Estimated Yield: 200 GPM

Casing Size: 16.00 Depth Well: 100 feet Depth Water:

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.

2/16/22 9:51 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help



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

C 00512 EXPL

23S 28E 11

588272 3576703*

Driller License:

Driller Company:

BRININSTOOL, M.D.

Drill Start Date:

Driller Name:

BRININSTOOL, M.D.

07/12/1971

Drill Finish Date:

07/17/1971

Plug Date:

Log File Date:

10/15/1971

PCW Rcv Date:

Source:

Shallow

Pump Type: Casing Size: Pipe Discharge Size:

Depth Well:

200 feet

Estimated Yield: Depth Water:

16 feet

Water Bearing Stratifications:

Top Bottom Description

16

35 Shallow Alluvium/Basin Fill

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.

2/16/22 8:36 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help



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 Q

Q64 Q16 Q4 Sec Tws Rng

X Y

C 00512 S 4 1 1 11 23S 28E

588167 3576806*

9

Driller License: Driller Company:

Driller Name: KIMMELL

Drill Start Date: 12/31/1946 **Drill Finish Date:** 12/31/1946

Drill Finish Date: 12/31/1946 Plug Date: PCW Rcv Date: 10/22/1976 Source:

Pump Type:TURBINPipe Discharge Size:3"Estimated Yield:Casing Size:16.00Depth Well:100 feetDepth Water:

Log File Date:

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.

2/16/22 8:35 AM

POINT OF DIVERSION SUMMARY

Shallow

^{*}UTM location was derived from PLSS - see Help



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

NA C 04417 POD1 4 3 3 36 22S 28E

589736 3578874

Driller License: 1789 Driller Company: HRL COMPLIANCE SOLUTIONS, INC

Driller Name: MARK MUMBY

Drill Start Date:03/31/2020Drill Finish Date:03/31/2020Plug Date:Log File Date:05/26/2020PCW Rcv Date:Source:

Pump Type:Pipe Discharge Size:Estimated Yield:Casing Size:Depth Well:55 feetDepth Water:

Casing Perforations: Top Bottom

45 55

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.

2/16/22 8:29 AM

POINT OF DIVERSION SUMMARY



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

C 00512

11 23S 28E 588188 3576775

Driller License: Driller Company: BRININSTOOL, M.D.

Driller Name: BRININSTOOL, M.D.

Drill Start Date: 05/04/1975 **Drill Finish Date:**

05/20/1975

Plug Date:

Log File Date:

05/11/1976

PCW Rcv Date:

10/22/1976

Source:

Shallow

Pump Type:

TURBIN

Pipe Discharge Size:

Estimated Yield: 300 GPM

Casing Size:

16.00

Depth Well:

175 feet

Depth Water:

15 feet

Water Bearing Stratifications:

Top Bottom Description

15

28 Shallow Alluvium/Basin Fill

Casing Perforations:

Top Bottom

> 15 90

Meter Number: 5520

Meter Make:

MCCROMETER

Meter Serial Number: 02-4-1040

Meter Multiplier:

100.0000 Diversion

Number of Dials:

Gallons

Meter Type:

Unit of Measure:

Return Flow Percent:

Usage Multiplier:

Reading Frequency:

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
03/27/2002	2002	0	A	tw		0
05/07/2002	2002	391	A	tw		0.120
06/12/2002	2002	1914	A	tw		0.467
09/03/2002	2002	3920	A	tw		0.616
01/13/2003	2002	4253	A	tw		0.102
04/02/2003	2003	4451	A	tw		0.061
06/04/2003	2003	4729	A	tw		0.085
08/02/2003	2003	4932	A	tw		0.062
10/27/2003	2003	4932	A	tw		0
01/07/2004	2003	4932	A	tw		0
04/27/2004	2004	4932	A	tw		0
07/15/2004	2004	5085	A	tw		0.047
10/20/2004	2004	649	R	tw	Meter Rollover	305.527
01/03/2005	2004	649	A	tw		0
03/01/2005	2005	649	A	tw		0
07/06/2005	2005	675	A	tw		0.008
10/19/2005	2005	675	A	tw		0
01/05/2006	2005	675	A	tw		0
04/06/2006	2006	676	A	tw		0
07/06/2006	2006	676	A	tw		0

01/00/2005	2005	686			
01/09/2007	2007	676	A	tw	
01/03/2008	2007	55046	A	tw	
04/24/2008	2008	85512	A	tw	
07/17/2008	2008	98411	A	tw	
10/02/2008	2008	103913	A	tw	
01/15/2009	2008	104404	A	tw	
04/22/2009	2009	123664	A	tw	
08/04/2009	2009	142056	A	tw	
01/06/2010	2009	160768	A	tw	
06/02/2010	2010	160899	A	tw	
01/12/2011	2010	160899	A	tw	
01/23/2012	2011	170841	A	tw	
3/12/2012	2012	170841	A	tw	
7/24/2012	2012	171317	A	tw	
2/13/2013	2012	171504	A	tw	
1/05/2013	2013	172273	A	tw	
07/22/2014	2014	172369	A	tw	
02/24/2016	2015	172706	A	tw	
08/11/2016	2016	178853	A	tw	
12/27/2016	2016	172959	C	tw	Meter Reading Correction
7/18/2017	2017	173150	A	tw	
1/08/2018	2017	173271	A	tw	
*YTD Met	er Amounts:	Year		Amount	•
		2002		1.305	
		2003		0.208	
		2004		305.574	
		2005		0.008	
		2006		0	1
		2007		16.686	
		2008		15.149	
		2009		17.298	
		2010		0.040	
		2011		3.051	
		2012		0.203	
		2013		0.236	
		2014		0.029	
		2015		0.103	
		2016		0.077	

Meter Number:15518Meter Make:MASTERMeter Serial Number:2680127Meter Multiplier:100.0000Number of Dials:6Meter Type:Diversion

Unit of Measure: Gallons Return Flow Percent:
Usage Multiplier: Reading Frequency:

v

Meter Readings (in Acre-Feet)

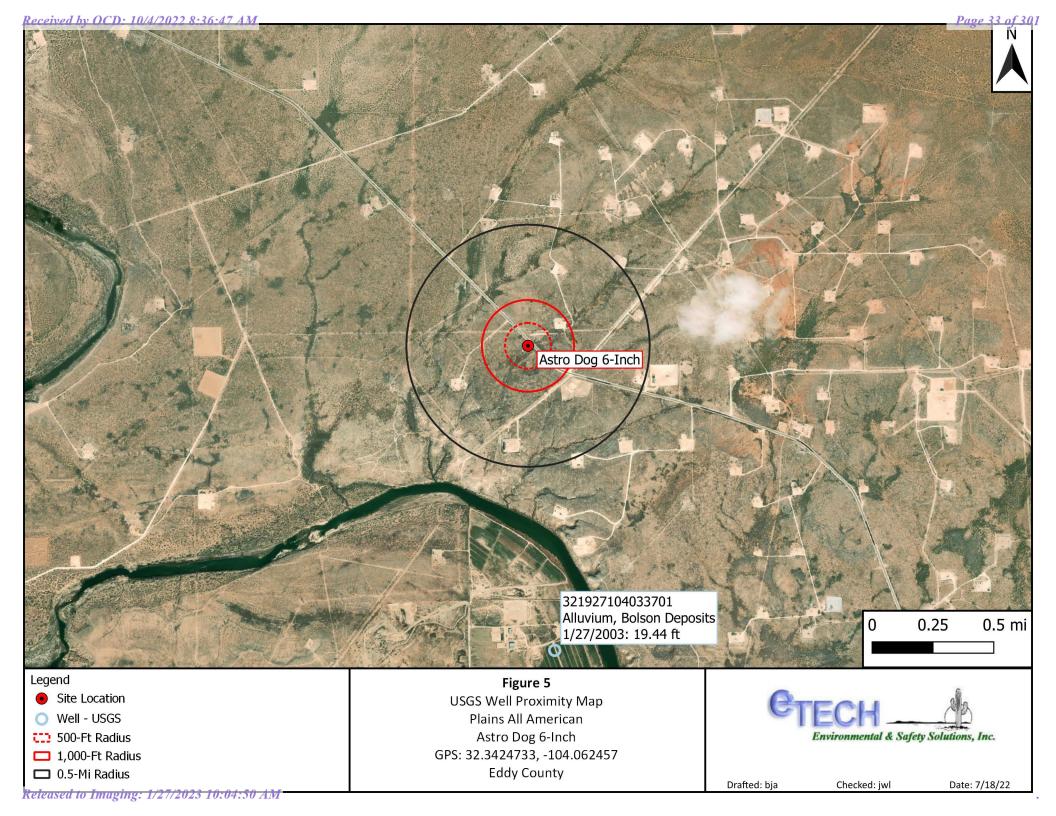
Read DateYearMtr ReadingFlagRdr CommentMtr Amount Online02/02/2012201217ARPT0

04/03/2012 201	12	2594	A	RPT
**YTD Meter Am	nounts: Yea	•	A	Amount
	201	2		0.791

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.

2/16/22 8:36 AM

POINT OF DIVERSION SUMMARY







MENU

23S.28E.11.114421



IMPORTANT Inventory Page 0

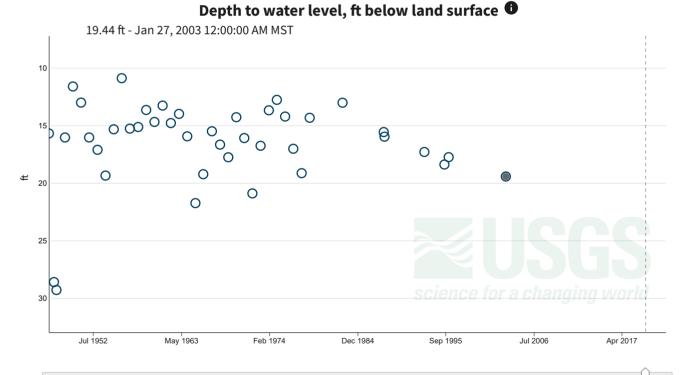
Monitoring location 321927104033701 is associated with a WELL in EDDY COUNTY, NEW MEXICO. Water data back to 1947 are available online.

1 year 10 years

Period of record

Change time span

₹ Retrieve data





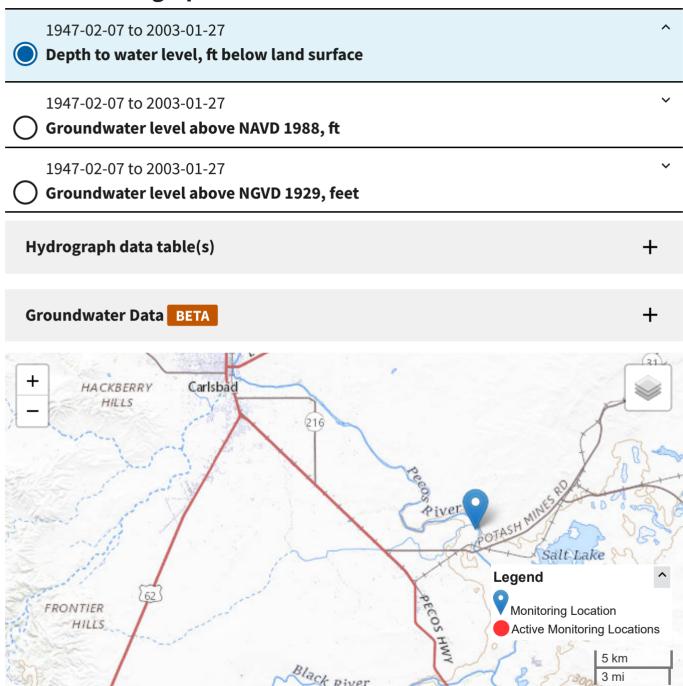
Questions or Comments

Compare to last year

✓ Display median

IMPORTANT Data may be provisional - <u>learn more</u>

Select data to graph



· National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National ...

Interested in understanding how to access the upstream/downstream data? <u>Learn about the Network-Linked Data Index (NLDI)</u>

Summary of All Available Data +

Location Metadata +

Appendix B Soil Profile Log



Soil Profile

Project: Astro I	Dog 6-Inch			Date:	8/17/22
Project Number:	15649	Latitude:	32.3424733	Longitude:	-104.062457
Depth (ft. bgs)	Red	topod industed bed	Des	scription	
3 4 5 6 7	(Vel)	indurated bed	rock		
8 9 10 11					
13 14 15 16					
18 19 20 21 22					
23 24 25 26	***************************************				
27 28 29 30					
31 32 33 34 35					
36 37 38					
39 40	decement to the con-				

Appendix C Photographic Log

Photo Number:

1

Photo Direction:

West

Photo Description:



View of the initial release.

Photo Number:

2

Photo Direction: West

Photo Description:

View of the affected pipeline and surface staining from the initial release.



Photo Number:

3

Photo Direction:Overhead/Bird's Eye

Photo Description:

Aerial view of the excavated area.



Photo Number:

4

Photo Direction:

West-Southwest

Photo Description:

View of the excavated area.



Photo Number: 5

Photo Direction: Southeast

Photo Description:

View of the excavated area.



Photo Number:

6

Photo Direction:

North

Photo Description:

View of the treated area.



Photo Number:

7

Photo Direction:

Northwest

Photo Description:



View of the remediated area after backfilling.

Photo Number: 8 Photo Direction:

West
Photo Description:

View of the remediated area after backfilling.



Photo Number:

9

Photo Direction:

East

Photo Description:



View of the remediated area after backfilling.

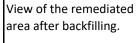
Photo Number:

10

Photo Direction:

East

Photo Description:





Appendix D Laboratory Analytical Reports

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-12054-1

Laboratory Sample Delivery Group: Rural Eddy

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MAMER

Authorized for release by: 3/7/2022 10:13:18 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

3

Ē

7

a

10

12

13

Н

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-12054-1 SDG: Rural Eddy

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	15
Lab Chronicle	18
Certification Summary	20
Method Summary	21
Sample Summary	22
Chain of Custody	23
Receipt Checklists	24

Definitions/Glossary

Client: Etech Environmental & Safety Solutions Job ID: 880-12054-1 Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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.
n	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 Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

Relative Percent Difference, a measure of the relative difference between two points **RPD**

TFF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

Job ID: 880-12054-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-12054-1

Receipt

The samples were received on 3/4/2022 12:13 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 3.1°C

GC VOA

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

GC Semi VOA

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

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

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-12054-1

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Client Sample ID: NSW #1	
Date Collected: 03/03/22 11:30	

Date Received: 03/04/22 12:13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/22 13:00	03/05/22 10:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				03/04/22 13:00	03/05/22 10:25	1
1,4-Difluorobenzene (Surr)	97		70 - 130				03/04/22 13:00	03/05/22 10:25	1
Method: Total BTEX - Total B	TEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/22 20:58	1
Method: 8015 NM - Diesel Rai	nge Organic	s (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/06/22 20:29	1
Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics								-	Diriac
(GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/04/22 13:00	03/05/22 19:15	
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9 <49.9		49.9		mg/Kg mg/Kg			03/05/22 19:15 03/05/22 19:15	1
(GRO)-C6-C10		U			0 0		03/04/22 13:00		1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9	U U	49.9		mg/Kg		03/04/22 13:00	03/05/22 19:15 03/05/22 19:15 <i>Analyzed</i>	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <49.9	U U	49.9 49.9		mg/Kg		03/04/22 13:00 03/04/22 13:00	03/05/22 19:15 03/05/22 19:15	1 1 1 Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 <49.9 %Recovery	U U	49.9 49.9 Limits		mg/Kg		03/04/22 13:00 03/04/22 13:00 Prepared 03/04/22 13:00	03/05/22 19:15 03/05/22 19:15 <i>Analyzed</i>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.9 <49.9 %Recovery 93 97	U U Qualifier	49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg		03/04/22 13:00 03/04/22 13:00 Prepared 03/04/22 13:00	03/05/22 19:15 03/05/22 19:15 Analyzed 03/05/22 19:15	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 <49.9 %Recovery 93 97 Chromatogra	U U Qualifier	49.9 49.9 Limits 70 - 130 70 - 130	MDL	mg/Kg mg/Kg		03/04/22 13:00 03/04/22 13:00 Prepared 03/04/22 13:00	03/05/22 19:15 03/05/22 19:15 Analyzed 03/05/22 19:15	1 1 1 Dil Fac

Client Sample ID: SSW #1 Lab Sample ID: 880-12054-2 Date Collected: 03/03/22 11:45 **Matrix: Solid**

Date Received: 03/04/22 12:13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
m-Xylene & p-Xylene	< 0.00397	U	0.00397		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/04/22 13:00	03/05/22 10:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				03/04/22 13:00	03/05/22 10:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130				03/04/22 13:00	03/05/22 10:46	1

Date Received: 03/04/22 12:13

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-12054-2

03/04/22 13:00 03/05/22 19:36 03/04/22 13:00 03/05/22 19:36

Client Sample ID: SSW #1 Date Collected: 03/03/22 11:45

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	r	mg/Kg		03/04/22 13:00	03/05/22 19:36	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0	r	mg/Kg		03/04/22 13:00	03/05/22 19:36	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0	r	mg/Kg		03/04/22 13:00	03/05/22 19:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	93	70 - 130
o-Terphenyl	89	70 - 130

Method. 300.0 - Amons, for C	ili olilatograpily - oolub	16					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273	4.95	mg/Kg			03/04/22 19:26	1

Client Sample ID: ESW #1 Lab Sample ID: 880-12054-3

Date Collected: 03/03/22 12:00 Date Received: 03/04/22 12:13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 13:00	03/05/22 11:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/04/22 13:00 03/05/22 11:	6 1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/04/22 13:00 03/05/22 11:	6 1

Method: Total BTEX - Total BTEX Calculation

Released to Imaging: 1/27/2023 10:04:50 AM

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg	_	_	03/06/22 20:58	1

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

Analyte	J <u></u>	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	55.5		49.9		ma/Ka			03/06/22 20:29	1	

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

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		03/04/22 13:00	03/05/22 19:57	1
(GRO)-C6-C10								
Diesel Range Organics (Over	55.5		49.9	mg/Kg		03/04/22 13:00	03/05/22 19:57	1
C40 C20\								

C10-C28)

Eurofins Midland

Matrix: Solid

Date Received: 03/04/22 12:13

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Client Sample ID: ESW #1 Lab Sample ID: 880-12054-3 Date Collected: 03/03/22 12:00

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Analyte	Result	Qualifier	RL	MDL Uni	t D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/	Kg	03/04/22 13:00	03/05/22 19:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			03/04/22 13:00	03/05/22 19:57	1
o-Terphenyl	92		70 - 130			03/04/22 13:00	03/05/22 19:57	1

Method: 300.0 - Anions, Ion	Chromatography - Soluble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed

Chloride 208 4.96 mg/Kg 03/04/22 19:35

Client Sample ID: ESW #2 Lab Sample ID: 880-12054-4 Date Collected: 03/03/22 12:15 **Matrix: Solid**

Date Received: 03/04/22 12:13

Method: 8021B - Volatile Oi	ganic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/22 13:00	03/05/22 11:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				03/04/22 13:00	03/05/22 11:27	1
1,4-Difluorobenzene (Surr)	99		70 - 130				03/04/22 13:00	03/05/22 11:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	ma/Ka			03/06/22 20:58	1

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

Analyte	Result Qua	alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	49.8	mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		03/04/22 13:00	03/05/22 20:19	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		03/04/22 13:00	03/05/22 20:19	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/04/22 13:00	03/05/22 20:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87	70 - 130	03/04/22 13:00	03/05/22 20:19	1
o-Terphenyl	86	70 - 130	03/04/22 13:00	03/05/22 20:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.8	5.05	mg/Kg			03/05/22 19:21	1

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Client Sample ID: FL-1 @ 14'

Lab Sample ID: 880-12054-5

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Date Collected: 03/03/22 12:30 Date Received: 03/04/22 12:13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
Toluene	< 0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
m-Xylene & p-Xylene	< 0.00399	U	0.00399		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/22 13:00	03/05/22 11:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				03/04/22 13:00	03/05/22 11:47	1
1,4-Difluorobenzene (Surr)	98		70 - 130				03/04/22 13:00	03/05/22 11:47	1
Method: Total BTEX - Total B	ΓEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/22 20:58	1
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/06/22 20:29	1
Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 20:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 20:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				03/04/22 13:00	03/05/22 20:41	1

5.00 Chloride 328 mg/Kg 03/04/22 21:07 Lab Sample ID: 880-12054-6 Client Sample ID: FL-2 @ 12'

RL

MDL Unit

Prepared

Analyzed

Matrix: Solid

Date Collected: 03/03/22 12:45 Date Received: 03/04/22 12:13

Analyte

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/04/22 13:00	03/05/22 12:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101	-	70 - 130				03/04/22 13:00	03/05/22 12:08	1
1.4-Difluorobenzene (Surr)	97		70 - 130				03/04/22 13:00	03/05/22 12:08	1

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch SDG: Rural Eddy

Client Sample ID: FL-2 @ 12'

Date Collected: 03/03/22 12:45 Date Received: 03/04/22 12:13

Chloride

Lab Sample ID: 880-12054-6

Matrix: Solid

Job ID: 880-12054-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/06/22 20:58	1
Method: 8015 NM - Diesel Ran	ige Organic	s (DRO) (0	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/06/22 20:29	1
Method: 8015B NM - Diesel Ra	ange Organi	ics (DRO)	(GC)						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 21:02	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 21:02	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 13:00	03/05/22 21:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				03/04/22 13:00	03/05/22 21:02	1
o-Terphenyl	93		70 - 130				03/04/22 13:00	03/05/22 21:02	1
Method: 300.0 - Anions, Ion C	hromatogra	nhy - Soli	ıble						

4.98

357

mg/Kg

03/04/22 21:16

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1

SDG: Rural Eddy

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11926-A-1-A MS	Matrix Spike	101	100	
880-11926-A-1-B MSD	Matrix Spike Duplicate	101	100	
880-12054-1	NSW #1	102	97	
880-12054-2	SSW #1	103	97	
880-12054-3	ESW #1	103	95	
880-12054-4	ESW #2	104	99	
880-12054-5	FL-1 @ 14'	105	98	
880-12054-6	FL-2 @ 12'	101	97	
LCS 880-20683/1-A	Lab Control Sample	101	101	
LCSD 880-20683/2-A	Lab Control Sample Dup	104	92	
MB 880-20683/5-A	Method Blank	100	94	
MB 880-20798/5-A	Method Blank	97	94	

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)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12045-A-1-E MS	Matrix Spike	120	100	
880-12045-A-1-F MSD	Matrix Spike Duplicate	115	100	
880-12054-1	NSW #1	93	97	
880-12054-2	SSW #1	93	89	
880-12054-3	ESW #1	90	92	
880-12054-4	ESW #2	87	86	
880-12054-5	FL-1 @ 14'	90	93	
880-12054-6	FL-2 @ 12'	92	93	
LCS 880-20883/2-A	Lab Control Sample	114	100	
LCSD 880-20883/3-A	Lab Control Sample Dup	105	98	
MB 880-20883/1-A	Method Blank	100	110	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Etech Environmental & Safety Solutions

Job ID: 880-12054-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20683/5-A

Lab Sample ID: LCS 880-20683/1-A

Matrix: Solid

Matrix: Solid

o-Xylene

Analysis Batch: 20854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20683

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 13:00	03/05/22 09:22	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100	70 - 130	03/02/22 13:00	03/05/22 09:22	
1,4-Difluorobenzene (Surr)	94	70 - 130	03/02/22 13:00	03/05/22 09:22	1

Client Sample ID: Lab Control Sample

70 - 130

104

Prep Type: Total/NA

Prep Batch: 20683

Prep Type: Total/NA

Prep Batch: 20683

Analysis Batch: 20854 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.1065 mg/Kg 106 Toluene 0.100 mg/Kg 70 - 130 0.1028 103 Ethylbenzene 0.100 0.09916 mg/Kg 99 70 - 130 0.200 m-Xylene & p-Xylene 0.2025 mg/Kg 101 70 - 130

0.100

0.1042

mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-20683/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 20854

	Spike	LCSD LCSD				%Rec.		RPD
Analyte	Added	Result Qualif	ier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1120	mg/Kg		112	70 - 130	5	35
Toluene	0.100	0.1099	mg/Kg		110	70 - 130	7	35
Ethylbenzene	0.100	0.1066	mg/Kg		107	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2183	mg/Kg		109	70 - 130	7	35
o-Xylene	0.100	0.1112	mg/Kg		111	70 - 130	6	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1.4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-11926-A-1-A MS

Matrix: Solid Analysis Batch: 20854									Prep Type: Prep Bate	: Total/NA ch: 20683
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.09263		mg/Kg		93	70 - 130	
Toluene	<0.00199	U	0.0996	0.08949		mg/Kg		90	70 - 130	

Eurofins Midland

Client Sample ID: Matrix Spike

Page 11 of 24

QC Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

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

Lab Sample ID: 880-11926-A-1-A MS

Lab Sample ID: 880-11926-A-1-B MSD

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20683 MS MS Sample Sample Spike %Rec.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene < 0.00199 U 0.0996 0.08636 mg/Kg 87 70 - 130 m-Xylene & p-Xylene <0.00398 U 0.199 0.1774 mg/Kg 89 70 - 130 <0.00199 U 0.0996 0.08810 88 o-Xylene mg/Kg 70 _ 130

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 101 1,4-Difluorobenzene (Surr) 70 - 130 100

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 20854

Prep Batch: 20683 %Rec. **RPD**

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Analyte <0.00199 U 0.100 0.09735 70 - 130 5 35 Benzene mg/Kg 97 0.09295 93 70 - 130 35 Toluene <0.00199 U 0.100 mg/Kg Ethylbenzene <0.00199 U 0.100 0.08974 mg/Kg 89 70 - 130 4 35 m-Xylene & p-Xylene <0.00398 U 0.201 0.1842 92 70 - 130 35 mq/Kq 0.100 0.08997 90 2 35 o-Xylene <0.00199 U mg/Kg 70 - 130

MSD MSD

%Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 101 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: MB 880-20798/5-A

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20798

MB MB Result Qualifier MDL Unit Analyte RL **Prepared** Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 03/03/22 16:00 03/04/22 22:26 1 Toluene <0.00200 U 0.00200 mg/Kg 03/03/22 16:00 03/04/22 22:26 Ethylbenzene <0.00200 U 0.00200 mg/Kg 03/03/22 16:00 03/04/22 22:26 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 03/03/22 16:00 03/04/22 22:26 03/03/22 16:00 03/04/22 22:26 o-Xylene <0.00200 U 0.00200 mg/Kg 03/03/22 16:00 03/04/22 22:26 Xylenes, Total <0.00400 U 0.00400 mq/Kq

MB MB

Surrogate Qualifier I imits Analyzed Dil Fac %Recovery Prepared 4-Bromofluorobenzene (Surr) 70 - 130 03/03/22 16:00 03/04/22 22:26 97 94 03/03/22 16:00 03/04/22 22:26 1,4-Difluorobenzene (Surr) 70 - 130

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

Lab Sample ID: MB 880-20883/1-A

Matrix: Solid

Analysis Batch: 20957

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

Prep Batch: 20883

MB MB Result Qualifier MDL Unit **Analyte** RL Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 03/04/22 11:31 03/05/22 12:16 mg/Kg

(GRO)-C6-C10

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

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

Lab Sample ID: MB 880-20883/1-A

Lab Sample ID: LCS 880-20883/2-A

Matrix: Solid

Analysis Batch: 20957

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 20883

ı		1410	1410							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 11:31	03/05/22 12:16	1
	Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 11:31	03/05/22 12:16	1

MB MB

MR ME

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/04/22 11:31	03/05/22 12:16	1
o-Terphenyl	110		70 - 130	03/04/22 11:31	03/05/22 12:16	1

Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 20957** Prep Batch: 20883 LCS LCS Spike %Rec.

Added Result Qualifier Limits Analyte Unit D %Rec Gasoline Range Organics 1000 919.2 70 - 130 mg/Kg 92 (GRO)-C6-C10 Diesel Range Organics (Over 1000 919.8 mg/Kg 92 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	114	70 - 130
o-Terphenyl	100	70 - 130

Lab Sample ID: LCSD 880-20883/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid

Analysis Batch: 20957

Prep Type: Total/NA Prep Batch: 20883

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	861.0		mg/Kg		86	70 - 130	7	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	899.9		mg/Kg		90	70 - 130	2	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 880-12045-A-1-E MS

Matrix: Solid

Analysis Batch: 20957

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 20883

Sample Sample Spike MS MS %Rec. **Analyte** Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <50.0 U 1000 1029 103 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 1003 mg/Kg 98 70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	100		70 - 130

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1

SDG: Rural Eddy

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

Lab Sample ID: 880-12045-A-1-F MSD

Matrix: Solid

Analysis Batch: 20957

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 20883

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	998.5		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over	<50.0	U	998	997.5		mg/Kg		97	70 - 130	1	20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	100		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20870/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20923

MB MB

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/04/22 15:45	1

Lab Sample ID: LCS 880-20870/2-A

Matrix: Solid

Analysis Batch: 20923

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	- <u> </u>	250	253.0		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-20870/3-A

Matrix: Solid

Analysis Batch: 20923

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	253.0		ma/Ka		101	90 - 110		20

Lab Sample ID: 880-12045-A-11-G MS

Matrix: Solid

Analysis Batch: 20923

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	12.1		253	265.5		ma/Ka		100	90 - 110	

Lab Sample ID: 880-12045-A-11-H MSD

Matrix: Solid

Analysis Batch: 20923

Alialysis Dalcii. 20323											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	12.1		253	263.1		mg/Kg		99	90 - 110	1	20

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

GC VOA

Prep Batch: 20683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Total/NA	Solid	5035	
880-12054-2	SSW #1	Total/NA	Solid	5035	
880-12054-3	ESW #1	Total/NA	Solid	5035	
880-12054-4	ESW #2	Total/NA	Solid	5035	
880-12054-5	FL-1 @ 14'	Total/NA	Solid	5035	
880-12054-6	FL-2 @ 12'	Total/NA	Solid	5035	
MB 880-20683/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20683/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20683/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11926-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-11926-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 20798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20798/5-A	Method Blank	Total/NA	Solid	5035	_

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Total/NA	Solid	8021B	20683
880-12054-2	SSW #1	Total/NA	Solid	8021B	20683
880-12054-3	ESW #1	Total/NA	Solid	8021B	20683
880-12054-4	ESW #2	Total/NA	Solid	8021B	20683
880-12054-5	FL-1 @ 14'	Total/NA	Solid	8021B	20683
880-12054-6	FL-2 @ 12'	Total/NA	Solid	8021B	20683
MB 880-20683/5-A	Method Blank	Total/NA	Solid	8021B	20683
MB 880-20798/5-A	Method Blank	Total/NA	Solid	8021B	20798
LCS 880-20683/1-A	Lab Control Sample	Total/NA	Solid	8021B	20683
LCSD 880-20683/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20683
880-11926-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	20683
880-11926-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20683

Analysis Batch: 21000

Lab Sample ID 880-12054-1	Client Sample ID NSW #1	Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch
880-12054-2	SSW #1	Total/NA	Solid	Total BTEX	
880-12054-3	ESW #1	Total/NA	Solid	Total BTEX	
880-12054-4	ESW #2	Total/NA	Solid	Total BTEX	
880-12054-5	FL-1 @ 14'	Total/NA	Solid	Total BTEX	
880-12054-6	FL-2 @ 12'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Total/NA	Solid	8015NM Prep	
880-12054-2	SSW #1	Total/NA	Solid	8015NM Prep	
880-12054-3	ESW #1	Total/NA	Solid	8015NM Prep	
880-12054-4	ESW #2	Total/NA	Solid	8015NM Prep	
880-12054-5	FL-1 @ 14'	Total/NA	Solid	8015NM Prep	
880-12054-6	FL-2 @ 12'	Total/NA	Solid	8015NM Prep	
MB 880-20883/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

GC Semi VOA (Continued)

Prep Batch: 20883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-20883/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20883/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12045-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12045-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Total/NA	Solid	8015B NM	20883
880-12054-2	SSW #1	Total/NA	Solid	8015B NM	20883
880-12054-3	ESW #1	Total/NA	Solid	8015B NM	20883
880-12054-4	ESW #2	Total/NA	Solid	8015B NM	20883
880-12054-5	FL-1 @ 14'	Total/NA	Solid	8015B NM	20883
880-12054-6	FL-2 @ 12'	Total/NA	Solid	8015B NM	20883
MB 880-20883/1-A	Method Blank	Total/NA	Solid	8015B NM	20883
LCS 880-20883/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20883
LCSD 880-20883/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20883
880-12045-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	20883
880-12045-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20883

Analysis Batch: 20980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Total/NA	Solid	8015 NM	
880-12054-2	SSW #1	Total/NA	Solid	8015 NM	
880-12054-3	ESW #1	Total/NA	Solid	8015 NM	
880-12054-4	ESW #2	Total/NA	Solid	8015 NM	
880-12054-5	FL-1 @ 14'	Total/NA	Solid	8015 NM	
880-12054-6	FL-2 @ 12'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Soluble	Solid	DI Leach	
880-12054-2	SSW #1	Soluble	Solid	DI Leach	
880-12054-3	ESW #1	Soluble	Solid	DI Leach	
880-12054-4	ESW #2	Soluble	Solid	DI Leach	
880-12054-5	FL-1 @ 14'	Soluble	Solid	DI Leach	
880-12054-6	FL-2 @ 12'	Soluble	Solid	DI Leach	
MB 880-20870/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20870/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20870/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12045-A-11-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12045-A-11-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-1	NSW #1	Soluble	Solid	300.0	20870
880-12054-2	SSW #1	Soluble	Solid	300.0	20870
880-12054-3	ESW #1	Soluble	Solid	300.0	20870
880-12054-4	ESW #2	Soluble	Solid	300.0	20870
880-12054-5	FL-1 @ 14'	Soluble	Solid	300.0	20870

Eurofins Midland

3/7/2022

Page 16 of 24

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

HPLC/IC (Continued)

Analysis Batch: 20923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12054-6	FL-2 @ 12'	Soluble	Solid	300.0	20870
MB 880-20870/1-A	Method Blank	Soluble	Solid	300.0	20870
LCS 880-20870/2-A	Lab Control Sample	Soluble	Solid	300.0	20870
LCSD 880-20870/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20870
880-12045-A-11-G MS	Matrix Spike	Soluble	Solid	300.0	20870
880-12045-A-11-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20870

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-12054-1

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Date Collected: 03/03/22 11:30 Date Received: 03/04/22 12:13

Client Sample ID: NSW #1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20683	03/04/22 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 10:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	20883 20957	03/04/22 13:00 03/05/22 19:15		XEN MID XEN MID
Soluble Soluble	Leach Analysis	DI Leach 300.0		1	5.05 g	50 mL	20870 20923	03/04/22 13:50 03/04/22 19:17		XEN MID XEN MID

Client Sample ID: SSW #1 Lab Sample ID: 880-12054-2 **Matrix: Solid**

Date Collected: 03/03/22 11:45 Date Received: 03/04/22 12:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20683	03/04/22 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 10:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20883	03/04/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/05/22 19:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20870	03/04/22 13:50	СН	XEN MID
Soluble	Analysis	300.0		1			20923	03/04/22 19:26	SC	XEN MID

Client Sample ID: ESW #1 Lab Sample ID: 880-12054-3

Date Collected: 03/03/22 12:00 Date Received: 03/04/22 12:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20683	03/04/22 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 11:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20883	03/04/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/05/22 19:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20870	03/04/22 13:50	CH	XEN MID
Soluble	Analysis	300.0		1			20923	03/04/22 19:35	SC	XEN MID

Client Sample ID: ESW #2 Lab Sample ID: 880-12054-4 Date Collected: 03/03/22 12:15 **Matrix: Solid**

Date Received: 03/04/22 12:13

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	20683	03/04/22 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 11:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID

Eurofins Midland

Matrix: Solid

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-12054-4

Matrix: Solid

Job ID: 880-12054-1

SDG: Rural Eddy

Client Sample ID: ESW #2 Date Collected: 03/03/22 12:15 Date Received: 03/04/22 12:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	20883	03/04/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/05/22 20:19	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20870	03/04/22 13:50	CH	XEN MID
Soluble	Analysis	300.0		1			20923	03/05/22 19:21	SC	XEN MID

Client Sample ID: FL-1 @ 14' Lab Sample ID: 880-12054-5 Date Collected: 03/03/22 12:30 **Matrix: Solid**

Date Received: 03/04/22 12:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20683	03/04/22 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 11:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20883	03/04/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/05/22 20:41	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20870	03/04/22 13:50	СН	XEN MID
Soluble	Analysis	300.0		1			20923	03/04/22 21:07	SC	XEN MID

Lab Sample ID: 880-12054-6 Client Sample ID: FL-2 @ 12' Date Collected: 03/03/22 12:45 **Matrix: Solid**

Date Received: 03/04/22 12:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20683	03/04/22 13:00	KL	XEN MI
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 12:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21000	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20980	03/06/22 20:29	AJ	XEN MI
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20883	03/04/22 13:00	DM	XEN MI
Total/NA	Analysis	8015B NM		1			20957	03/05/22 21:02	AJ	XEN MI
Soluble	Leach	DI Leach			5.02 g	50 mL	20870	03/04/22 13:50	СН	XEN MII
Soluble	Analysis	300.0		1			20923	03/04/22 21:16	SC	XEN MII

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

Laboratory: Eurofins Midland

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

Authority	F	Program	Identification Number	Expiration Date
Texas	N	NELAP	T104704400-21-22	06-30-22
The following analyte the agency does not o		port, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Midland

1

11

13

14

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12054-1 SDG: Rural Eddy

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-12054-1	NSW #1	Solid	03/03/22 11:30	03/04/22 12:13
880-12054-2	SSW #1	Solid	03/03/22 11:45	03/04/22 12:13
880-12054-3	ESW #1	Solid	03/03/22 12:00	03/04/22 12:13
880-12054-4	ESW #2	Solid	03/03/22 12:15	03/04/22 12:13
880-12054-5	FL-1 @ 14'	Solid	03/03/22 12:30	03/04/22 12:13
880-12054-6	FL-2 @ 12'	Solid	03/03/22 12:45	03/04/22 12:13

3

4

_

9

10

12

13

12

Chain of Custody

Work Order No: 17054

3/7/2022

Page 23 of 24

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

								(icinta (JA (III	3, 443-0	,000					w	ww.xer	nco.c	com	Page	of	1
Project Manager	Joel Lowry	/			Bill to. (if differ	ent)	Par	will.	13	2444	الحد،			Γ					-	Comments		
Company Name	Etech Env	ironmental &	Safety		Company Na			ius		incl				F	Program U	ST/PST	PRP	□Br	own	fields RRC	Superfune	d []
Address	3100 Plain	s Highway			Address					-			***************************************		State of						•	
City, State ZIP	Lovington,	NM, 88260			City, State ZI	p.	17							F	Reporting L	evel I	Level I	F	PST/U	UST TRR	Level I	
Phone.	575-396-2	378		Emai	I Email Resu	lts to <u>F</u>	РМ@е	teche	nv,cor	<u>n</u> + Cl	ient				Deliverables	EDD		ΑE	DaPT	Other		
Project Name	Astro	DOG 6	o-Inch	т	urn Around	T					ΑN	IALYS	IS REQU	IES	T			- Colorando do Caraciona		Preserva	tive Code	es
Project Number	156	,		Rou	tine 🗆								T	T			T	T		HNO3 HN		
Project Location	Rusc	1 Ede	بالم	Rus	h 🕱	e e								\top			_	\top		H2S04 H2		
Sampler's Name			7	Due	Date	s/Preservative													- 1	HCL. HL		
PO #·	525	2022-	012			ser						İ			İ				/ 1	None NO		
SAMPLE REC			k: Yes 😡	Wet los	Yes No	ď				ļ										NaOH Na		
Temperature (°C):		2/3.1		Thermomete	er ID															MeOH Me		
Received Intact:		Yes No		128		Containe			Ĕ			1								Zn Acetate+ Na	OH Zn	ĺ
Cooler Custody Sea Sample Custody Se		s No (N/A s No (N/A			-0.	15	E300	- 12		9001	454						-			TAT starts the c	lay recevied ved by 4 30p	
Sample ide	entification	Matri	X Date Sampled	Time Sampled	Depth	Number Code	Chloride E300	BTEX 8021	TPH Modified	TPH TX1005	Ru									Sample	Comment	ts
NSW #1		5	313/72	1130			K	X	X		1			\top				\top				
55W #1				11 45			1	1						1				1				
ESW#1				12 00		1								\top				\top				
ESW#Z	····			12:15					T					\dagger		1 (10) (10)						
Ft-10141				12 30	14'		H															
FL-2012'		J	J	12:45	121		1	1	V		1			+								_
													***************************************	十								
														1		880-120	054 Ch	ain c	of Cu	18tody 18 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 1911 19	11	
														1		1 1	1	ı		1		
														\top			\neg	7				
Total 200.7 / Circle Method	d(s) and Me		nalyzed	TCLP / SF	PLP 6010 8R	CRA	Sb A	s Ba	Be C	Cd Cr	Co C	u Pb	Mn Mo	Ni	Se Ag T	ΊŲ	Se Ag	SiC		Na Sr Tl Sn 31 / 245.1 / 74		Hg
Notice Signature of this	document and re	linquishment of s	amples constitute	s a valid purcha	se order from clier	t compa	ny to Ye	nco He	affiliates	and sub	contract	ore # ac	clone stand	d 4		- distant	****					

of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75,00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1) cel jum	(h)	3/4/12 17 73	2	***************************************	
3 4 0			4		
5			6		

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-12054-1 SDG Number: Rural Eddy

List Source: Eurofins Midland

Login Number: 12054 List Number: 1

Creator: Kramer, Jessica

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

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-12301-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MAMER

Authorized for release by: 3/11/2022 6:37:39 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

_

6

10

12

13

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-inch Laboratory Job ID: 880-12301-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	16
Lab Chronicle	19
Certification Summary	21
Method Summary	22
Sample Summary	23
Chain of Custody	24
Receint Checklists	25

3

4

6

8

9

10

12

13

14

DL, RA, RE, IN

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

MQL NC

ND

NEG

POS

PQL

QC **RER**

RL

RPD

TEF

TEQ

TNTC

PRES

ML MPN

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM Project/Site: Astro Dog 6-inch

Project/Site: Astro Dog 6-inch		SDG: Rural Eddy C
Qualifiers		
GC VOA		
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VO	A	
Qualifier	Qualifier Description	
S1-	Surrogate recovery exceeds control limits, low 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.	
n	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)	

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit Minimum Level (Dioxin)

Most Probable Number Method Quantitation Limit

Not Calculated

Negative / Absent

Positive / Present

Presumptive **Quality Control**

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM

Job ID: 880-12301-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-12301-1

Receipt

The samples were received on 3/10/2022 3:52 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 3.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21365 and analytical batch 880-21366 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

Client Sample ID: NW #2

Date Received: 03/10/22 15:52

Lab Sample ID: 880-12301-1 Date Collected: 03/10/22 00:00

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 14:51	
Toluene	0.00564		0.00199		mg/Kg		03/11/22 08:50	03/11/22 14:51	
Ethylbenzene	0.00368		0.00199		mg/Kg		03/11/22 08:50	03/11/22 14:51	
m-Xylene & p-Xylene	0.0747		0.00398		mg/Kg		03/11/22 08:50	03/11/22 14:51	
o-Xylene	0.0272		0.00199		mg/Kg		03/11/22 08:50	03/11/22 14:51	
Xylenes, Total	0.102		0.00398		mg/Kg		03/11/22 08:50	03/11/22 14:51	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	101		70 - 130				03/11/22 08:50	03/11/22 14:51	
1,4-Difluorobenzene (Surr)	93		70 - 130				03/11/22 08:50	03/11/22 14:51	
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.111		0.00398		mg/Kg			03/11/22 18:22	
- Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	910		49.9		mg/Kg			03/11/22 18:20	
- Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 10:46	
Diesel Range Organics (Over	810		49.9		mg/Kg		03/11/22 08:28	03/11/22 10:46	
C10-C28)			40.0				00/44/00 00 00	00/44/00 40 40	
Oll Range Organics (Over	100		49.9		mg/Kg		03/11/22 08:28	03/11/22 10:46	
C28-C36)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	81		70 - 130				03/11/22 08:28	03/11/22 10:46	
o-Terphenyl	74		70 - 130				03/11/22 08:28	03/11/22 10:46	
- Method: 300.0 - Anions, Ion Cl	nromatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client Sample ID: SW #2 Lab Sample ID: 880-12301-2 Date Collected: 03/10/22 00:00 Matrix: Solid

Date Received: 03/10/22 15:52

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/11/22 08:50	03/11/22 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				03/11/22 08:50	03/11/22 15:11	1
1,4-Difluorobenzene (Surr)	95		70 ₋ 130				03/11/22 08:50	03/11/22 15:11	1

Eurofins Midland

3/11/2022

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

Client Sample ID: SW #2

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52 Lab Sample ID: 880-12301-2

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/11/22 18:22	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/11/22 18:20	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 11:51	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 11:51	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 11:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				03/11/22 08:28	03/11/22 11:51	1
o-Terphenyl	119		70 - 130				03/11/22 08:28	03/11/22 11:51	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	446		4.99		mg/Kg			03/11/22 15:31	1

Client Sample ID: FL-3 @ 14' Lab Sample ID: 880-12301-3

Date Collected: 03/10/22 00:00

Date Received: 03/10/22 15:52

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 15:32	
Toluene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 15:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 15:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/11/22 08:50	03/11/22 15:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 15:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/11/22 08:50	03/11/22 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/11/22 08:50	03/11/22 15:32	1
1,4-Difluorobenzene (Surr) Method: Total BTEX - Total BT			70 - 130				03/11/22 08:50	03/11/22 15:32	
Method: Total BTEX - Total BT Analyte	EX Calculation	Qualifier	RL	MDL	Unit ma/Ka	<u>D</u>	03/11/22 08:50 Prepared	03/11/22 15:32 Analyzed 03/11/22 18:22	
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Rang	EX Calculation Result < 0.00399 ge Organics (DR)	U (GC)	RL 0.00399		mg/Kg		Prepared	Analyzed 03/11/22 18:22	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Rang Analyte	EX Calculation Result <	U	RL		mg/Kg	<u>D</u>		Analyzed 03/11/22 18:22 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Range	EX Calculation Result < 0.00399 ge Organics (DR)	U (GC)	RL 0.00399		mg/Kg		Prepared	Analyzed 03/11/22 18:22	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Rang Analyte Total TPH	EX Calculation Result <0.00399 ge Organics (DR) Result 999	O) (GC) Qualifier	RL		mg/Kg		Prepared	Analyzed 03/11/22 18:22 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Rang	EX Calculation Result <0.00399 ge Organics (DR) Result 999 nge Organics (D	O) (GC) Qualifier	RL	MDL	mg/Kg		Prepared	Analyzed 03/11/22 18:22 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Rang Analyte	EX Calculation Result <0.00399 ge Organics (DR) Result 999 nge Organics (D	O) (GC) Qualifier RO) (GC) Qualifier	RL 0.00399 RL 50.0	MDL	mg/Kg Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 03/11/22 18:22 Analyzed 03/11/22 18:20	Dil Fac

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

Client Sample ID: FL-3 @ 14'

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52

Lab Sample ID: 880-12301-3

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over	129		50.0		mg/Kg		03/11/22 08:28	03/11/22 12:13	1
C28-C36)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				03/11/22 08:28	03/11/22 12:13	1
o-Terphenyl	111		70 - 130				03/11/22 08:28	03/11/22 12:13	1
- Method: 300.0 - Anions, Ion C	hromatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	492		4.97		mg/Kg			03/11/22 15:40	1

Client Sample ID: FL-4 @ 14' Lab Sample ID: 880-12301-4

Date Collected: 03/10/22 00:00

Date Received: 03/10/22 15:52

Matrix: Solid

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
Toluene	< 0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/11/22 08:50	03/11/22 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				03/11/22 08:50	03/11/22 15:53	1
1,4-Difluorobenzene (Surr)	104		70 - 130				03/11/22 08:50	03/11/22 15:53	1

Method: Total BTEX - Total BTEX C	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/11/22 18:22	1

Method: 8015 NM - Diesel Range C	Organics (DRC)) (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Total TPH	131		49.9		mg/Kg				03/11/22 18:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 12:34	1
Diesel Range Organics (Over C10-C28)	131		49.9		mg/Kg		03/11/22 08:28	03/11/22 12:34	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 12:34	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	100		70 - 130				03/11/22 08:28	03/11/22 12:34	1
o-Terphenyl	96		70 - 130				03/11/22 08:28	03/11/22 12:34	1

RL

4.96

MDL Unit

mg/Kg

Analyzed

03/11/22 15:49

Prepared

Result Qualifier

391

Eurofins Midland

Dil Fac

Analyte

Chloride

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

SDG: Rural Eddy Co., NM

Client Sample ID: FL-5 @ 14.5'

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52 Lab Sample ID: 880-12301-5

Matrix: Solid

Job ID: 880-12301-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/11/22 08:50	03/11/22 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				03/11/22 08:50	03/11/22 16:13	1
1,4-Difluorobenzene (Surr)	95		70 - 130				03/11/22 08:50	03/11/22 16:13	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/11/22 18:22	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	227		50.0		mg/Kg			03/11/22 18:20	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/11/22 08:28	03/11/22 12:57	1
Diesel Range Organics (Over C10-C28)	227		50.0		mg/Kg		03/11/22 08:28	03/11/22 12:57	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 08:28	03/11/22 12:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130				03/11/22 08:28	03/11/22 12:57	1
o-Terphenyl	113		70 - 130				03/11/22 08:28	03/11/22 12:57	1
•		Colubia							
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chr Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FL-6 @ 14.5'

Method: 8021B - Volatile Organic Compounds (GC)

Result Qualifier

<0.00200 U

<0.00200 U

<0.00200 U

<0.00399 U

<0.00200 U

Date Collected: 03/10/22 00:00

Date Received: 03/10/22 15:52

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Prepared	Analyzed	Dil Fac
03/11/22 08:45	03/11/22 13:18	1
03/11/22 08:45	03/11/22 13:18	1
03/11/22 08:45	03/11/22 13:18	1

03/11/22 13:18

03/11/22 13:18

Lab Sample ID: 880-12301-6

Matrix: Solid

Xylenes, Total	<0.00399	U	0.00399	mg/Kg	03/11/22 08:45	03/11/22 13:18	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		03/11/22 08:45	03/11/22 13:18	1
1,4-Difluorobenzene (Surr)	105		70 - 130		03/11/22 08:45	03/11/22 13:18	1

RL

0.00200

0.00200

0.00200

0.00399

0.00200

MDL Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

03/11/22 08:45

03/11/22 08:45

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

Client Sample ID: FL-6 @ 14.5'

Date Collected: 03/10/22 00:00

Lab Sample ID: 880-12301-6

Matrix: Solid

Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/11/22 18:22	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	274		49.9		mg/Kg			03/11/22 18:20	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 13:18	
(GRO)-C6-C10									
Diesel Range Organics (Over	274		49.9		mg/Kg		03/11/22 08:28	03/11/22 13:18	
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/11/22 08:28	03/11/22 13:18	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	106		70 - 130				03/11/22 08:28	03/11/22 13:18	
o-Terphenyl	102		70 - 130				03/11/22 08:28	03/11/22 13:18	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	246		4.95		mg/Kg			03/11/22 16:33	

Page 9 of 25 3/11/2022 Released to Imaging: 1/27/2023 10:04:50 AM

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM

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)	
880-12254-A-1-E MS	Matrix Spike	102	104	
880-12254-A-1-F MSD	Matrix Spike Duplicate	102	103	
880-12301-1	NW #2	101	93	
880-12301-2	SW #2	98	95	
880-12301-3	FL-3 @ 14'	107	96	
880-12301-4	FL-4 @ 14'	103	104	
880-12301-5	FL-5 @ 14.5'	105	95	
880-12301-6	FL-6 @ 14.5'	102	105	
880-12301-6 MS	FL-6 @ 14.5'	113	110	
880-12301-6 MSD	FL-6 @ 14.5'	112	112	
LCS 880-21364/1-A	Lab Control Sample	96	104	
LCS 880-21365/1-A	Lab Control Sample	94	103	
LCSD 880-21364/2-A	Lab Control Sample Dup	103	109	
LCSD 880-21365/2-A	Lab Control Sample Dup	97	98	
MB 880-21364/5-A	Method Blank	104	104	
MB 880-21365/5-A	Method Blank	97	101	

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 (A
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12301-1	NW #2	81	74	
880-12301-1 MS	NW #2	83	66 S1-	
880-12301-1 MSD	NW #2	81	65 S1-	
880-12301-2	SW #2	117	119	
880-12301-3	FL-3 @ 14'	109	111	
880-12301-4	FL-4 @ 14'	100	96	
880-12301-5	FL-5 @ 14.5'	110	113	
880-12301-6	FL-6 @ 14.5'	106	102	
LCS 880-21362/2-A	Lab Control Sample	97	90	
LCSD 880-21362/3-A	Lab Control Sample Dup	102	95	
MB 880-21362/1-A	Method Blank	111	113	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM Project/Site: Astro Dog 6-inch

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21364/5-A

Matrix: Solid Analysis Batch: 21361 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21364

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:45	03/11/22 12:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:45	03/11/22 12:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:45	03/11/22 12:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/11/22 08:45	03/11/22 12:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:45	03/11/22 12:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/11/22 08:45	03/11/22 12:56	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	P	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/1	1/22 08:45	03/11/22 12:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/1	1/22 08:45	03/11/22 12:56	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-21364/1-A

Matrix: Solid

Analysis Batch: 21361

Prep Type: Total/NA

Prep Batch: 21364

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09733		mg/Kg		97	70 - 130	
Toluene	0.100	0.09798		mg/Kg		98	70 - 130	
Ethylbenzene	0.100	0.1017		mg/Kg		102	70 - 130	
m-Xylene & p-Xylene	0.200	0.2078		mg/Kg		104	70 - 130	
o-Xylene	0.100	0.1011		mg/Kg		101	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-21364/2-A

Matrix: Solid

Analysis Batch: 21361

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control Sam	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 21364

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1003		mg/Kg		100	70 - 130	3	35
Toluene	0.100	0.1006		mg/Kg		101	70 - 130	3	35
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2119		mg/Kg		106	70 - 130	2	35
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130	3	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	103	70 - 130
1.4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: 880-12301-6 MS

Matrix: Solid

Analysis Batch: 21361

Client Sample ID: FL-6 @ 14.5'

Prep Type: Total/NA

Prep Batch: 21364

		Sample	Sample	Spike	MS	MS				%Rec.	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00200	U	0.0998	0.07999		mg/Kg	_	80	70 - 130	
١	Toluene	<0.00200	U	0.0998	0.07840		mg/Kg		77	70 - 130	

Eurofins Midland

Page 11 of 25

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-12301-6 MS

Matrix: Solid

Analysis Batch: 21361									Prep Ba	tch: 21364
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.0998	0.07743		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1595		mg/Kg		79	70 - 130	

0.0998

MS MS

<0.00200 U

Surrogate	%Recovery Quali	fier Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1.4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: 880-12301-6 MSD

Matrix: Solid

o-Xylene

Analysis Batch: 21361

Client Sample ID: FL-6 @ 14.5' Prep Type: Total/NA

0.08084

mg/Kg

Prep Batch: 21364 %Rec.

Client Sample ID: FL-6 @ 14.5'

80

70 - 130

Prep Type: Total/NA

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.0996 Benzene <0.00200 U 0.08021 mg/Kg 81 70 - 130 0 35 Toluene <0.00200 U 0.0996 0.08055 80 35 mg/Kg 70 - 130 3 Ethylbenzene <0.00200 U 0.0996 0.07568 mg/Kg 75 70 - 130 2 35 m-Xylene & p-Xylene <0.00399 U 0.199 0.1542 76 70 - 130 35 mg/Kg 3 0.0996 o-Xylene <0.00200 U 0.07417 74 70 - 130 mg/Kg

MSD MSD

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	112	70 - 130
1,4-Difluorobenzene (Surr)	112	70 - 130

Lab Sample ID: MB 880-21365/5-A

Matrix: Solid

Analysis Batch: 21366

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

Prep Batch: 21365

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/11/22 08:50	03/11/22 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/22 08:50	03/11/22 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/11/22 08:50	03/11/22 12:40	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/11/22 08:50	03/11/22 12:40	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/11/22 08:50	03/11/22 12:40	1

Lab Sample ID: LCS 880-21365/1-A

Matrix: Solid

Analysis Batch: 21366

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

Prep Batch: 21365

-	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.09712		mg/Kg		97	70 - 130
Toluene	0.100	0.09327		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09429		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.2190		mg/Kg		109	70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: LCS 880-21365/1-A **Matrix: Solid**

Analysis Batch: 21366

Prep Batch: 21365 LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits o-Xylene 0.100 0.1061 106 70 - 130 mg/Kg

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-21365/2-A

Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 21366** Prep Batch: 21365

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09481		mg/Kg		95	70 - 130	2	35
Toluene	0.100	0.09272		mg/Kg		93	70 - 130	1	35
Ethylbenzene	0.100	0.09409		mg/Kg		94	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2206		mg/Kg		110	70 - 130	1	35
o-Xylene	0.100	0.1082		mg/Kg		108	70 - 130	2	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-12254-A-1-E MS

Matrix: Solid

Analysis Batch: 21366									Prep E	Batch: 21365
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0998	0.08929		mg/Kg		89	70 - 130	
Toluene	< 0.00199	U F1	0.0998	0.07024		mg/Kg		70	70 - 130	
Ethylbenzene	<0.00199	U F1	0.0998	0.05491	F1	mg/Kg		54	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09500	F1	mg/Kg		48	70 - 130	
o-Xylene	< 0.00199	U F1	0.0998	0.06803	F1	mg/Kg		68	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

<0.00199 UF1

Lab Sample ID: 880-12254-A-1-F MSD

Matrix: Solid

o-Xylene

Analysis Batch: 21366

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

70 - 130

54

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 21365

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier %Rec Limits Limit Unit RPD Benzene <0.00199 U 0.0996 0.07551 mg/Kg 76 70 - 130 17 35 70 - 130 Toluene <0.00199 UF1 0.0996 0.05814 F1 mg/Kg 58 35 19 Ethylbenzene <0.00199 UF1 0.0996 0.04339 F1 mg/Kg 43 70 - 130 23 35 70 - 130 <0.00398 UF1 0.199 0.07847 F1 m-Xylene & p-Xylene mg/Kg 39 19 35

0.05406 F1

mg/Kg

0.0996

Eurofins Midland

23

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-12254-A-1-F MSD

Matrix: Solid

Analysis Batch: 21366

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 21365

MSD MSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 102 70 - 130 1,4-Difluorobenzene (Surr) 103 70 - 130

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

Lab Sample ID: MB 880-21362/1-A

Matrix: Solid

Analysis Batch: 21357

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21362

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 03/11/22 08:28 03/11/22 09:39 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 03/11/22 08:28 03/11/22 09:39 C10-C28) 03/11/22 09:39 OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 03/11/22 08:28

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	03/11/22 08:28	03/11/22 09:39	1
o-Terphenyl	113		70 - 130	03/11/22 08:28	03/11/22 09:39	1

Lab Sample ID: LCS 880-21362/2-A

Matrix: Solid

Analysis Batch: 21357

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

Prep Batch: 21362

LCS LCS Spike %Rec. Result Qualifier Analyte Added Unit D %Rec Limits Gasoline Range Organics 1000 891.1 mg/Kg 89 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 929.2 mg/Kg 93 70 - 130

C10-C28)

LCS LCS %Recovery Surrogate Qualifier Limits 70 - 130 1-Chlorooctane 97 o-Terphenyl 90 70 - 130

Lab Sample ID: LCSD 880-21362/3-A

Matrix: Solid Analysis Batch: 21357 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21362

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 833.5 83 70 - 130 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 926.9 93 70 - 130 20 mg/Kg

C10-C28)

LCSD LCSD

Surrogate	%Recovery G	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	95		70 - 130

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-12301-1 MS Client Sample ID: NW #2

Matrix: Solid

Analysis Batch: 21357

Prep Type: Total/NA Prep Batch: 21362

MS MS Limits Surrogate %Recovery Qualifier 1-Chlorooctane 83 70 - 130 70 - 130 66 S1o-Terphenyl

Client Sample ID: NW #2 Lab Sample ID: 880-12301-1 MSD Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 21357

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 81 70 - 130

65 S1-

MR MR

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21349/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

70 - 130

Matrix: Solid

o-Terphenyl

Analysis Batch: 21408

Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride <5.00 U 5.00 03/11/22 14:38 mg/Kg

Lab Sample ID: LCS 880-21349/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 21408

LCS LCS Spike %Rec. Added Qualifier Analyte Result %Rec Limits Unit Chloride 250 90 - 110 240.1 mg/Kg

Lab Sample ID: LCSD 880-21349/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 21408

Spike LCSD LCSD %Rec. RPD Added Qualifier RPD Analyte Result Unit D %Rec Limits Limit 250 240.2 Chloride mg/Kg 96 90 - 110 0

Lab Sample ID: 880-12301-1 MS Client Sample ID: NW #2

Matrix: Solid

Analysis Batch: 21408

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Analyte Unit D %Rec Limits Chloride 28.6 250 288.9 104 90 - 110 mg/Kg

Lab Sample ID: 880-12301-1 MSD Client Sample ID: NW #2 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 21408

Released to Imaging: 1/27/2023 10:04:50 AM

Sample Spike MSD MSD %Rec. RPD Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 28.6 250 283.0 102 mg/Kg

Eurofins Midland

Prep Batch: 21362

Prep Type: Soluble

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

GC VOA

Analysis Batch: 21361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	8021B	21364
MB 880-21364/5-A	Method Blank	Total/NA	Solid	8021B	21364
LCS 880-21364/1-A	Lab Control Sample	Total/NA	Solid	8021B	21364
LCSD 880-21364/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21364
880-12301-6 MS	FL-6 @ 14.5'	Total/NA	Solid	8021B	21364
880-12301-6 MSD	FL-6 @ 14.5'	Total/NA	Solid	8021B	21364

Prep Batch: 21364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	5035	
MB 880-21364/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21364/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21364/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12301-6 MS	FL-6 @ 14.5'	Total/NA	Solid	5035	
880-12301-6 MSD	FL-6 @ 14.5'	Total/NA	Solid	5035	

Prep Batch: 21365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	5035	-
880-12301-2	SW #2	Total/NA	Solid	5035	
880-12301-3	FL-3 @ 14'	Total/NA	Solid	5035	
880-12301-4	FL-4 @ 14'	Total/NA	Solid	5035	
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	5035	
MB 880-21365/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21365/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21365/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12254-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-12254-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	8021B	21365
880-12301-2	SW #2	Total/NA	Solid	8021B	21365
880-12301-3	FL-3 @ 14'	Total/NA	Solid	8021B	21365
880-12301-4	FL-4 @ 14'	Total/NA	Solid	8021B	21365
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	8021B	21365
MB 880-21365/5-A	Method Blank	Total/NA	Solid	8021B	21365
LCS 880-21365/1-A	Lab Control Sample	Total/NA	Solid	8021B	21365
LCSD 880-21365/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21365
880-12254-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	21365
880-12254-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21365

Analysis Batch: 21415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	Total BTEX	
880-12301-2	SW #2	Total/NA	Solid	Total BTEX	
880-12301-3	FL-3 @ 14'	Total/NA	Solid	Total BTEX	
880-12301-4	FL-4 @ 14'	Total/NA	Solid	Total BTEX	
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	Total BTEX	
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	Total BTEX	

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 21357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	8015B NM	21362
880-12301-2	SW #2	Total/NA	Solid	8015B NM	21362
880-12301-3	FL-3 @ 14'	Total/NA	Solid	8015B NM	21362
880-12301-4	FL-4 @ 14'	Total/NA	Solid	8015B NM	21362
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	8015B NM	21362
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	8015B NM	21362
MB 880-21362/1-A	Method Blank	Total/NA	Solid	8015B NM	21362
LCS 880-21362/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21362
LCSD 880-21362/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21362
880-12301-1 MS	NW #2	Total/NA	Solid	8015B NM	21362
880-12301-1 MSD	NW #2	Total/NA	Solid	8015B NM	21362

Prep Batch: 21362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	8015NM Prep	
880-12301-2	SW #2	Total/NA	Solid	8015NM Prep	
880-12301-3	FL-3 @ 14'	Total/NA	Solid	8015NM Prep	
880-12301-4	FL-4 @ 14'	Total/NA	Solid	8015NM Prep	
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	8015NM Prep	
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	8015NM Prep	
MB 880-21362/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21362/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21362/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12301-1 MS	NW #2	Total/NA	Solid	8015NM Prep	
880-12301-1 MSD	NW #2	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Total/NA	Solid	8015 NM	
880-12301-2	SW #2	Total/NA	Solid	8015 NM	
880-12301-3	FL-3 @ 14'	Total/NA	Solid	8015 NM	
880-12301-4	FL-4 @ 14'	Total/NA	Solid	8015 NM	
880-12301-5	FL-5 @ 14.5'	Total/NA	Solid	8015 NM	
880-12301-6	FL-6 @ 14.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Soluble	Solid	DI Leach	_
880-12301-2	SW #2	Soluble	Solid	DI Leach	
880-12301-3	FL-3 @ 14'	Soluble	Solid	DI Leach	
880-12301-4	FL-4 @ 14'	Soluble	Solid	DI Leach	
880-12301-5	FL-5 @ 14.5'	Soluble	Solid	DI Leach	
880-12301-6	FL-6 @ 14.5'	Soluble	Solid	DI Leach	
MB 880-21349/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21349/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21349/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12301-1 MS	NW #2	Soluble	Solid	DI Leach	
880-12301-1 MSD	NW #2	Soluble	Solid	DI Leach	

Client: Etech Environmental & Safety Solutions

Job ID: 880-12301-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

HPLC/IC

Analysis Batch: 21408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12301-1	NW #2	Soluble	Solid	300.0	21349
880-12301-2	SW #2	Soluble	Solid	300.0	21349
880-12301-3	FL-3 @ 14'	Soluble	Solid	300.0	21349
880-12301-4	FL-4 @ 14'	Soluble	Solid	300.0	21349
880-12301-5	FL-5 @ 14.5'	Soluble	Solid	300.0	21349
880-12301-6	FL-6 @ 14.5'	Soluble	Solid	300.0	21349
MB 880-21349/1-A	Method Blank	Soluble	Solid	300.0	21349
LCS 880-21349/2-A	Lab Control Sample	Soluble	Solid	300.0	21349
LCSD 880-21349/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21349
880-12301-1 MS	NW #2	Soluble	Solid	300.0	21349
880-12301-1 MSD	NW #2	Soluble	Solid	300.0	21349

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Client Sample ID: NW #2

Lab Sample ID: 880-12301-1

Matrix: Solid

SDG: Rural Eddy Co., NM

Job ID: 880-12301-1

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21365	03/11/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21366	03/11/22 14:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21415	03/11/22 18:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21412	03/11/22 18:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21362	03/11/22 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/11/22 10:46	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21349	03/10/22 18:13	CH	XEN MID
Soluble	Analysis	300.0		1			21408	03/11/22 15:05	CH	XEN MID

Client Sample ID: SW #2 Lab Sample ID: 880-12301-2

Date Collected: 03/10/22 00:00 **Matrix: Solid**

Date Received: 03/10/22 15:52

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 21365 Total/NA 5.03 g 5 mL 03/11/22 08:50 MR XEN MID Total/NA 8021B 5 mL 03/11/22 15:11 XEN MID Analysis 1 5 mL 21366 MR Total/NA Total BTEX 03/11/22 18:22 XEN MID Analysis 1 21415 A.I Total/NA Analysis 8015 NM 21412 03/11/22 18:20 XEN MID Total/NA 21362 03/11/22 08:28 XEN MID Prep 8015NM Prep 10.03 g DM 10 mL Total/NA Analysis 8015B NM 21357 03/11/22 11:51 AJ XEN MID Soluble 03/10/22 18:13 XEN MID Leach DI Leach 5.01 g 50 mL 21349 CH Soluble Analysis 300.0 1 21408 03/11/22 15:31 CH XEN MID

Client Sample ID: FL-3 @ 14' Lab Sample ID: 880-12301-3 Date Collected: 03/10/22 00:00

Date Received: 03/10/22 15:52

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21365	03/11/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21366	03/11/22 15:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21415	03/11/22 18:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21412	03/11/22 18:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21362	03/11/22 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/11/22 12:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21349	03/10/22 18:13	CH	XEN MID
Soluble	Analysis	300.0		1			21408	03/11/22 15:40	CH	XEN MID

Client Sample ID: FL-4 @ 14' Lab Sample ID: 880-12301-4

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21365	03/11/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21366	03/11/22 15:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21415	03/11/22 18:22	AJ	XEN MID

Eurofins Midland

Matrix: Solid

Page 19 of 25

Matrix: Solid

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

SDG: Rural Eddy Co., NM

Job ID: 880-12301-1

Client Sample ID: FL-4 @ 14'

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52

Lab Sample ID: 880-12301-4

Matrix: Solid

Matrix: Solid

XEN MID

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21412	03/11/22 18:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21362	03/11/22 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/11/22 12:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21349	03/10/22 18:13	CH	XEN MID
Soluble	Analysis	300.0		1			21408	03/11/22 15:49	CH	XEN MID

Client Sample ID: FL-5 @ 14.5' Lab Sample ID: 880-12301-5 Date Collected: 03/10/22 00:00

Date Received: 03/10/22 15:52

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab 21365 5035 Total/NA Prep 5.01 g 5 mL 03/11/22 08:50 MR XEN MID Total/NA Analysis 8021B 5 mL 5 mL 21366 03/11/22 16:13 MR XEN MID 1 Total/NA Total BTEX XEN MID Analysis 1 21415 03/11/22 18:22 AJ Total/NA Analysis 8015 NM 21412 03/11/22 18:20 XEN MID AJTotal/NA Prep 8015NM Prep 10.01 g 10 mL 21362 03/11/22 08:28 DM XEN MID Total/NA Analysis 8015B NM 21357 03/11/22 12:57 AJ XEN MID Soluble Leach DI Leach 5 g 50 mL 21349 03/10/22 18:13 CH XEN MID

Client Sample ID: FL-6 @ 14.5' Lab Sample ID: 880-12301-6

21408

03/11/22 15:58

CH

1

Date Collected: 03/10/22 00:00 Date Received: 03/10/22 15:52

Analysis

300.0

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21364	03/11/22 08:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21361	03/11/22 13:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21415	03/11/22 18:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21412	03/11/22 18:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21362	03/11/22 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/11/22 13:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21349	03/10/22 18:13	CH	XEN MID
Soluble	Analysis	300.0		1			21408	03/11/22 16:33	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

SDG: Rural E

Job ID: 880-12301-1 SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date		
Texas	NE	ELAP	T104704400-21-22	06-30-22		
The following analytes the agency does not of	' '	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes fo		
Analysis Method	Prep Method	Matrix	Analyte			
8015 NM		Solid	Total TPH			

6

8

10

4.0

13

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-12301-1

SDG: Rural Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-12301-1	NW #2	Solid	03/10/22 00:00	03/10/22 15:52
880-12301-2	SW #2	Solid	03/10/22 00:00	03/10/22 15:52
880-12301-3	FL-3 @ 14'	Solid	03/10/22 00:00	03/10/22 15:52
880-12301-4	FL-4 @ 14'	Solid	03/10/22 00:00	03/10/22 15:52
880-12301-5	FL-5 @ 14.5'	Solid	03/10/22 00:00	03/10/22 15:52
880-12301-6	FL-6 @ 14.5'	Solid	03/10/22 00:00	03/10/22 15:52

Chain of Custody

Work Order No: 12301

3/11/2022

Page 24 of 25

Released to Imaging: 1/27/2023 10:04:50 AM

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701 Atlanta GA (770) 449-8800

																·	**********	www	v xenc	o com	<u>n</u> Page <u>1</u> of <u>1</u>
Project Manager	Joel Lowry	<u> </u>			Bill to: (if differ	ent)	Camıl	le Brya	int									W	lork C)rder	Comments
the perturbation of the same o	Etech Env	ironmental a	ind Safety		Company Na	me.	Plains	Pipeli	ne						Progr	ram [.] U	IST/P	ѕт∐ і	PRF.	Brow	vnfield RR Superfund
Address.	2617 Wes	t Marland		****	Address:										State of Project:					_	
City, State ZIP	Hobbs, NN	A 88240			City, State ZI	City, State ZIP							Reporting Level Level PST/US TRF Level								
Phone:	(575) 264-	9884		Email	Email Resu	Email Results to PM@etechenv com + Client						Deliverables EDD ADaPT Other Other				PT ☐ Other					
Project Name:		Astro Dog	6-Inch	Ta	ırn Around			VIIIV-1			AN	ALYS	IS RE	QUE	UEST Preservativ				Preservative Codes		
Project Number	***************************************	1564	9	Rout	ine 🗆														T	T	HNO3 HN
Project Location		Rural Eddy Co , NM Rush																		1	H2S04 H2
Sampler's Name:		Joel Lowry Due Date						1					1								HCL HL
PO#:	5R5	The property of the second sec																			None NO
SAMPLE RECE	Barrens Barren Barrens Barrens Barrens Barrens Barrens Barrens Barrens Barrens	Temp Blank	. Yes No	Wet Ice	Yes No	J.		BOIS				1	l								NaOH Na
Temperature (°C):		+13.0		Thermomete	2.00000] []							1								MeOH Me
Received Intact:	-	Yes No The						Ext.)					١						1		Zn Acetate+ NaOH Zn
Cooler Custody Seal:	Acceptance of the Control of the Con				1-1	Contai															TAT starts the day recevied by the
Sample Custody Sea	ls: Yes	s No (N/A	Total Conta	iners		jo Jo	(8021)	(Modified	()												lab if received by 4 30pm
Sample iden	itification	Matrix	Date Sampled	Time Sampled	Depth	Numb Code	BTEX (трн (м	CI- (E300)												Sample Comments
NW #2		Soil	3/10/2022			1/NO	X	Х	Х							1	<u> </u>		1	†	
SW #2		Soil	3/10/2022			1/NO	×	Х	Х					•	Ļ	†			+		
FL-3 @ 14'		Soil	3/10/2022		14	1/NO	X	Х	Х				************	118818		1	 	1		1	
FL-4 @ 14'		Soil	3/10/2022		14	1/NO	X	Х	Х				·····			// / /////////////////////////////////		ina	1	+	1_
FL-5 @ 14 5'		Soil	3/10/2022		14 5	1/NO	X	Х	Х											/// /m	744
FL-6 @ 14 5'		Soil	3/10/2022		14 5	1/NO	X	Х	Х				- //							/////	***************************************
													- 88	30-12	301 C	//////////////////////////////////////	W//////		///////////////////////////////////////	////	***************************************
						1								_	<u> </u>	iain o	f Cus	tody	11/1/////	////	
																<u> </u>	T	1			
																	 	T	1	T	
Total 200.7 / 6	010 200	0.8 / 6020:	880	:RA 13PP	M Teyas 11	ΔΙ (Sh As	. Ba	Bo P		`^			- D'-	14-		/	: 14 0		<u> </u>	
Circle Method			nalyzed	TCLP / SF	LP 6010 8	RCRA	Sb	As Ba	De B aBe	Cd C	r Co	Cul	ou re h Mr	⇒ PD ≀ Mo	Ni S	IVIN IV Se ∆∽	NO NI	ik S II	e Ag		2 Na Sr Tl Sn U V Zn 631/245.1/7470/7471 Hg
~												'	~				, ,, ,	~			JULIANTO, LIITIU II 1411 114

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed These terms will be enforced unless previously negotiated

Relinquished by: (Signature)		Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by (Signature)	Date/Time
1 / the	1	It to earl	3/10/22	2		
3///			15.52	4		
5	-			6		

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-12301-1

SDG Number: Rural Eddy Co., NM

Login Number: 12301 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	

4

3

5

4

6

Ω Q

4.6

11

13



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-12845-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MAMER

Authorized for release by: 3/29/2022 2:12:54 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

-

9

10

12

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-12845-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	22

1

2

3

4

6

8

10

40

13

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-12845-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC VOA

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

POS

PQL

PRES

QC

RER

RPD TEF

TEQ

TNTC

RL

Qualifier **Qualifier Description**

Qualifier	Qualifier Description 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

Eurofins Midland

Positive / Present

Presumptive

Quality Control

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

Job ID: 880-12845-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-12845-1

Receipt

The samples were received on 3/24/2022 12:56 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 5.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22266 and analytical batch 880-22323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1 SDG: Rural Eddy Co., NM

Client Sample ID: SSW #3

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56

Lab Sample ID: 880-12845-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/25/22 07:30	03/25/22 11:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				03/25/22 07:30	03/25/22 11:24	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109	70 - 130	03/25/22 07:30	03/25/22 11:24	1
1,4-Difluorobenzene (Surr)	112	70 - 130	03/25/22 07:30	03/25/22 11:24	1
_					

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg]		03/25/22 13:37	1

Method: 8015 NM - Diesel Range O	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	49.8	mg/Kg			03/25/22 10:50	1

Analyte	Result Qualifier	RL	MDL Unit	_ D	Prepared	Analyzed	Dil F
Method: 8015B NM - Diesel Range	Organics (DRO) (GC)						
Total TPH	<49.8 U	49.8	mg/Kg			03/25/22 10:50	

randific	rtoouit	Quannon		mbe ome	_	. roparoa	raidiyeda	D uo
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		03/24/22 15:46	03/24/22 22:15	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		03/24/22 15:46	03/24/22 22:15	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 15:46	03/24/22 22:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	DII Fac
1-Chlorooctane	100		70 - 130	03,	/24/22 15:46	03/24/22 22:15	1
o-Terphenyl	98		70 - 130	03,	/24/22 15:46	03/24/22 22:15	1
_							

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.5		4.99		mg/Kg			03/25/22 12:58	1

Client Sample ID: NSW #2b Lab Sample ID: 880-12845-2

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56

Method: 8015 NM - Diesel Range Analyte	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
·		- Qualifici		- IIIDE			Troparca		
Total TPH	886		49.9		mg/Kg			03/25/22 10:50	1
_									
Method: 8015B NM - Diesel Rang	ge Organics (DI	RO) (GC)							
Method: 8015B NM - Diesel Rang Analyte	• • •	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	• • •	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 03/24/22 15:46	Analyzed 03/24/22 23:18	Dil Fac
Analyte	Result	Qualifier		MDL		<u>D</u>			Dil Fac

49.9

114

mg/Kg

03/24/22 15:46

Oll Range Organics (Over C28-C36)

C10-C28)

Eurofins Midland

03/24/22 23:18

Matrix: Solid

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

Client Sample ID: NSW #2b

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56 Lab Sample ID: 880-12845-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	03/24/22 15:46	03/24/22 23:18	1
o-Terphenyl	120		70 - 130	03/24/22 15:46	03/24/22 23:18	1

Lab Sample ID: 880-12845-3 Client Sample ID: NSW #3

Date Collected: 03/23/22 00:00 **Matrix: Solid**

Date Received: 03/24/22 12:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/25/22 07:30	03/25/22 11:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				03/25/22 07:30	03/25/22 11:45	1
1,4-Difluorobenzene (Surr)	110		70 - 130				03/25/22 07:30	03/25/22 11:45	1
Method: Total BTEX - Total BT	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	11	0.00402		mg/Kg			03/25/22 13:37	1

,						· ······ , — · ··		
Total BTEX	<0.00402	U	0.00402	mg/Kg	_	03/25/22 13:37	1	
Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)						

Analyte	Result Quali	•	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	341	49.8	mg/Kg			03/25/22 10:50	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/24/22 15:46	03/24/22 23:40	1
Diesel Range Organics (Over	341		49.8	mg/Kg		03/24/22 15:46	03/24/22 23:40	1
C10-C28) Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 15:46	03/24/22 23:40	1

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128	70 - 130	03/24/22 15:46	03/24/22 23:40	1
o-Terphenyl	123	70 - 130	03/24/22 15:46	03/24/22 23:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	55.3	4.97	ma/Ka			03/25/22 13:33	1		

Client Sample ID: FL-3b @ 16' Lab Sample ID: 880-12845-4 Date Collected: 03/23/22 00:00 **Matrix: Solid**

Date Received: 03/24/22 12:56

Sample Depth: 16'

Method: 8015 NM - Diesel Range Organics (DRO) (GC)								
	Analyte	Result Qu	alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<49.7 U	49.7	mg/Kg			03/25/22 10:50	1

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Job ID: 880-12845-1

Client Sample ID: FL-3b @ 16'

Date Collected: 03/23/22 00:00

Date Received: 03/24/22 12:56

Lab Sample ID: 880-12845-4

Lab Sample ID: 880-12845-5

Lab Sample ID: 880-12845-6

Matrix: Solid

Matrix: Solid

Matrix: Solid

Sample Depth: 16'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/24/22 15:46	03/25/22 00:01	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/22 15:46	03/25/22 00:01	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/22 15:46	03/25/22 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				03/24/22 15:46	03/25/22 00:01	1
o-Terphenyl	109		70 - 130				03/24/22 15:46	03/25/22 00:01	1

Client Sample ID: FL-4b @ 16'

Date Collected: 03/23/22 00:00

Date Received: 03/24/22 12:56

Sample Depth: 16'

Method: 8015 NM - Diesel Ra	ange Organics (DRO) (GC)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	155	50.0		mg/Kg			03/25/22 10:50	1
Method: 8015B NM - Diesel F	Range Organics (DRO) (GC)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

1-Chlorooctane	121		70 - 130		03/24/22 15:46	03/25/22 00:24	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	03/24/22 15:46	03/25/22 00:24	1
Diesel Range Organics (Over C10-C28)	155		50.0	mg/Kg	03/24/22 15:46	03/25/22 00:24	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg	03/24/22 15:46	03/25/22 00:24	1

70 - 130

119

Client Sample ID: FL-5b @ 14'

Date Collected: 03/23/22 00:00

Date Received: 03/24/22 12:56

Sample Depth: 14'

o-Terphenyl

Method: 8015 NM - Diesel Range Or	ganics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/25/22 10:50	1
Method: 8015B NM - Diesel Range C	rganics (D	RO) (GC)							

Analyzed	Dil Fac
46 02/2E/22 00:46	
.46 03/25/22 00.46	1
:46 03/25/22 00:46	1
246 03/25/22 00:46	1
Analyzed	Dil Fac
:46 03/25/22 00:46	1
:46 03/25/22 00:46	1
5 5	5:46 03/25/22 00:46 ad Analyzed 5:46 03/25/22 00:46

Client: Etech Environmental & Safety Solutions

SDG: Rural Eddy Co., NM

Job ID: 880-12845-1

Project/Site: Astro Dog 6-Inch

Client Sample ID: FL-6b @ 17'

Lab Sample ID: 880-12845-7

Date Collected: 03/24/22 00:00 Date Received: 03/24/22 12:56 Matrix: Solid

Sample Depth: 17'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/25/22 10:50	1
– Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							

Total TPH —	<50.0	U	50.0	m	g/Kg			03/25/22 10:50	1
– Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	m	g/Kg		03/24/22 15:46	03/25/22 01:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	m	g/Kg		03/24/22 15:46	03/25/22 01:09	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	m	g/Kg		03/24/22 15:46	03/25/22 01:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				03/24/22 15:46	03/25/22 01:09	1
o-Terphenyl	101		70 - 130				03/24/22 15:46	03/25/22 01:09	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-12845-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12845-1	SSW #3	109	112	
880-12845-3	NSW #3	105	110	
890-2122-A-1-E MS	Matrix Spike	108	104	
890-2122-A-1-F MSD	Matrix Spike Duplicate	107	111	
LCS 880-22266/1-A	Lab Control Sample	103	111	
LCSD 880-22266/2-A	Lab Control Sample Dup	105	112	
MB 880-22266/5-A	Method Blank	100	104	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12845-1	SSW #3	100	98	
880-12845-1 MS	SSW #3	103	89	
880-12845-1 MSD	SSW #3	113	100	
880-12845-2	NSW #2b	124	120	
880-12845-3	NSW #3	128	123	
880-12845-4	FL-3b @ 16'	111	109	
880-12845-5	FL-4b @ 16'	121	119	
880-12845-6	FL-5b @ 14'	124	126	
880-12845-7	FL-6b @ 17'	103	101	
LCS 880-22285/2-A	Lab Control Sample	96	81	
LCSD 880-22285/3-A	Lab Control Sample Dup	114	96	
MB 880-22285/1-A	Method Blank	114	119	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12845-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-22266/5-A

Lab Sample ID: LCS 880-22266/1-A

Analysis Batch: 22323

Matrix: Solid

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22266

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/25/22 07:30	03/25/22 10:42	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 07:30	03/25/22 10:42	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/25/22 07:30	03/25/22 10:42	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22266

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08853 mg/Kg 89 70 - 130 Toluene 0.100 0.08731 mg/Kg 87 70 - 130 0.100 Ethylbenzene 0.09324 mg/Kg 93 70 - 130 0.200 0.1909 95 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09386 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Lab Sample ID: LCSD 880-22266/2-A

Analysis Batch: 22323

Prep Type: Total/NA Prep Batch: 22266

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08920		mg/Kg		89	70 - 130	1	35	
Toluene	0.100	0.08871		mg/Kg		89	70 - 130	2	35	
Ethylbenzene	0.100	0.09388		mg/Kg		94	70 - 130	1	35	
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130	1	35	
o-Xylene	0.100	0.09509		mg/Kg		95	70 - 130	1	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	112	70 - 130

Lab Sample ID: 890-2122-A-1-E MS

Matrix: Solid

Analysis Batch: 22323

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

Prep Batch: 22266

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.0996	0.06367	F1	mg/Kg	_	64	70 - 130	
Toluene	<0.00200	U F1	0.0996	0.07260		mg/Kg		71	70 - 130	

Eurofins Midland

Page 10 of 22

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-12845-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 890-2122-A-1-E MS Client Sample ID: Matrix Spike **Matrix: Solid**

Prep Type: Total/NA **Analysis Batch: 22323** Prep Batch: 22266 Snike MS MS Sample Sample

	Sample	Sample	Spike	IVIO	IVIO				70Kec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.0996	0.07681		mg/Kg		76	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1597		mg/Kg		79	70 - 130	
o-Xylene	<0.00200	U	0.0996	0.08081		mg/Kg		80	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 108 1,4-Difluorobenzene (Surr) 70 - 130 104

Lab Sample ID: 890-2122-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 22323** Prep Batch: 22266

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0992	0.07252		mg/Kg		73	70 - 130	13	35
Toluene	<0.00200	U F1	0.0992	0.06862	F1	mg/Kg		68	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0992	0.07502		mg/Kg		75	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1562		mg/Kg		77	70 - 130	2	35
o-Xylene	<0.00200	U	0.0992	0.07864		mg/Kg		78	70 - 130	3	35

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 107 1,4-Difluorobenzene (Surr) 111 70 - 130

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

Lab Sample ID: MB 880-22285/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 22241

MB MB Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Analyte 03/24/22 15:46 <50.0 U 50.0 03/24/22 21:14 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 03/24/22 15:46 03/24/22 21:14 mg/Kg C10-C28)

OII Range Organics (Over C28-C36) <50.0 U 50.0 03/24/22 15:46 03/24/22 21:14 mg/Kg MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114	70 - 130	03/24/22 15:46	03/24/22 21:14	1
o-Terphenyl	119	70 - 130	03/24/22 15:46	03/24/22 21:14	1

Lab Sample ID: LCS 880-22285/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Total/NA Analysis Batch: 22241 Prep Batch: 22285

_	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	988.8		mg/Kg		99	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	972.2		mg/Kg		97	70 - 130
C10-C28)							

Eurofins Midland

Prep Batch: 22285

Client: Etech Environmental & Safety Solutions

Job ID: 880-12845-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

LCS LCS

Lab Sample ID: LCS 880-22285/2-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22285

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 96 70 - 130 o-Terphenyl 81 70 - 130

Lab Sample ID: LCSD 880-22285/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 22241

Prep Type: Total/NA

Prep Batch: 22285

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1143 114 70 - 13014 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1172 mg/Kg 117 70 - 13019 20 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 114 o-Terphenyl 70 - 130 96

Lab Sample ID: 880-12845-1 MS Client Sample ID: SSW #3

MS MS

Matrix: Solid

Analysis Batch: 22241

Prep Type: Total/NA

Prep Batch: 22285

%Rec.

	•	•	•						
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	<49.8	U	998	980.9		mg/Kg		98	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	998	886.1		mg/Kg		87	70 - 130
C10-C28)									

Spike

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 103 o-Terphenyl 89 70 - 130

Lab Sample ID: 880-12845-1 MSD Client Sample ID: SSW #3

Matrix: Solid

Analysis Batch: 22241

Prep Type: Total/NA

Prep Batch: 22285

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.8	U	999	1041		mg/Kg		104	70 - 130	6	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.8	U	999	1010		mg/Kg		99	70 - 130	13	20	
C10-C28)												

C10-C28)

MSD MSD

Sample Sample

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	113	70 - 130
o-Terphenyl	100	70 - 130

QC Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1 SDG: Rural Eddy Co., NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22343/1-A

Lab Sample ID: LCS 880-22343/2-A

Client Sample ID: Method Blank

Prep Type: Soluble

Analysis Batch: 22357

Matrix: Solid

мв мв

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 03/25/22 10:36

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 22357

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 274.1 mg/Kg 110 90 - 110

Lab Sample ID: LCSD 880-22343/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble

Analysis Batch: 22357

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 274.7 mg/Kg 110 90 - 110

Lab Sample ID: 880-12847-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 22357

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits 308.2 Chloride 36.6 249 109 90 - 110 mg/Kg

Lab Sample ID: 880-12847-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 22357

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 36.6 308.3 mg/Kg 109 90 - 110 0 20

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1 SDG: Rural Eddy Co., NM

GC VOA

Prep Batch: 22266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	5035	
880-12845-3	NSW #3	Total/NA	Solid	5035	
MB 880-22266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2122-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2122-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	8021B	22266
880-12845-3	NSW #3	Total/NA	Solid	8021B	22266
MB 880-22266/5-A	Method Blank	Total/NA	Solid	8021B	22266
LCS 880-22266/1-A	Lab Control Sample	Total/NA	Solid	8021B	22266
LCSD 880-22266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22266
890-2122-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	22266
890-2122-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22266

Analysis Batch: 22359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	Total BTEX	
880-12845-3	NSW #3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	8015B NM	22285
880-12845-2	NSW #2b	Total/NA	Solid	8015B NM	22285
880-12845-3	NSW #3	Total/NA	Solid	8015B NM	22285
880-12845-4	FL-3b @ 16'	Total/NA	Solid	8015B NM	22285
880-12845-5	FL-4b @ 16'	Total/NA	Solid	8015B NM	22285
880-12845-6	FL-5b @ 14'	Total/NA	Solid	8015B NM	22285
880-12845-7	FL-6b @ 17'	Total/NA	Solid	8015B NM	22285
MB 880-22285/1-A	Method Blank	Total/NA	Solid	8015B NM	22285
LCS 880-22285/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22285
LCSD 880-22285/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22285
880-12845-1 MS	SSW #3	Total/NA	Solid	8015B NM	22285
880-12845-1 MSD	SSW #3	Total/NA	Solid	8015B NM	22285

Prep Batch: 22285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	8015NM Prep	
880-12845-2	NSW #2b	Total/NA	Solid	8015NM Prep	
880-12845-3	NSW #3	Total/NA	Solid	8015NM Prep	
880-12845-4	FL-3b @ 16'	Total/NA	Solid	8015NM Prep	
880-12845-5	FL-4b @ 16'	Total/NA	Solid	8015NM Prep	
880-12845-6	FL-5b @ 14'	Total/NA	Solid	8015NM Prep	
880-12845-7	FL-6b @ 17'	Total/NA	Solid	8015NM Prep	
MB 880-22285/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22285/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

GC Semi VOA (Continued)

Prep Batch: 22285 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22285/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12845-1 MS	SSW #3	Total/NA	Solid	8015NM Prep	
880-12845-1 MSD	SSW #3	Total/NA	Solid	8015NM Prep	

Analysis Batch: 22340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Total/NA	Solid	8015 NM	
880-12845-2	NSW #2b	Total/NA	Solid	8015 NM	
880-12845-3	NSW #3	Total/NA	Solid	8015 NM	
880-12845-4	FL-3b @ 16'	Total/NA	Solid	8015 NM	
880-12845-5	FL-4b @ 16'	Total/NA	Solid	8015 NM	
880-12845-6	FL-5b @ 14'	Total/NA	Solid	8015 NM	
880-12845-7	FL-6b @ 17'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 22343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Soluble	Solid	DI Leach	
880-12845-3	NSW #3	Soluble	Solid	DI Leach	
MB 880-22343/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22343/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22343/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12847-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12847-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 22357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12845-1	SSW #3	Soluble	Solid	300.0	22343
880-12845-3	NSW #3	Soluble	Solid	300.0	22343
MB 880-22343/1-A	Method Blank	Soluble	Solid	300.0	22343
LCS 880-22343/2-A	Lab Control Sample	Soluble	Solid	300.0	22343
LCSD 880-22343/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22343
880-12847-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	22343
880-12847-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22343

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Date Received: 03/24/22 12:56

SDG: Rural Eddy Co., NM

Client Sample ID: SSW #3 Lab Sample ID: 880-12845-1 Date Collected: 03/23/22 00:00

Matrix: Solid

Job ID: 880-12845-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	22266	03/25/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 11:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22359	03/25/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 22:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22343	03/25/22 09:00	CH	XEN MID
Soluble	Analysis	300.0		1			22357	03/25/22 12:58	CH	XEN MID

Client Sample ID: NSW #2b Lab Sample ID: 880-12845-2 Matrix: Solid

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 23:18	AJ	XEN MID

Client Sample ID: NSW #3 Lab Sample ID: 880-12845-3 Date Collected: 03/23/22 00:00 **Matrix: Solid**

Date Received: 03/24/22 12:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	22266	03/25/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 11:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22359	03/25/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 23:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	22343	03/25/22 09:00	СН	XEN MID
Soluble	Analysis	300.0		1			22357	03/25/22 13:33	CH	XEN MID

Client Sample ID: FL-3b @ 16' Lab Sample ID: 880-12845-4 Date Collected: 03/23/22 00:00 **Matrix: Solid**

Date Received: 03/24/22 12:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/25/22 00:01	AJ	XEN MID

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

Client Sample ID: FL-4b @ 16'

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56

Lab Sample ID: 880-12845-5

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/25/22 00:24	AJ	XEN MID

Client Sample ID: FL-5b @ 14'

Date Collected: 03/23/22 00:00 Date Received: 03/24/22 12:56 Lab Sample ID: 880-12845-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g	10 mL	22285 22241	03/24/22 15:46 03/25/22 00:46	DM AJ	XEN MID XEN MID

Client Sample ID: FL-6b @ 17'

Date Collected: 03/24/22 00:00

Lab Sample ID: 880-12845-7

Matrix: Solid

Date Received: 03/24/22 12:56

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22340	03/25/22 10:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22285	03/24/22 15:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/25/22 01:09	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch SDG:

Job ID: 880-12845-1 SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes fo
the agency does not of	fer certification.			
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	
9 ,		Matrix Solid	Analyte Total TPH	

4

5

7

8

10

12

13

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-12845-1

SDG: Rural Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12845-1	SSW #3	Solid	03/23/22 00:00	03/24/22 12:56	
380-12845-2	NSW #2b	Solid	03/23/22 00:00	03/24/22 12:56	
380-12845-3	NSW #3	Solid	03/23/22 00:00	03/24/22 12:56	
30-12845-4	FL-3b @ 16'	Solid	03/23/22 00:00	03/24/22 12:56	16'
0-12845-5	FL-4b @ 16'	Solid	03/23/22 00:00	03/24/22 12:56	16'
80-12845-6	FL-5b @ 14'	Solid	03/23/22 00:00	03/24/22 12:56	14'
80-12845-7	FL-6b @ 17'	Solid	03/24/22 00:00	03/24/22 12:56	17'

Page 21 of 22

3/29/2022



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701 Atlanta, GA (770) 449-8800

Wc	
	880-12845 Chain of Custody

Project Manager:	Joel Lowry				Bill to: (if differe	ent)	Camil	le Brya	ant			Work Or				rk Orc	der Comments				
Company Name:	Etech Environ	mental ar	d Safety		Company Na	me:	Plains	Pipel	ine]	Progra	m: US	T/PST	PF	≀Р∏ В	rown	nfield RR Superfund
Address:	2617 West Ma	rland			Address:				State of Project:												
City, State ZIP:	Hobbs, NM 88	240			City, State ZI	P:								_	Reporting:Level Level PST/US TRF Level					'U\$ TRF Level /	
Phone:	(575) 264-988	4		Email:	Email Resu	Its to: !	PM@	etech	env.co	<u>om</u> + C	Client			Deliverables: EDD ☐ ADaPT ☐ Other:					Other:		
Project Name:	As	tro Dog 6	-Inch	Tu	rn Around						AN.	ALYS	IS REC	QUES	JEST						Preservative Codes
Project Number:		15649		Routi	ne:																HNO3: HN
Project Location	Rura	al Eddy C	o., NM	Rush	: X	e v															H2S04: H2
Sampler's Name:		Joel Lowry Due D			Date: ASAP	rvati					1										HCL: HL
PO #:		SRS# 2022-012				ese															None: NO
SAMPLE RECE	IPT Te	mp Blank:	Yes No) Wet Ice:	Yes) No	s/Pr						- 1						1			NaOH: Na
Temperature (°C):	5.3	S. 2		hermometer		ne															MeOH: Me
Received Intact:	Yes) No		TH	28	Contai		Ext.)						Į					i	1	Zn Acetate+ NaOH: Zn
Cooler Custody Seals			Correction Fa		-1	of Co	5														TAT starts the day recevied by the lab, if received by 4:30pm
Sample Custody Sea	ıls: Yes N	o (N/A)	Total Contain	ners:		5	802	lodii	(E300)					i						ļ	lab, if received by 4.30pm
Sample Iden	tification	Matrix	Date Sampled	Time Sampled	Depth	Numb Code	BTEX (8021)	TPH (Modified	CI- (E3												Sample Comments
SSW #3		Soil	3/23/2022			1/NO	Х	Х	Х												
NSW #2b		Soil	3/23/2022			1/NO		Х												_	
NSW #3		Soil	3/23/2022			1/NO	Х	Х	Х									_	_		
FL-3b @ 16'		Soil	3/23/2022		16'	1/NO		Х													
FL-4b @ 16'		Soil	3/23/2022		16'	1/NO		X												_	
FL-5b @ 14'		Soil	3/23/2022		14'	1/NO		Х										_			
FL-6b @ 17'		Soil	3/24/2022		17'	1/NO		Х								_					
															_		_	_			
																_	_+		_		
											1										
																					N 0 TI 0 II V 7:

8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn Total 200.7 / 6010 200.8 / 6020: 1631 / 245.1 / 7470 / 7471 : Hg TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Circle Method(s) and Metal(s) to be analyzed

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

1 Such Alle	(0/1/20	
	×1 3/24/22 2	
3	1.2.56 4	
5	6	e101419 Rev. 2019

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-12845-1 SDG Number: Rural Eddy Co., NM

List Source: Eurofins Midland

Login Number: 12845 List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	

land

•

2

4

6

8

10

12

13

14

Released to Imaging: 1/27/2023 10:04:50 AM

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-13232-1

Laboratory Sample Delivery Group: Rural Eddy Co.,NM

Client Project/Site: Astro Dog 6-inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

KRAMER

Authorized for release by: 4/5/2022 12:57:26 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through

·····LINKS ·······

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

4

5

7

8

1 N

1 0

13

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-inch Laboratory Job ID: 880-13232-1 SDG: Rural Eddy Co.,NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Racaint Chacklists	15

3

-4

6

8

10

4.0

13

| | 4

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-13232-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

Qualifiers

GC Semi VOA

Qualifier

Qualifier Description Compound was found in the blank and sample.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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)

Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) 1.00

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 **Quality Control** QC

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) Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-13232-1 SDG: Rural Eddy Co.,NM

Job ID: 880-13232-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-13232-1

Receipt

The sample was received on 4/4/2022 8:38 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-22935 and analytical batch 880-22887 contained Gasoline Range Organics (GRO)-C6-C10, Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

1

Δ

6

7

8

9

1 4

12

Job ID: 880-13232-1

Matrix: Solid

Lab Sample ID: 880-13232-1

04/05/22 02:54

04/04/22 13:00

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co.,NM

Client Sample ID: FL-4c @ 17'

Date Collected: 04/01/22 00:00 Date Received: 04/04/22 08:38

Sample Depth: 17'

o-Terphenyl

Method: 8015 NM - Diesel Range C	rganics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	93.4		50.0	15.0	mg/Kg			04/05/22 10:37	1
- Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	27.6	JB	50.0	15.0	mg/Kg		04/04/22 13:00	04/05/22 02:54	1
(GRO)-C6-C10									
Diesel Range Organics (Over	65.8	В	50.0	15.0	mg/Kg		04/04/22 13:00	04/05/22 02:54	1
C10-C28)									
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/04/22 13:00	04/05/22 02:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				04/04/22 13:00	04/05/22 02:54	1

70 - 130

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch SDG: Rura

Job ID: 880-13232-1 SDG: Rural Eddy Co.,NM

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-13187-A-1-F MS	Matrix Spike	90	97	
880-13187-A-1-G MSD	Matrix Spike Duplicate	91	96	
880-13232-1	FL-4c @ 17'	94	105	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-22935/2-A	Lab Control Sample	97	116	
LCSD 880-22935/3-A	Lab Control Sample Dup	99	118	
MB 880-22935/1-A	Method Blank	107	127	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Eurofins Midland

2

3

6

0

9

11

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-13232-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: MB 880-22935/1-A

Analysis Batch: 22887

Matrix: Solid

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

Prep Batch: 22935

мв мв Dil Fac Analyte Result Qualifier RL MDL Unit Prepared Analyzed Gasoline Range Organics 20.39 J 50.0 15.0 mg/Kg 04/04/22 11:43 04/04/22 22:23 (GRO)-C6-C10 Diesel Range Organics (Over 26.46 J 50.0 04/04/22 11:43 04/04/22 22:23 15.0 mg/Kg C10-C28) 15.0 mg/Kg Oll Range Organics (Over C28-C36) <15.0 U 50.0 04/04/22 11:43 04/04/22 22:23

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 107 70 - 130 04/04/22 11:43 04/04/22 22:23 o-Terphenyl 127 70 - 130 04/04/22 11:43 04/04/22 22:23

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-22935/2-A **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 22887**

Prep Batch: 22935

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	841.9		mg/Kg		84	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	987.3		mg/Kg		99	70 - 130	

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 97 70 - 130 o-Terphenyl 116 70 - 130

Lab Sample ID: LCSD 880-22935/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 22887

Prep Type: Total/NA

Prep Batch: 22935

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	837.8		mg/Kg		84	70 - 130	0	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	992.0		mg/Kg		99	70 - 130	0	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 880-13187-A-1-F MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 22887** Prep Batch: 22935

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	19.3	JB	998	883.5		mg/Kg		87	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over	54.3	В	998	829.4		mg/Kg		78	70 - 130
C10-C28)									

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-13232-1 Project/Site: Astro Dog 6-inch SDG: Rural Eddy Co., NM

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

MS MS

%Recovery Qualifier

90

97

Lab Sample ID: 880-13187-A-1-F MS

Matrix: Solid

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 22887

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22935

Lab Sample ID: 880-13187-A-1-G MSD

Limits

70 - 130

70 - 130

Matrix: Solid

Analysis Batch: 22887

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

Prep Batch: 22935

Sample Sample Spike MSD MSD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics 19.3 JB 998 921.7 90 70 - 130 4 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 54.3 B 998 834.8 mg/Kg 78 70 - 130 20 C10-C28)

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	91	70 - 130
o-Terphenyl	96	70 - 130

%Rec RPD

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-13232-1 SDG: Rural Eddy Co.,NM

GC Semi VOA

Analysis Batch: 22887

Lab Sample ID 880-13232-1	Client Sample ID FL-4c @ 17'	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 22935
MB 880-22935/1-A	Method Blank	Total/NA	Solid	8015B NM	22935
LCS 880-22935/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22935
LCSD 880-22935/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22935
880-13187-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	22935
880-13187-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22935

Prep Batch: 22935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13232-1	FL-4c @ 17'	Total/NA	Solid	8015NM Prep	
MB 880-22935/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22935/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22935/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-13187-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-13187-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13232-1	FL-4c @ 17'	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

SDG: Rural Eddy Co.,NM

Job ID: 880-13232-1

Client Sample ID: FL-4c @ 17'

Date Collected: 04/01/22 00:00 Date Received: 04/04/22 08:38 Lab Sample ID: 880-13232-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			23016	04/05/22 10:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22935	04/04/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22887	04/05/22 02:54	AJ	XEN MID

Laboratory References:

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

5

6

8

3

11

13

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-13232-1 SDG: Rural Eddy Co.,NM

Laboratory: Eurofins Midland

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

Authority		ogram	Identification Number	Expiration Date		
Texas	NE	ELAP	T104704400-21-22	06-30-22		
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for		
the agency does not of	er certification.			, ,		
0 ,		Matrix	Δnalyte	,		
the agency does not of Analysis Method	er certification. Prep Method	Matrix	Analyte			

- - -

4

5

_

10

13

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-13232-1

SDG: Rural Eddy Co.,NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-13232-1

SDG: Rural Eddy Co.,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-13232-1	FL-4c @ 17'	Solid	04/01/22 00:00	04/04/22 08:38	17'

Received by OCD: 10/4/2022 8:36:47 AM

4/5/2022

Chain of Custody

40° Work Order No: 13232

Houston TX (281) 240-4200 Daltas, TX (214) 902-0300, San Antonic TX (210) 509-3334

Midland TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

Hobbs, NM (575) 392-7550 Cartsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701

Atlanta. GA (770) 449-8600

Project Manager:	Joel Lowry	**************************************	······		Bill to: (if differ	m)\	Camille Bryant							www.xenco.com Page 1 of 1 Work Order:Comments										
Company Name:	Etech Environr	nental a	nd Safety		Company Na			Pipel	***************************************			·····		\dashv	n								<u> </u>	
Address:	2617 West Ma	***************************************			Address:	,,,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	3 (GII)(3	a their	110	·····				\dashv	Program UST/PST PRF Brownfield RR Superfund State of Project:									
City, State ZIP;	Hobbs, NM 88				City, State Zi	D-					······································		***************************************	\dashv										
Phone:	(575) 264-9884	***************************************		Ema	E. A.		PM@etechenv com + Client]												
				1		165 TO	1 IVIICO	<u>erecii</u>	env C	OIII T	4.6360			Alex Sur										
Project Name:	As:	tro Dog (***************************************		Furn Around		·		Τ	r	AN	IALYS	IS RE	QUE	ST	T					Pre	servative	Codes	
Project Number		15649	***************************************		utine: U				ļ	 					<u> </u>	<u> </u>					ниоз: н	IN		
Project Location		al Eddy (Rus	173	itive														H2S04 H	12			
Sampler's Name. PO#		Joel Lov	wry SRS# 2022-0		Date: ASAP	ervat															HCL. HL			
SAMPLE RECE					e Xes No	s														1 1	None NC	-		
Temperature (°C)	1.8	1,4				120							,		ł					: :	NaOH Na			
Received Intact:	T A	No		Thermomet		tain		3		1						i lli i i i i i i i i i i i i i i i i i i	1 111 111 1111	1000 mm	litt ens	. 1	MACH M			
Cooler Custody Seaf			Correction F	actor	71. T	Conta		EXT														<u>a+ NaOH.</u>	Zn	
Sample Custody Sea	ils. Yes No	77	Total Contai			5	(8021)	TPH (Modiffled	_													is the day re	cevied by the	
p - 1 12	475		Date	Time		ie ei	l &	Ngo.	CI- (E300)					11111111111111111111111111111111111111	3232							if received by	y 4:30pm	
Sample Ider	itification	Matrix	Sampled	Sampled	Depth	Numb	ВТЕХ	Ŧ	3				_		1	Chain	of Cu	stody			n	nple Corr	iments	
FL-4c @ 17'		Soil	4/1/2022		17'	1/NO	1	×	 			 		··········	1	1					<u>%</u>			
										1		 		***********		1								
								 		1		 				1						***************************************		
									ep.	1	1	†	νa	te	THP], 			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
															Mg	t 9	9 00 LBS SPECIA			CIAL		00		
	· · · · · · · · · · · · · · · · · · ·								T				DV			Ø		HANDLII		6.¢	ì	0 0	0	
								1	T			Sve	S. P	RIO	YTIS	OVER	NIGH	T HLE)		0 0	0	***************************************	
										1	1	1	1	** *** ****	uag	ดลอา	3598	3		1 1	ı	***************************************		
															T	T '		I - 1				······································		
																1								
Total 200.7 / 6	010 200.8/0	6020:	8RC	RA 13PI	PM Texas 11	AI S	Sb As	Ba	Be R	Cd	Ca C	r Co	Cu F	e Ph	Ma	Mn N	o Ni	K 6~	Δσ	SiO2	No Co	TI OF IT		
Circle Method	(s) and Metal(s)	to be ar	nalyzed	TCLP / S	PLP 6010 8F	CRA	Sb	As B	a Be	Cd C	or Co	Ou 1	Pb Mi	n Mo	Ni S	Se Ad	TIU	к ов 	Λÿ	163	na or 1 31/2451	∷ SN U ` 1/7470 /	V Zn 7471 Hg	
Notice: Signature of this	document and reling	juishment d	of samples cons	titutes a valid	Durchase order fr	om ciler	it como	any to)	Keaco. I	te affilia	toe and	eutros	teactor	. 11	ologo o				(litione				rating	
of service. Xenco will be of Xenco. A minimum ch	liable only for the co	ist of samp	ion and shall no	ine emusee t	e navnennathillier ten	north Smar			and Name and Advanced	بولا دائسه خداد			***************************************	,						ı				
Relinquished by	r. (Signature)	7	Received	by: (Signa	ilure)		Date	/Time		Re	lingui	shed	by: (S	ignat	ure)	17	Reec	ived 6	y: (S	ignatu	re)	Date	e/Time	
Mother has been county of				0	1-4-	22	24	7	2	92	*9,557	1000		1	 	H	74	,	<u> </u>	· ·	7 1/2	773 A		
3 / 7 0 0			,		····	4			······································		***************************************	112	//		···			7	HOD					
5			 	······································			6				••••••••••••••••••••••••••••••••••••••	····	 						- ,	ich				

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-13232-1

SDG Number: Rural Eddy Co.,NM

List Source: Eurofins Midland

Login Number: 13232 List Number: 1 Creator: Teel, Brianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	

Eurofins Midland

5

4

5

<u>م</u>

13

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-13517-1

Laboratory Sample Delivery Group: Rural Eddy Co.,NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MRAMER

Authorized for release by: 4/12/2022 2:57:31 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project

·····LINKS ·······

results through
Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

4

9

10

12

13

Н

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

2

6

8

10

<u> 11</u>

13

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-13517-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC VOA

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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 Colony Forming Unit CFU **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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

Not Calculated NC

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)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

Job ID: 880-13517-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-13517-1

Receipt

The samples were received on 4/11/2022 12:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-23328 and analytical batch 880-23365 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

04/11/22 15:16 04/12/22 03:41

Lab Sample ID: 880-13517-2

Matrix: Solid

Lab Sample ID: 880-13517-1

Matrix: Solid

Job ID: 880-13517-1

SDG: Rural Eddy Co.,NM

Date Received: 04/11/22 00:00 Sample Depth: 10'

Client Sample ID: NT-10'

Date Collected: 04/08/22 00:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/11/22 17:03	04/12/22 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				04/11/22 17:03	04/12/22 13:28	1
1,4-Difluorobenzene (Surr)	107		70 - 130				04/11/22 17:03	04/12/22 13:28	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			04/12/22 15:46	1
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			04/12/22 12:12	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 03:41	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 03:41	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 03:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Client Sample ID: NT-15'

Date Collected: 04/08/22 00:00 Date Received: 04/11/22 00:00

Sample Depth: 15'

1-Chlorooctane

o-Terphenyl

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/11/22 17:03	04/12/22 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/11/22 17:03	04/12/22 13:49	1
1,4-Difluorobenzene (Surr)	107		70 - 130				04/11/22 17:03	04/12/22 13:49	1

70 - 130

70 - 130

87

98

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co.,NM

Job ID: 880-13517-1

Client Sample ID: NT-15'

Date Collected: 04/08/22 00:00 Date Received: 04/11/22 00:00

Sample Depth: 15'

Lab Sample ID: 880-13517-2

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/12/22 15:46	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			04/12/22 12:12	1
- Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 04:01	1
(GRO)-C6-C10									
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 04:01	1
,	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/12/22 04:01	1
Diesel Range Organics (Over	<50.0 <50.0		50.0 50.0		mg/Kg mg/Kg		04/11/22 15:16 04/11/22 15:16	04/12/22 04:01 04/12/22 04:01	1
Diesel Range Organics (Over C10-C28)		U							1 1 <i>Dil Fac</i>
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0				04/11/22 15:16	04/12/22 04:01	1 1 <i>Dil Fac</i>

Client Sample ID: NT-20' Lab Sample ID: 880-13517-3

Date Collected: 04/08/22 00:00

Date Received: 04/11/22 00:00

Released to Imaging: 1/27/2023 10:04:50 AM

Sample Depth: 20'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
Toluene	< 0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/11/22 17:03	04/12/22 14:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/11/22 17:03	04/12/22 14:09	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/11/22 17:03	04/12/22 14:09	1
Analyte Total BTEX Method: 8015 NM - Diesel Range	<0.00398		RL 0.00398	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 04/12/22 15:46	Dil Fac
_		Qualifier	RI	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH		Qualifier U	RL 49.9	MDL	Unit mg/Kg	D	Prepared	Analyzed 04/12/22 12:12	Dil Fac
Analyte	Result <49.9 ge Organics (D	RO) (GC) Qualifier		MDL	mg/Kg	<u>D</u>	Prepared Prepared 04/11/22 15:16		1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <49.9 ge Organics (D Result	RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	04/12/22 12:12 Analyzed	

Eurofins Midland

Matrix: Solid

Client Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-13517-3

Date Collected: 04/08/22 00:00 Date Received: 04/11/22 00:00

Client Sample ID: NT-20'

Matrix: Solid

Sample Depth: 20'

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83	70 - 130	04/11/22 15:16	04/12/22 04:21	1
o-Terphenyl	85	70 - 130	04/11/22 15:16	04/12/22 04:21	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acce
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-13501-A-5-C MS	Matrix Spike	93	105	
880-13501-A-5-D MSD	Matrix Spike Duplicate	100	100	
880-13517-1	NT-10'	107	107	
880-13517-2	NT-15'	109	107	
880-13517-3	NT-20'	109	103	
LCS 880-23328/1-A	Lab Control Sample	96	104	
LCSD 880-23328/2-A	Lab Control Sample Dup	94	102	
MB 880-23328/5-A	Method Blank	97	100	
Surrogate Legend BFB = 4-Bromofluorober	ozena (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-13517-1	NT-10'	87	98
880-13517-2	NT-15'	88	95
880-13517-3	NT-20'	83	85
890-2177-A-1-B MS	Matrix Spike	97	89
890-2177-A-1-C MSD	Matrix Spike Duplicate	93	86
LCS 880-23313/2-A	Lab Control Sample	86	78
LCSD 880-23313/3-A	Lab Control Sample Dup	91	83
MB 880-23313/1-A	Method Blank	99	106

Surrogate Legend

1CO = 1-Chlorooctane

Released to Imaging: 1/27/2023 10:04:50 AM

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-13517-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23328/5-A

Matrix: Solid Analysis Batch: 23365 Client Sample ID: Method Blank

04/12/22 11:58

Prep Type: Total/NA

Prep Batch: 23328

	MB	MB MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 11:58	1		
Toluene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 11:58	1		
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 11:58	1		
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/11/22 17:03	04/12/22 11:58	1		
o-Xylene	< 0.00200	U	0.00200		mg/Kg		04/11/22 17:03	04/12/22 11:58	1		

MB MB

<0.00400 U

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	04/11/22 17:03	04/12/22 11:58	1
1.4-Difluorobenzene (Surr)	100	70 - 130	04/11/22 17:03	04/12/22 11:58	1

0.00400

mg/Kg

Lab Sample ID: LCS 880-23328/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Xylenes, Total

Analysis Batch: 23365

Prep Type: Total/NA

04/11/22 17:03

Prep Batch: 23328

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08329		mg/Kg		83	70 - 130	
Toluene	0.100	0.09279		mg/Kg		93	70 - 130	
Ethylbenzene	0.100	0.09605		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1926		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09385		mg/Kg		94	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-23328/2-A

Matrix: Solid

Analysis Batch: 23365

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control Sam	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 23328

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08654		mg/Kg		87	70 - 130	4	35	
Toluene	0.100	0.09625		mg/Kg		96	70 - 130	4	35	
Ethylbenzene	0.100	0.09917		mg/Kg		99	70 - 130	3	35	
m-Xylene & p-Xylene	0.200	0.1983		mg/Kg		99	70 - 130	3	35	
o-Xylene	0.100	0.09711		mg/Kg		97	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-13501-A-5-C MS

Matrix: Solid

Analysis Batch: 23365

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 23328

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.1319	F1	mg/Kg		131	70 - 130	
Toluene	<0.00200	U	0.100	0.1267		mg/Kg		126	70 - 130	

Eurofins Midland

Page 9 of 19

Prep Batch: 23328

Prep Type: Total/NA

Prep Batch: 23313

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-13517-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-13501-A-5-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 23365

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.100	0.1100		mg/Kg		110	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2260		mg/Kg		113	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1041		mg/Kg		104	70 - 130	

MS MS Qualifier %Recovery Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 93 1,4-Difluorobenzene (Surr) 105 70 - 130

Lab Sample ID: 880-13501-A-5-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 23365									Prep	Batch:	23328
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0998	0.1185		mg/Kg		118	70 - 130	11	35
Toluene	<0.00200	U	0.0998	0.1252		mg/Kg		125	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.0998	0.1107		mg/Kg		111	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2320		mg/Kg		116	70 - 130	3	35
o-Xylene	<0.00200	U	0.0998	0.1074		mg/Kg		108	70 - 130	3	35

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

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

Lab Sample ID: MB 880-23313/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 23283

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/11/22 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/11/22 19:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/11/22 15:16	04/11/22 19:55	1

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 1-Chlorooctane 99 04/11/22 15:16 04/11/22 19:55 o-Terphenyl 106 70 - 130 04/11/22 15:16 04/11/22 19:55

Lab Sample ID: LCS 880-23313/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 23283

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	765.0		mg/Kg		76	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	940.9		mg/Kg		94	70 - 130	

C10-C28)

Prep Batch: 23313

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1

SDG: Rural Eddy Co., NM

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

Lab Sample ID: LCS 880-23313/2-A

Lab Sample ID: LCSD 880-23313/3-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 23283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23313

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 86 70 - 130 o-Terphenyl 78 70 - 130

Client Sample ID: Lab Control Sample Dup

70 - 130

100

Prep Type: Total/NA

6

Analysis Batch: 23283 Prep Batch: 23313 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 709.6 71 70 - 1308 20 Gasoline Range Organics mg/Kg

999.3

mg/Kg

1000

C10-C28)

(GRO)-C6-C10

LCSD LCSD

Surrogate	%Recovery Qualific	er Limits
1-Chlorooctane	91	70 - 130
o-Terphenyl	83	70 - 130

Lab Sample ID: 890-2177-A-1-B MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 23283

Diesel Range Organics (Over

Prep Type: Total/NA

Prep Batch: 23313

Sample Sample Spike MS MS Analyte Result Qualifier hahhA Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 998 817.6 mg/Kg 82 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 998 979.3 mg/Kg 96 70 - 130 C10-C28)

MS MS

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

Lab Sample ID: 890-2177-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid**

Analysis Batch: 23283

Prep Type: Total/NA

Prep Batch: 23313 RPD

Sample Sample MSD MSD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U 997 781.5 78 20 Gasoline Range Organics <49.9 mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 955.7 mg/Kg 94 70 - 130 20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	86		70 - 130

Eurofins Midland

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

GC VOA

Prep Batch: 23328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	5035	
880-13517-2	NT-15'	Total/NA	Solid	5035	
880-13517-3	NT-20'	Total/NA	Solid	5035	
MB 880-23328/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23328/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23328/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13501-A-5-C MS	Matrix Spike	Total/NA	Solid	5035	
880-13501-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 23365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	8021B	23328
880-13517-2	NT-15'	Total/NA	Solid	8021B	23328
880-13517-3	NT-20'	Total/NA	Solid	8021B	23328
MB 880-23328/5-A	Method Blank	Total/NA	Solid	8021B	23328
LCS 880-23328/1-A	Lab Control Sample	Total/NA	Solid	8021B	23328
LCSD 880-23328/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23328
880-13501-A-5-C MS	Matrix Spike	Total/NA	Solid	8021B	23328
880-13501-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23328

Analysis Batch: 23404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	Total BTEX	
880-13517-2	NT-15'	Total/NA	Solid	Total BTEX	
880-13517-3	NT-20'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	8015B NM	23313
880-13517-2	NT-15'	Total/NA	Solid	8015B NM	23313
880-13517-3	NT-20'	Total/NA	Solid	8015B NM	23313
MB 880-23313/1-A	Method Blank	Total/NA	Solid	8015B NM	23313
LCS 880-23313/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23313
LCSD 880-23313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23313
890-2177-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	23313
890-2177-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23313

Prep Batch: 23313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	8015NM Prep	
880-13517-2	NT-15'	Total/NA	Solid	8015NM Prep	
880-13517-3	NT-20'	Total/NA	Solid	8015NM Prep	
MB 880-23313/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23313/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2177-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2177-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

GC Semi VOA

Analysis Batch: 23382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13517-1	NT-10'	Total/NA	Solid	8015 NM	
880-13517-2	NT-15'	Total/NA	Solid	8015 NM	
880-13517-3	NT-20'	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Job ID: 880-13517-1

Client Sample ID: NT-10'

Lab Sample ID: 880-13517-1

Matrix: Solid

Date Collected: 04/08/22 00:00 Date Received: 04/11/22 00:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23328	04/11/22 17:03	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23365	04/12/22 13:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23404	04/12/22 15:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23382	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23313	04/11/22 15:16	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/12/22 03:41	AJ	XEN MID

Client Sample ID: NT-15'

Date Collected: 04/08/22 00:00 Date Received: 04/11/22 00:00

Lab Sample ID: 880-13517-2

Matrix: Solid

Final Batch Batch Dil Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Lab Analyst 5035 23328 04/11/22 17:03 XEN MID Total/NA Prep 5.02 g 5 mL MR Total/NA 8021B 5 mL 04/12/22 13:49 Analysis 1 5 mL 23365 MR XEN MID Total/NA Total BTEX 23404 04/12/22 15:46 XEN MID Analysis 1 AJXEN MID Total/NA Analysis 8015 NM 1 23382 04/12/22 12:12 AJ Total/NA 10.01 g 23313 04/11/22 15:16 XEN MID Prep 8015NM Prep 10 mL AM Total/NA Analysis 8015B NM 23283 04/12/22 04:01 AJ XEN MID

Client Sample ID: NT-20'

Date Collected: 04/08/22 00:00

Date Received: 04/11/22 00:00

Lab Sample ID: 880-13517-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	23328	04/11/22 17:03	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23365	04/12/22 14:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23404	04/12/22 15:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23382	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23313	04/11/22 15:16	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/12/22 04:21	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-13517-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co.,NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-21-22	06-30-22	
The following analytes	are included in this report by		and boother and consider a subbands. This list was		
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for	
,	• '	Matrix	ed by the governing authority. This list ma	ay include analytes for	
the agency does not of	fer certification.	•	, , ,	ay include analytes for	

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1 SDG: Rural Eddy Co.,NM

al Eddy Co.,Nivi

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
035	Closed System Purge and Trap	SW846	XEN MID
3015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-13517-1

SDG: Rural Eddy Co.,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-13517-1	NT-10'	Solid	04/08/22 00:00	04/11/22 00:00	10'
880-13517-2	NT-15'	Solid	04/08/22 00:00	04/11/22 00:00	15'
880-13517-3	NT-20'	Solid	04/08/22 00:00	04/11/22 00:00	20'

Received by OCD: 10/4/2022 8:36:47 AM

Revised Date101419 Rev 2019 1



Chain of Custody

Work Order No:

Houston TX (281) 240-4200, Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701 Atlanta GA (770) 449-8800

Project Manager	Joel Lo	owry				Bill to (if differ	ent)	Ca	584	-50	~~~	, ,			Work Order Comments						
Company Name:	Etech	Environn	nental ar	nd Safety	Safety Company Name:				Matador Rosources					Program. UST/PST PRF Brownfield RRC Superfund							
Address:	2617 V	Vest Mar	rland	~		Address.						State of Project:									
City, State ZIP	Hobbs,	NM 882	240			City, State Z	P·	CI	0	30e	y L	Ou	RY		Re	porting l	Level (Le	vel 🗌	PST	7/US TRF Level /
Phone:	(575) 2	64-9884			Emai	Email Resu	Its to	<u>РМ@</u>	etech	env.co					De	liverable	s ED	D \square		ADaP	T Other
Project Name:		Ast	ro Dog 6	-Inch	T	urn Around			·			AN	ALYS	IS REQ	UEST				***********		Preservative Codes
Project Number			15649		Rou	tine 🗵											1	T	T		HNO3 HN
Project Location		Rura	l Eddy C	o , NM	Rus	h 🔲	9										1	1	1	1	H2S04 H2
Sampler's Name			Joel Low	/ry	Due	Date	rvative														HCL HL
PO#:		a mantanana da	S	RS# 2022-0	12		ese										l	1			None NO
SAMPLE RECE	IPT	The state of the s	np Blank:	Yes 🐠	Wet los	Yes No	S														NaOH Na
Temperature (°C).		5	14		Thermomete				İ								1				MeOH Me
Received Intact:	getating works		No		en é a remandada	The	Contai		Ext.)												Zn Acetate+ NaOH Zn
Cooler Custody Seal Sample Custody Sea	3040-0400-0404	Yes No	7 7	Correction F	demonstration of the second se		ζ 6	_									1				TAT starts the day recevied by the
Sample Gustouy Sea	115%	Yes No) NAME	Total Contai	Non-aspendiction of the second		18	805	Tod:	6											lab if received by 4 30pm
Sample Ider	itificatio	n	Matrix	Date Sampled	Time Sampled	Depth	Numb Code	BTEX (8021)	TPH (Modified	CI- (E300)											Sample Comments
NT-10'			Soil	4/8/2022		10'	1/NO	 	X						\top	_	+	1	-	\vdash	anne trace an annealth ar to go and the second and
NT-15'			Soil	4/8/2022		15'	1/NO	Х	х									1	<u> </u>		
NT-20'	·	_	Soil	4/8/2022		20'	1/NO	Х	Х						1 23 8						I
	_														88)-13517	Chair	of Cu	ıstody	B 	
															ſ	ſ	ı	ı	ı	1	
							I								1	1	1		1	1	
												. 8					1	1	1		
Total 200.7 / 6	010	200.8 / 6	6020:	8RC	RA 13PP	M Teyas 11	ΔΙ 🤇	Sh As	Ro	Re P	C4 (~ C.		Cu Ea	Db 14	a \4= '	Ma N	· · ·		6.00	Na Sr TI Sn U V Zn
Circle Method				alyzed	TCLP / SF	PLP 6010 8F	RCRA	Sb 73	As Ba	a Be	Cd C	ca Ci cr Co	Cu F	ou re Pb Mn I	ru ivi MoNi	yıvı⊓ Se.A	vio N a Tl	irs H	e Ag		Na Sr II Sn U V Zn 31 / 245.1 / 7470 / 7471 Hg
Notice Signature of this																			n d'ia'		51, 275.1, 7770 / 74/1 Ng
of service. Xenco will be of Xenco. A minimum ch	liable only	v for the co	st of sample	es and shall no	fassume anv	reenoneihility for	any los		vnanca	e incur	ad b., 4h	114	if acces							i	
Relinquished by	Marie Visited Committee	088pp=00=0=0=0=0ppppp	-bbung to	CONTRACTOR OF THE PERSONS			re suom	angger version of	5550 Provide 6	107 (B-17 (B) 14	amenings.	Calculation and	and the same of the same of	wed governor was		and the oracle	e ngayyan	**************************************	Kalukaran ara	Contraction	
1 / /	, colgile	· Maic)		the second secon	by: (Signa	(uie)	lu:	" Branches	/Time	2019/14-141	7.2	material States		oy (Sigr	ature)	\mathcal{A}	Rec	eived	by:\s	ignatı	re) Date/Time
1//////	1//	no		illa	refile	40	472	<u> </u>	<u> 114</u>	$\overline{\mathcal{O}}$	2	U	عا	my($\Omega \Gamma$	W	U/J	<u>VV</u>		14/11/22
3 - 7				·	Λ						4			λ	•	1		v			1,140

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-13517-1 SDG Number: Rural Eddy Co.,NM

List Source: Eurofins Midland

Login Number: 13517 List Number: 1 Creator: Teel, Brianna

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

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-14196-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MRAMER

Authorized for release by: 5/9/2022 2:53:52 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

4

6

0

9

10

12

13

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	20

1

2

3

6

8

10

12

13

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC	VOA
Qual	lifier

В	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Qualifier Description

Qualifier Description

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

GC Semi VOA

Qualifier

F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.

Clossary

PRES

QC

RER

RPD

TEF

TEQ

TNTC

RL

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

Eurofins Midland

Presumptive

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

Job ID: 880-14196-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-14196-1

Receipt

The samples were received on 4/28/2022 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SWSW (880-14196-1), FL-7 16-18' (880-14196-2), FL-10 @18' (880-14196-3) and (CCV 880-24955/20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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 880-24439 and analytical batch 880-24611 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.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FL-7 16-18' (880-14196-2), FL-10 @18' (880-14196-3), (890-2252-A-1-B), (890-2252-A-1-C MS) and (890-2252-A-1-D 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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-24421 and analytical batch 880-24747 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.

А

-

6

9

11

13

114

Job ID: 880-14196-1

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: SWSW Lab Sample ID: 880-14196-1 Date Collected: 04/27/22 00:00 Matrix: Solid

Date Received: 04/28/22 10:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
Toluene	< 0.00199	U	0.00199		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/04/22 12:55	05/06/22 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	173	S1+	70 - 130				05/04/22 12:55	05/06/22 22:59	1
1,4-Difluorobenzene (Surr)	84		70 - 130				05/04/22 12:55	05/06/22 22:59	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
=									
=									
- Mothod: 8015 NM - Diosal Pange	Organice (DP)	O) (GC)							
Method: 8015 NM - Diesel Range	•		RI	MDI	Unit	п	Prepared	Analyzed	Dil Fac
Analyte	Result	O) (GC) Qualifier	RL	MDL	Unit ma/Ka	<u>D</u>	Prepared	Analyzed 05/03/22 11:44	Dil Fac
	•		RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/03/22 11:44	
Analyte	Result 1840	Qualifier		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result 1840 ge Organics (Di	Qualifier				D	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result 1840 ge Organics (Di	Qualifier RO) (GC)	49.9		mg/Kg			05/03/22 11:44	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 1840 ge Organics (Di Result	Qualifier RO) (GC)	49.9		mg/Kg		Prepared	05/03/22 11:44 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result 1840 ge Organics (Dige Result 869	Qualifier RO) (GC) Qualifier	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 04/28/22 14:02	05/03/22 11:44 Analyzed 05/02/22 19:03	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 1840 ge Organics (Dige Result 869 973	Qualifier RO) (GC) Qualifier	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 04/28/22 14:02 04/28/22 14:02	05/03/22 11:44 Analyzed 05/02/22 19:03 05/02/22 19:03	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 1840 ge Organics (Di Result 869 973 <49.9	Qualifier RO) (GC) Qualifier	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 04/28/22 14:02 04/28/22 14:02 04/28/22 14:02	05/03/22 11:44 Analyzed 05/02/22 19:03 05/02/22 19:03	Dil Face 1 1 1 Dil Face
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 1840 ge Organics (Di Result 869 973 <49.9 %Recovery	Qualifier RO) (GC) Qualifier	49.9 RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 04/28/22 14:02 04/28/22 14:02 04/28/22 14:02 Prepared	05/03/22 11:44 Analyzed 05/02/22 19:03 05/02/22 19:03 05/02/22 19:03 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result 1840	Qualifier RO) (GC) Qualifier U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 04/28/22 14:02 04/28/22 14:02 04/28/22 14:02 Prepared 04/28/22 14:02	05/03/22 11:44 Analyzed 05/02/22 19:03 05/02/22 19:03 Analyzed 05/02/22 19:03	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result 1840	Qualifier RO) (GC) Qualifier U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 04/28/22 14:02 04/28/22 14:02 04/28/22 14:02 Prepared 04/28/22 14:02	05/03/22 11:44 Analyzed 05/02/22 19:03 05/02/22 19:03 Analyzed 05/02/22 19:03	Dil Fac 1 1 Dil Fac

Client Sample ID: FL-7 16-18' Lab Sample ID: 880-14196-2 **Matrix: Solid**

Date Collected: 04/27/22 00:00 Date Received: 04/28/22 10:20

Sample Depth: 16-18'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
o-Xylene	0.0132	В	0.00200		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
Xylenes, Total	0.0132		0.00401		mg/Kg		05/04/22 12:55	05/06/22 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	181	S1+	70 - 130				05/04/22 12:55	05/06/22 23:25	1
1,4-Difluorobenzene (Surr)	83		70 ₋ 130				05/04/22 12:55	05/06/22 23:25	1

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Lab Sample ID: 880-14196-2

Lab Sample ID: 880-14196-3

Matrix: Solid

Matrix: Solid

Job ID: 880-14196-1

Client Sample ID: FL-7 16-18' Date Collected: 04/27/22 00:00

Date Received: 04/28/22 10:20

Sample Depth: 16-18'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0132		0.00401		mg/Kg			05/09/22 15:19	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/03/22 11:44	1
Method: 8015B NM - Diesel Range	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 19:46	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 19:46	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	66	S1-	70 - 130				04/28/22 14:02	05/02/22 19:46	1
o-Terphenyl	59	S1-	70 - 130				04/28/22 14:02	05/02/22 19:46	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	196		4.99		mg/Kg			05/04/22 08:54	

Client Sample ID: FL-10 @18'

Date Collected: 04/27/22 00:00

Date Received: 04/28/22 10:20

Sample Depth: 18'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/04/22 12:55	05/06/22 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	184	S1+	70 - 130				05/04/22 12:55	05/06/22 23:51	1
1,4-Difluorobenzene (Surr)	82		70 - 130				05/04/22 12:55	05/06/22 23:51	1
		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte			RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/09/22 15:19	Dil Fac
Analyte Total BTEX	Result < 0.00403	U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Ran	Result <0.00403	U				<u>D</u>	Prepared Prepared		1
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte	Result <0.00403	U (GC)	0.00403		mg/Kg		<u> </u>	05/09/22 15:19	1
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH	Result <0.00403 rige Organics (DRO Result 50.4	O) (GC) Qualifier	0.00403		mg/Kg		<u> </u>	05/09/22 15:19 Analyzed	1
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH Method: 8015B NM - Diesel Ra	result conditions (DR) Result conditions (DR) Result conditions (DR) Result conditions (DR)	O) (GC) Qualifier	0.00403		mg/Kg Unit mg/Kg		<u> </u>	05/09/22 15:19 Analyzed	Dil Fac Dil Fac 1 Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics	result conditions (DR) Result conditions (DR) Result conditions (DR) Result conditions (DR)	O) (GC) Qualifier RO) (GC) Qualifier	0.00403 RL 50.0	MDL	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	05/09/22 15:19 Analyzed 05/03/22 11:44	Dil Fa

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

Client Sample ID: FL-10 @18'

Lab Sample ID: 880-14196-3

Matrix: Solid

Date Collected: 04/27/22 00:00 Date Received: 04/28/22 10:20

Sample Depth: 18'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	50.4		50.0		mg/Kg		04/28/22 14:02	05/02/22 20:07	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 20:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130				04/28/22 14:02	05/02/22 20:07	1
o-Terphenyl	64	S1-	70 - 130				04/28/22 14:02	05/02/22 20:07	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	372		4.98		mg/Kg			05/04/22 09:00	1

5

0

9

10

4.0

13

14

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14196-1	SWSW	173 S1+	84
880-14196-2	FL-7 16-18'	181 S1+	83
880-14196-3	FL-10 @18'	184 S1+	82
890-2241-A-1-G MS	Matrix Spike	121	85
890-2241-A-1-H MSD	Matrix Spike Duplicate	137 S1+	78
LCS 880-24825/1-A	Lab Control Sample	169 S1+	90
LCSD 880-24825/2-A	Lab Control Sample Dup	164 S1+	89
MB 880-24825/5-A	Method Blank	146031	263 S1+
		S1+	

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	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
0-14196-1	SWSW	101	102	
0-14196-2	FL-7 16-18'	66 S1-	59 S1-	
0-14196-3	FL-10 @18'	69 S1-	64 S1-	
0-2252-A-1-C MS	Matrix Spike	42 S1-	37 S1-	
0-2252-A-1-D MSD	Matrix Spike Duplicate	45 S1-	40 S1-	
S 880-24439/2-A	Lab Control Sample	105	107	
SD 880-24439/3-A	Lab Control Sample Dup	108	106	
3 880-24439/1-A	Method Blank	96	110	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24825/5-A

Lab Sample ID: LCS 880-24825/1-A

Lab Sample ID: LCSD 880-24825/2-A

Matrix: Solid

Analysis Batch: 24955

Analysis Batch: 24955

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24825

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.002348		0.00200		mg/Kg		05/04/22 12:55	05/06/22 14:02	1
Toluene	0.002776		0.00200		mg/Kg		05/04/22 12:55	05/06/22 14:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/04/22 12:55	05/06/22 14:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/04/22 12:55	05/06/22 14:02	1
o-Xylene	0.002063		0.00200		mg/Kg		05/04/22 12:55	05/06/22 14:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/04/22 12:55	05/06/22 14:02	1

MB MB

ı	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	4-Bromofluorobenzene (Surr)	146031	S1+	70 - 130	05/04/22 12:55	05/06/22 14:02	1
	1,4-Difluorobenzene (Surr)	263	S1+	70 - 130	05/04/22 12:55	05/06/22 14:02	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24825

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1133 mg/Kg 113 70 - 130 Toluene 0.100 0.1066 mg/Kg 107 70 - 130 0.100 Ethylbenzene 0.1240 mg/Kg 124 70 - 130 0.200 0.2510 126 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 70 - 130 o-Xylene 0.1212 mg/Kg 121

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 24825

Matrix: Solid Analysis Batch: 24955

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	4	35	
Toluene	0.100	0.1031		mg/Kg		103	70 - 130	3	35	
Ethylbenzene	0.100	0.1189		mg/Kg		119	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2400		mg/Kg		120	70 - 130	4	35	
o-Xylene	0.100	0.1171		mg/Kg		117	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130
1.4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 890-2241-A-1-G MS

Matrix: Solid

Analysis Batch: 24955

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

Prep Batch: 24825

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1 F2	0.101	<0.00202	U F1	mg/Kg	_	0.6	70 - 130	
Toluene	<0.00200	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	

Eurofins Midland

Page 9 of 20

Prep Batch: 24825

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 24439

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 890-2241-A-1-G MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 24955

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.101	0.05543	F1	mg/Kg		55	70 - 130	
m-Xylene & p-Xylene	<0.00400	U F1	0.202	0.1173	F1	mg/Kg		58	70 - 130	
o-Xylene	<0.00200	U F1	0.101	0.05796	F1	mg/Kg		57	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 121 1,4-Difluorobenzene (Surr) 70 - 130 85

Lab Sample ID: 890-2241-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 24955									Prep	Batch:	24825
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1 F2	0.101	0.05097	F1 F2	mg/Kg		51	70 - 130	195	35
Toluene	<0.00200	U F1	0.101	0.05046	F1	mg/Kg		50	70 - 130	NC	35
Ethylbenzene	<0.00200	U F1	0.101	0.05264	F1	mg/Kg		52	70 - 130	5	35
m-Xylene & p-Xylene	<0.00400	U F1	0.201	0.1084	F1	mg/Kg		54	70 - 130	8	35
o-Xylene	<0.00200	U F1	0.101	0.05612	F1	mg/Kg		56	70 - 130	3	35

MSD MSD Qualifier Limits Surrogate %Recovery S1+ 70 - 130 4-Bromofluorobenzene (Surr) 137 1,4-Difluorobenzene (Surr) 70 - 130 78

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

Lab Sample ID: MB 880-24439/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 24611

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 14:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 14:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/22 14:02	05/02/22 14:00	1

MB MB %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 1-Chlorooctane 96 70 - 130 04/28/22 14:02 05/02/22 14:00 110 70 - 130 04/28/22 14:02 05/02/22 14:00 o-Terphenyl

Lab Sample ID: LCS 880-24439/2-A Client Sample ID: Lab Control Sample

Analysis Batch: 24611

Matrix: Solid

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit %Rec Limits 1000 103 1032 70 _ 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 952.8 mg/Kg 95 70 - 130

C10-C28)

Eurofins Midland

Prep Type: Total/NA

Prep Batch: 24439

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: LCS 880-24439/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 24611 Prep Batch: 24439

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 105 70 - 130 o-Terphenyl 107 70 - 130

Lab Sample ID: LCSD 880-24439/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 24611 Prep Batch: 24439 LCSD LCSD %Rec RPD

Spike Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 914.4 91 70 - 13012 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 948.7 95 mg/Kg 70 - 1300 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 108 106 70 - 130 o-Terphenyl

Lab Sample ID: 890-2252-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 24611 Prep Batch: 24439 Sample Sample MS MS Spike

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U F1 F2 1000 341.0 F1 mg/Kg 30 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 UF1 1000 335.4 F1 mg/Kg 34 70 - 130 C10-C28)

MS MS

%Recovery Qualifier Surrogate Limits 42 S1-70 - 130 1-Chlorooctane o-Terphenyl 37 S1-70 - 130

Lab Sample ID: 890-2252-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 24611 Prep Batch: 24439

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U F1 F2 998 639.8 F1 F2 Gasoline Range Organics <50.0 60 70 - 130 61 20 mg/Kg (GRO)-C6-C10 20

Diesel Range Organics (Over <50.0 U F1 998 365.7 F1 mg/Kg 37 70 - 130 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 45 S1-70 - 130 40 S1-70 - 130 o-Terphenyl

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1

Analyzed

05/04/22 06:47

SDG: Rural Eddy Co., NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24421/1-A

Matrix: Solid

Analysis Batch: 24747

Analyte

Chloride

Chloride

Client Sample ID: Method Blank **Prep Type: Soluble**

мв мв MDL Unit Dil Fac

mg/Kg

mg/Kg

D

Prepared

96

90 - 110

Client Sample ID: SWSW

Prep Type: Soluble

Lab Sample ID: LCS 880-24421/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

RL

5.00

Analysis Batch: 24747

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits

250

Result Qualifier

<5.00 U

Lab Sample ID: LCSD 880-24421/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

240.9

Analysis Batch: 24747

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 264.2 mg/Kg 106 90 - 110

Lab Sample ID: 880-14196-1 MS Client Sample ID: SWSW **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 24747

Spike MS MS Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 47.0 F1 251 349.7 F1 121 90 - 110 mg/Kg

Lab Sample ID: 880-14196-1 MSD

Matrix: Solid

Analysis Batch: 24747

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 47.0 F1 251 327.8 F1 mg/Kg 112 90 - 110 6 20

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

GC VOA

Prep Batch: 24825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	SWSW	Total/NA	Solid	5035	
880-14196-2	FL-7 16-18'	Total/NA	Solid	5035	
880-14196-3	FL-10 @18'	Total/NA	Solid	5035	
MB 880-24825/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24825/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24825/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2241-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2241-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 24955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	swsw	Total/NA	Solid	8021B	24825
880-14196-2	FL-7 16-18'	Total/NA	Solid	8021B	24825
880-14196-3	FL-10 @18'	Total/NA	Solid	8021B	24825
MB 880-24825/5-A	Method Blank	Total/NA	Solid	8021B	24825
LCS 880-24825/1-A	Lab Control Sample	Total/NA	Solid	8021B	24825
LCSD 880-24825/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24825
890-2241-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	24825
890-2241-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24825

Analysis Batch: 25133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	SWSW	Total/NA	Solid	Total BTEX	
880-14196-2	FL-7 16-18'	Total/NA	Solid	Total BTEX	
880-14196-3	FL-10 @18'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 24439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	swsw	Total/NA	Solid	8015NM Prep	
880-14196-2	FL-7 16-18'	Total/NA	Solid	8015NM Prep	
880-14196-3	FL-10 @18'	Total/NA	Solid	8015NM Prep	
MB 880-24439/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24439/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2252-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2252-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	SWSW	Total/NA	Solid	8015B NM	24439
880-14196-2	FL-7 16-18'	Total/NA	Solid	8015B NM	24439
880-14196-3	FL-10 @18'	Total/NA	Solid	8015B NM	24439
MB 880-24439/1-A	Method Blank	Total/NA	Solid	8015B NM	24439
LCS 880-24439/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24439
LCSD 880-24439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24439
890-2252-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	24439
890-2252-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	24439

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 24739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
880-14196-1	swsw	Total/NA	Solid	8015 NM
880-14196-2	FL-7 16-18'	Total/NA	Solid	8015 NM
880-14196-3	FL-10 @18'	Total/NA	Solid	8015 NM

HPLC/IC

Leach Batch: 24421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	SWSW	Soluble	Solid	DI Leach	
880-14196-2	FL-7 16-18'	Soluble	Solid	DI Leach	
880-14196-3	FL-10 @18'	Soluble	Solid	DI Leach	
MB 880-24421/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24421/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24421/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14196-1 MS	SWSW	Soluble	Solid	DI Leach	
880-14196-1 MSD	SWSW	Soluble	Solid	DI Leach	

Analysis Batch: 24747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14196-1	SWSW	Soluble	Solid	300.0	24421
880-14196-2	FL-7 16-18'	Soluble	Solid	300.0	24421
880-14196-3	FL-10 @18'	Soluble	Solid	300.0	24421
MB 880-24421/1-A	Method Blank	Soluble	Solid	300.0	24421
LCS 880-24421/2-A	Lab Control Sample	Soluble	Solid	300.0	24421
LCSD 880-24421/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24421
880-14196-1 MS	SWSW	Soluble	Solid	300.0	24421
880-14196-1 MSD	SWSW	Soluble	Solid	300.0	24421

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-14196-1

Client Sample ID: SWSW

Date Collected: 04/27/22 00:00 Date Received: 04/28/22 10:20

Matrix: Solid

Job ID: 880-14196-1

SDG: Rural Eddy Co., NM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24825	05/04/22 12:55	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24955	05/06/22 22:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25133	05/09/22 15:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24739	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 08:35	CH	XEN MID

Lab Sample ID: 880-14196-2

Date Collected: 04/27/22 00:00

Client Sample ID: FL-7 16-18'

Date Received: 04/28/22 10:20

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24825	05/04/22 12:55	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24955	05/06/22 23:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25133	05/09/22 15:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24739	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 19:46	AJ	XEN MID

5.01 g

50 mL

24421

24747

Client Sample ID: FL-10 @18'

Leach

Analysis

Lab Sample ID: 880-14196-3

04/28/22 11:39 SC

05/04/22 08:54 CH

Matrix: Solid

XEN MID

XEN MID

Date Collected: 04/27/22 00:00 Date Received: 04/28/22 10:20

Soluble

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	24825	05/04/22 12:55	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24955	05/06/22 23:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25133	05/09/22 15:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24739	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 20:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:00	CH	XEN MID

Laboratory References:

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

DI Leach

300.0

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-14196-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority		ogram	Identification Number	Expiration Date
Texas		ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, but	t the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for
the agency does not of			od by the governing addressity. This list his	dy moidde driafytes for
the agency does not of Analysis Method		Matrix	Analyte	ay molade analytes for
0 ,	fer certification.	•	, , ,	

Method Summary

Client: Etech Environmental & Safety Solutions

Method Description

Total BTEX Calculation

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1 SDG: Rural Eddy Co., NM

XEN MID

XEN MID

Protocol	Laboratory
SW846	XEN MID
TAL SOP	XEN MID
SW846	XEN MID
SW846	XEN MID
MCAWW	XEN MID
SW846	YEN MID

SW846

ASTM

Protocol References:

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

2

4

5

7

10

11

13

14

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14196-1

SDG: Rural Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14196-1	SWSW	Solid	04/27/22 00:00	04/28/22 10:20
880-14196-2	FL-7 16-18'	Solid	04/27/22 00:00	04/28/22 10:20
880-14196-3	FL-10 @18'	Solid	04/27/22 00:00	04/28/22 10:20

Received by OCD: 10/4/2022 8:36:47 AM

Chain of Custody

Houston TX (281) 240-4200, Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland, TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296

Hobbs NM (575) 392-7550, Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Work Order No:	14196
----------------	-------

5/9/2022

Page 19 of 20

Released to Imaging: 1/27/2023 10:04:50 AM

						Ati	ianta (3A (770) 449-8	800								vono		. Page 1 of 4
Project Manager	Joel Lowry			Bill to. (if differ	ent)	!							7		·,		***************************************	xenc	Charles and the second	n Page 1 of 1 Comments
Company Name	Etech Environment	al and Safety		Company Na	Sand mean with the								7	Progu	ram· II	STIPS				
Address:	2617 West Marland			Address:								···········	7	Program: UST/PST PRF Brownfield RR Superfund State of Project:						
City, State ZIP:	Hobbs, NM 88240			City, State ZI	P:						7	1	rting Le	-		vel ∏	PS	T/US TRF Level /		
Phone:	(575) 264-9884		Email:	Email Resu	Its to	PM@	etech	env.c	<u>om</u> + (Client		······		Deliverables EDD ADaPT						
Project Name:	Astro D	og 6-Inch	Tu	irn Around ANALYSIS REQUI						EQUE	ST	-9-00-0-00-0	Karantina		and the second of the	4-9-0-3-1-11	Preservative Codes			
Project Number:	15	649	Routi	ne 🛛	44.00							Control (1997)				Comments months of	And annual manager	and the same of		HNO3 HN
Project Location	Rural Ed	dy Co , NM	Rush		e l														1	H2S04 H2
Sampler's Name:	Joel .	Lowry	Due [Date] sat															HCL HL
PO#		SRS# 2022-0	Seath a state of the state of t		Lese															None NO
SAMPLE RECE	IPT Temp BI	AND PROPERTY OF THE PARTY OF TH		(Yes) No	18															NaOH Na
Temperature (°C): Received Intact:	(Yes) No	2 [Thermometer		ije															MeOH Me
Cooler Custody Seal	September 199	Correction F	CANADA CONTRACTOR CONTRACTOR	- 2	Conta		Ext.													Zn Acetate+ NaOH Zn
Sample Custody Sea		Total Conta		* &	er of C	(8021)	odified	(00												TAT starts the day recevied by the lab if received by 4 30pm
Sample Ider	ntification Ma	trix Date Sampled	Time Sampled	Depth	Numb Code	втех (TPH (Modified Ext.)	CI- (E300)												Sample Comments
swsw	Soi	4/27/2022			1/NO	Х	Х	Х										T		And the second distribution of the second second second distribution of the second distribution of the second seco
FL-7 16-18'	Soil	4/27/2022		16-18'	1/NO	Х	Х	Х											1	
FL-10 @ 18'	Soi	4/27/2022		18'	1/NO	Х	Х	X												
ļ					ļi									_						
ļ			ļ	<u></u>										_						
											ļ			_	880-	1419	6 Cha	in of (Custo	dy
														<u> </u>	 			 	+-	
					<u></u>				<u> </u>					<u></u>			<u> </u>	<u></u>	<u></u>	<u> </u>
Total 200.7 / 6 Circle Method	010 200.8 / 6020 (s) and Metal(s) to be	: 8RC e analyzed	RA 13PPN TCLP/SPI	/I Texas 11 _P 6010 8F	AL S RCRA	b As Sb A	Ba As Ba	Be B Be	Cd C	Ca Cr r Co	Co Cu I	Cu F	e Pb	Mg Ni S	Mn M Se Ag	o Ni Ti l	K S	e Ag		2 Na Sr TI Sn U V Zn 631/245.1/7470/7471 Hg
Notice Signature of this	document and relinquishm	ent of samples cons	stitutes a valid p	urchase order fr	om clien	t compa	any to X	enco. ii	ts affilia	es and	subcor	tractors	Itae	te ennie	andard	tormo	and sor	dition	==	
pot service. Xenco will be	liable only for the cost of a large of \$75.00 will be appli	samples and shall no	of assume any re	senoneihility for	any loca		vn0000	Incom		114	10	1							ol Ol	
Relinquished by			by: (Signatu		O Whileshield and annual	Date	MANUT 1888	Service Contraction	P.	TO A STATE OF THE					$-\Delta$					

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-14196-1

SDG Number: Rural Eddy Co., NM

Login Number: 14196 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	
ls 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	

Euronnis midiand

Released to Imaging: 1/27/2023 10:04:50 AM

2

3

4

5

7

_

11

| 4

1/

Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-14739-1

Laboratory Sample Delivery Group: Rural Eddy

Client Project/Site: Astro Dog 6-2Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

JURAMER

Authorized for release by: 5/19/2022 10:33:00 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

····· Links

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

3

4

5

0

8

1 N

13

Н

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-2Inch

Laboratory Job ID: 880-14739-1 SDG: Rural Eddy

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Racaint Chacklists	19

3

4

6

8

10

11

13

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Qualifiers

GC VOA Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD 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)

Method Detection Limit

ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

MDL

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

Eurofins Midland

1

2

O

7

Ŏ

10

12

13

Н

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Job ID: 880-14739-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-14739-1

Receipt

The samples were received on 5/12/2022 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

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

GC Semi VOA

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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-25438 and analytical batch 880-25553 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: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1

SDG: Rural Eddy

Client Sample ID: FL-56

Date Collected: 05/10/22 07:30 Date Received: 05/12/22 10:40 Lab Sample ID: 880-14739-1

Matrix: Solid

Method: 8015 NM - Diesel Range	Organics (DR	U) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	70.4		49.9		mg/Kg			05/19/22 08:51	1
- Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		05/18/22 15:06	05/19/22 01:40	1
(GRO)-C6-C10									
Diesel Range Organics (Over	70.4		49.9		mg/Kg		05/18/22 15:06	05/19/22 01:40	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/18/22 15:06	05/19/22 01:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/18/22 15:06	05/19/22 01:40	1
o-Terphenyl	110		70 ₋ 130				05/18/22 15:06	05/19/22 01:40	1

Client Sample ID: FL-8

Date Collected: 05/10/22 07:35

Date Received: 05/12/22 10:40

Lab Sample ID: 880-14739-2

Matrix: Solid

_ |

4 /

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 17:24	
Toluene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 17:24	
Ethylbenzene	0.00383		0.00202		mg/Kg		05/16/22 13:46	05/17/22 17:24	1
m-Xylene & p-Xylene	0.00671		0.00403		mg/Kg		05/16/22 13:46	05/17/22 17:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 17:24	1
Xylenes, Total	0.00671		0.00403		mg/Kg		05/16/22 13:46	05/17/22 17:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				05/16/22 13:46	05/17/22 17:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130				05/16/22 13:46	05/17/22 17:24	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0105		0.00403		mg/Kg			05/18/22 09:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1680		49.9		mg/Kg			05/19/22 08:51	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
· ····· , · ·					mg/Kg		05/18/22 15:06	05/19/22 02:01	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/rtg		00, 10,22 10.00	00/10/22 02:01	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.9 1680	U	49.9 49.9		mg/Kg		05/18/22 15:06	05/19/22 02:01	,
Gasoline Range Organics (GRO)-C6-C10									
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	1680	U	49.9		mg/Kg		05/18/22 15:06	05/19/22 02:01	1 1 Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	1680 <49.9	U	49.9 49.9		mg/Kg		05/18/22 15:06 05/18/22 15:06	05/19/22 02:01 05/19/22 02:01	1

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1

SDG: Rural Eddy

Client Sample ID: FL-8

Lab Sample ID: 880-14739-2

Date Collected: 05/10/22 07:35 Date Received: 05/12/22 10:40

Matrix: Solid

	Method: 300.0 - Anions, Ion Chromatog	raphy -	Soluble							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	96.1	F1 F2	4.98		mg/Kg			05/13/22 17:51	1

Lab Sample ID: 880-14739-3

Date Collected: 05/10/22 07:40

Client Sample ID: FL-9

Matrix: Solid

Date Received: 05/12/22 10:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
Toluene	< 0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				05/16/22 13:46	05/17/22 17:44	1
1,4-Difluorobenzene (Surr)	91		70 - 130				05/16/22 13:46	05/17/22 17:44	1

Analyte

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <0.00398 0.00398 Total BTEX mg/Kg 05/18/22 09:14

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

RL MDL Unit D Prepared Analyzed Dil Fac **Total TPH** 341 49.9 05/19/22 08:51 mg/Kg

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

Analyte	Result	Qualifier	KL	MDL	Unit	D	Prepared	Anaiyzed	DII Fac	
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		05/18/22 15:06	05/19/22 02:22	1	
(GRO)-C6-C10										
Diesel Range Organics (Over	341		49.9		mg/Kg		05/18/22 15:06	05/19/22 02:22	1	
C10-C28)										
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/18/22 15:06	05/19/22 02:22	1	

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 05/19/22 02:22 70 - 130 05/18/22 15:06 1-Chlorooctane 117 117 70 - 130 05/18/22 15:06 05/19/22 02:22 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier MDL Unit RL D Prepared Analyzed Dil Fac Chloride 132 5.00 mg/Kg 05/13/22 18:16

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14739-2	FL-8	115	93
880-14739-3	FL-9	116	91
890-2303-A-1-E MS	Matrix Spike	110	96
890-2303-A-1-F MSD	Matrix Spike Duplicate	104	93
LCS 880-25638/1-A	Lab Control Sample	105	96
LCSD 880-25638/2-A	Lab Control Sample Dup	105	95
MB 880-25638/5-A	Method Blank	102	92

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)	
880-14739-1	FL-56	108	110	
880-14739-2	FL-8	110	113	
880-14739-3	FL-9	117	117	
890-2316-A-1-G MS	Matrix Spike	104	98	
890-2316-A-1-H MSD	Matrix Spike Duplicate	103	94	
LCS 880-25829/2-A	Lab Control Sample	105	102	
LCSD 880-25829/3-A	Lab Control Sample Dup	102	98	
MB 880-25829/1-A	Method Blank	111	118	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25638/5-A

Lab Sample ID: LCS 880-25638/1-A

Matrix: Solid

Analysis Batch: 25671

Matrix: Solid Analysis Batch: 25671 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25638

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 12:34	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/16/22 13:40	05/17/22 12:34	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/16/22 13:40	05/17/22 12:34	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25638

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1010 mg/Kg 101 70 - 130 Toluene 0.100 0.1123 mg/Kg 112 70 - 130 0.100 Ethylbenzene 0.1158 mg/Kg 116 70 - 130 0.200 70 - 130 m-Xylene & p-Xylene 0.2346 mg/Kg 117 0.100 0.1168 70 - 130 o-Xylene mg/Kg 117

LCS LCS

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 25671

Lab Sample ID: LCSD 880-25638/2-A

Prep Type: Total/NA Prep Batch: 25638

	Бріке	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09697		mg/Kg		97	70 - 130	4	35	
Toluene	0.100	0.1065		mg/Kg		106	70 - 130	5	35	
Ethylbenzene	0.100	0.1108		mg/Kg		111	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130	4	35	
o-Xylene	0.100	0.1119		mg/Kg		112	70 - 130	4	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1.4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-2303-A-1-E MS

Matrix: Solid

Analysis Batch: 25671

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

Prep Batch: 25638

		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00201	U F1	0.101	0.06816	F1	mg/Kg	_	67	70 - 130	
١	Toluene	<0.00201	U	0.101	0.07512		mg/Kg		74	70 - 130	

Eurofins Midland

Page 8 of 19

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1

SDG: Rural Eddy

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

Lab Sample ID: 890-2303-A-1-E MS

Lab Sample ID: 890-2303-A-1-F MSD

Matrix: Solid

Analysis Batch: 25671

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25638

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.101	0.07397		mg/Kg		73	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1496		mg/Kg		74	70 - 130	
o-Xylene	<0.00201	U	0.101	0.07506		mg/Kg		74	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							

70 - 130

70 - 130

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

Matrix: Solid Analysis Batch: 25671 Prep Batch: 25638 Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Analyte babbA Result Qualifier Limits Unit Benzene <0.00201 UF1 0.100 0.07943 mg/Kg 79 70 - 130 15 35 Toluene <0.00201 U 0.100 0.08921 mg/Kg 89 70 - 130 17 35 Ethylbenzene <0.00201 0.100 0.09057 90 70 - 130 35 U mg/Kg 20 m-Xylene & p-Xylene <0.00402 U 0.200 0.1847 mg/Kg 92 70 - 130 21 35 <0.00201 U 0.100 0.09235 92 70 - 130 o-Xylene mg/Kg 21

MSD MSD

110

96

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	104		70 - 130		
1,4-Difluorobenzene (Surr)	93		70 - 130		

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

Lab Sample ID: MB 880-25829/1-A

Matrix: Solid

Analysis Batch: 25770

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

Prep Batch: 25829

мв мв Result Qualifier RL MDL Unit D Prepared Dil Fac Analyte Analyzed 05/18/22 15:06 <50.0 U 50.0 05/18/22 21:27 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 05/18/22 15:06 05/18/22 21:27 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 05/18/22 15:06 05/18/22 21:27 mg/Kg

MB MB

%Recovery Analyzed Qualifier Limits Prepared Dil Fac Surrogate 1-Chlorooctane 111 70 - 130 05/18/22 15:06 05/18/22 21:27 118 70 - 130 05/18/22 15:06 05/18/22 21:27 o-Terphenyl

Lab Sample ID: LCS 880-25829/2-A

Matrix: Solid

Analysis Batch: 25770

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25829

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	857.6		mg/Kg		86	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	998.7		mg/Kg		100	70 - 130	
C10-C28)								

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

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

Lab Sample ID: LCS 880-25829/2-A

Matrix: Solid

Analysis Batch: 25770

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25829

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 105 70 - 130 o-Terphenyl 102 70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-25829/3-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25770 Prep Batch: 25829

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 845.8 85 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 959.5 96 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 102 70 - 130 1-Chlorooctane 70 - 130 o-Terphenyl 98

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25829

Sample Sample MS MS Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics <50.0 U 1000 1156 mg/Kg 113 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 UF1 1000 1405 F1 mg/Kg 141 70 - 130

C10-C28)

Matrix: Solid

Analysis Batch: 25770

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 104 o-Terphenyl 98 70 - 130

Lab Sample ID: 890-2316-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Lab Sample ID: 890-2316-A-1-G MS

Analysis Batch: 25770

Prep Type: Total/NA

Prep Batch: 25829

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U 999 Gasoline Range Organics 1218 119 70 - 130 5 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U F1 999 1377 F1 mg/Kg 138 70 - 130 2 20

C10-C28)

MSD MSD

Qualifier Surrogate %Recovery Limits 1-Chlorooctane 103 70 - 130 94 70 - 130 o-Terphenyl

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

SDG: Rural Eddy

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: FL-8

Client Sample ID: FL-8

Prep Type: Soluble

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25438/1-A

Matrix: Solid

Analysis Batch: 25553

MB MB

MDL Unit Dil Fac Analyte Result Qualifier RL Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 05/13/22 17:05

Lab Sample ID: LCS 880-25438/2-A

Matrix: Solid

Analysis Batch: 25553

	Spike	LCS	LCS			%Rec
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits
Chloride	250	250.7	ma/Ka		100	90 - 110

Lab Sample ID: LCSD 880-25438/3-A

Matrix: Solid

Analysis Batch: 25553

	5	Spike	LCSD	LCSD				%Rec		RPD
Analyte	A	dded	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride		250	253.9		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-14739-2 MS

Matrix: Solid

Analysis Batch: 25553

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	96.1	F1 F2	249	340.2		mg/Kg	_	98	90 - 110	

Lab Sample ID: 880-14739-2 MSD

Matrix: Solid

Analysis Batch: 25553

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	96.1	F1 F2	249	246.5	F1 F2	mg/Kg		60	90 - 110	32	20

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

GC VOA

Prep Batch: 25638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-2	FL-8	Total/NA	Solid	5035	
880-14739-3	FL-9	Total/NA	Solid	5035	
MB 880-25638/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-2	FL-8	Total/NA	Solid	8021B	25638
880-14739-3	FL-9	Total/NA	Solid	8021B	25638
MB 880-25638/5-A	Method Blank	Total/NA	Solid	8021B	25638
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	8021B	25638
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25638
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	25638
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25638

Analysis Batch: 25797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-2	FL-8	Total/NA	Solid	Total BTEX	
880-14739-3	FL-9	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-1	FL-56	Total/NA	Solid	8015B NM	25829
880-14739-2	FL-8	Total/NA	Solid	8015B NM	25829
880-14739-3	FL-9	Total/NA	Solid	8015B NM	25829
MB 880-25829/1-A	Method Blank	Total/NA	Solid	8015B NM	25829
LCS 880-25829/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25829
LCSD 880-25829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25829
890-2316-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	25829
890-2316-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25829

Prep Batch: 25829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-1	FL-56	Total/NA	Solid	8015NM Prep	
880-14739-2	FL-8	Total/NA	Solid	8015NM Prep	
880-14739-3	FL-9	Total/NA	Solid	8015NM Prep	
MB 880-25829/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25829/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2316-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2316-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-1	FL-56	Total/NA	Solid	8015 NM	
880-14739-2	FL-8	Total/NA	Solid	8015 NM	

Eurofins Midland

Page 12 of 19

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

GC Semi VOA (Continued)

Analysis Batch: 25862 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-3	FL-9	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-2	FL-8	Soluble	Solid	DI Leach	
880-14739-3	FL-9	Soluble	Solid	DI Leach	
MB 880-25438/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25438/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25438/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14739-2 MS	FL-8	Soluble	Solid	DI Leach	
880-14739-2 MSD	FL-8	Soluble	Solid	DI Leach	

Analysis Batch: 25553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14739-2	FL-8	Soluble	Solid	300.0	25438
880-14739-3	FL-9	Soluble	Solid	300.0	25438
MB 880-25438/1-A	Method Blank	Soluble	Solid	300.0	25438
LCS 880-25438/2-A	Lab Control Sample	Soluble	Solid	300.0	25438
LCSD 880-25438/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25438
880-14739-2 MS	FL-8	Soluble	Solid	300.0	25438
880-14739-2 MSD	FL-8	Soluble	Solid	300.0	25438

Eurofins Midland

2

3

4

9

10

12

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Client Sample ID: FL-56

Date Collected: 05/10/22 07:30 Date Received: 05/12/22 10:40 Lab Sample ID: 880-14739-1

Matrix: Solid

	Bat	tch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep T	уре Тур	oe i	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/N	A Ana	alysis 8	3015 NM		1			25862	05/19/22 08:51	AJ	XEN MID
Total/N	A Pre	ер 8	3015NM Prep			10.02 g	10 mL	25829	05/18/22 15:06	DM	XEN MID
Total/N	A Ana	alysis 8	3015B NM		1			25770	05/19/22 01:40	AJ	XEN MID

Client Sample ID: FL-8

Date Collected: 05/10/22 07:35 Date Received: 05/12/22 10:40 Lab Sample ID: 880-14739-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 17:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25797	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25862	05/19/22 08:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25829	05/18/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25770	05/19/22 02:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25438	05/12/22 14:54	CH	XEN MID
Soluble	Analysis	300.0		1			25553	05/13/22 17:51	CH	XEN MID

Client Sample ID: FL-9

Date Collected: 05/10/22 07:40 Date Received: 05/12/22 10:40 Lab Sample ID: 880-14739-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 17:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25797	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25862	05/19/22 08:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25829	05/18/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25770	05/19/22 02:22	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25438	05/12/22 14:54	CH	XEN MID
Soluble	Analysis	300.0		1			25553	05/13/22 18:16	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date		
exas		ELAP	T104704400-21-22	06-30-22		
The following analytes the agency does not of		it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo		
Analysis Method	D M () 1	N.A Audio				
Alialysis Melliou	Prep Method	Matrix	Analyte			
8015 NM	Ргер метпод	Solid	Analyte Total TPH			

А

_

6

8

10

12

13

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

Job ID: 880-14739-1 SDG: Rural Eddy

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Midland

3

4

9

11

12

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-2Inch

OD ID: 880-14	739-1
SDG: Rural	Eddy

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14739-1	FL-56	Solid	05/10/22 07:30	05/12/22 10:40
880-14739-2	FL-8	Solid	05/10/22 07:35	05/12/22 10:40
880-14739-3	FL-9	Solid	05/10/22 07:40	05/12/22 10:40

Chain of Custody

Work Order No: _____1973

5/19/2022

Page 18 of 19

Released to Imaging: 1/27/2023 10:04:50 AM

Revised Date101419 Rev 2019 1

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Atlanta GA (770) 449-8800

	=== 1 (······································				1 .							_ ,				www	xenc	o con	n Pag	e	of	
Project Manager	Doel C		`		Bill to (if differ			tecl						4				W	ork C	rder	Comme	nts		
Company Name.	Etech Environr		nd Safety		Company Na	me	CI	0	50el	Lo	w/.	1			Progr	am U	ST/PS	T[] F	'RF	Brov	vnfield[RR€	Superfund	7]
Address:	2617 West Ma	rland			Address.	11-722-117-127-121									Sta	ate of	Projec	t						-
City, State ZIP	Hobbs, NM 882			Y**	City, State Z	P·								Reporting Level Level PST/US TRF Level					ļ					
Phone:	(575) 264-9884	<u> </u>		Ema	il Email Resu	Its to	PM@etechenv com + Client					Deliverables EDD ☐ ADaPT ☐ Other												
Project Name:	AStro Do	y 6-	luch	3	Turn Aroung	7,,,,,,,,,,	ANALYSIS REQ					QUE	ST	//////					Pn	Preservative Codes		\equiv		
Project Number				Roi	utine 🔯														Г	T	HNO3	HN		ᅱ
Project Location	Qural E			Rus	sh 🔲	ě														†	H2S04			ı
Sampler's Name	50el Lo			Due	e Date	servative		1											}		HCL HL			1
PO#:	1564	9/				Še															None N			
SAMPLE RECE	I PT Ten	np Blank.	Yes No	Wet lo	e (Ces) No	Containers/Pre															NaOH I	-		-
Temperature (°C)·	1-61	14		Thermomet	er ID	12															MeOH			
Received Intact:	(Yes	No			Ile] <u>ā</u>		Ext.)													Zn Acet		7U 7n	l
Cooler Custody Seal	(m) Mr. am rought (p)		Correction I	actor	2			Ğ Ü															***************************************	ᅱ
Sample Custody Sea	als. Yes No (N/A/ Total Containers.				ē	021)	diffe	6												TAT sta	arts the da if receive	ay recevied by too	ne	
Sample Ider	tification	Matrix	latrix Date Time Sampled Depth			Number Code	BTEX (8021)	TPH (Modified	CI- (E300)															-
FL-56		7	5/1422	Sampled	<u> </u>	žΰ	<u> </u>	<u>F</u>	<u> </u>	-									<u> </u>	<u> </u>	ļ	inhie c	omments	
EL-8		1	1	7:35		╁──	-	1	+,-	-		ļ	\vdash						├	<u> </u>	-			_
FL-9				7: W		┼	 	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1										 	┼				_
				7: 20		╁──	<u> </u>	 ^	1 3										<u> </u>	1	1, _			_
		ļ — —				╁──		├	 	-			_ 1				u zan 11 31	nani i	11111111	1111111	-			
		 		 		 	 	 	 	-											-			
				 				├	 	-														
		}	-	 		├	<u> </u>	├─	├	-			_							111/111	ı			
	·				 	<u> </u>	<u> </u>	├	ـــ				_	880	14739) Chai	n of C	ustod	ly					
			 			-	 	 	├ ─				L						I		1]
			L			<u> </u>	<u> </u>	<u> </u>	<u>L</u>											<u></u>			***************************************	
Total 200.7 / 6			8RC	CRA 13PI	PM Texas 11	AI S	Sb As	Ba	Be B	Cd (Ca C	r Co	Cu Fe	Pb	Mg N	√ln M	o Ni	K Se	e Aa	SiO	2 Na Sr	TI Sn	U V Zn	一
	s) and Metal(s)		iaiyzea	ICLPIS	PLP 6010 8F	CRA	Sb /	As B	a Be	Cd C	r Co	Cu F	² b Mn	Мо	Ni S	e Ag	TI U			16			0 / 7471 H	ا وا
Notice Signature of this	document and reling	uishment o	of samples con	stitutes a valic	nurchase order fr	om clier	at comp	any to	Yanga i	to offilia								nd con	ditions					픡
of service. Xenco will be of Xenco A minimum ch																				ol				i
Relinquished by					A 1	/Time	The state of the state of							7	No. of the last of			Sana	uro)	7	No. (4- /T)	<u></u>		
1)ce, 8001	IN MOC			21	Date/Time Relinquished by (Signature) Received by (Signature)				 	Date/Time														
3		110				 	XY	O_{\parallel}	щС	4	1	<u>U</u>				K	\mathcal{M}	<u> </u>	<u>/ </u>	····		101	14/43	늬
5	<u>U</u>	 		***************************************		 				6												 	100115	\dashv
L		L				<u></u>				<u> </u>													10,40	- 1

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-14739-1

SDG Number: Rural Eddy

Login Number: 14739 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	N/A	

3

4

0

8

10

12

11

<6mm (1/4").

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-14811-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

eurofins 🙀

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MAMER

Authorized for release by: 5/20/2022 11:17:49 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Links

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

_

5

6

8

11

13

Н

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receint Checklists	19

2

3

4

6

8

40

11

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Qualifier Description

Qualifier Description

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

C	Qualifiers
G	C VOA
Q	ualifier
F	1
S	1+
U	
G	iC Semi VO
Q	ualifier
U	
Н	PLC/IC
Q	ualifier

Indicates the analyte was analyzed for but not detected.

MS and/or MSD recovery exceeds control limits. Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

Qualifier Description

Indicates the analyte was analyzed for but not detected.

Glossary Abbreviation

%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** 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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL NC Not Calculated ND Not Detected at the reporting limit (or MDL or EDL if shown) NEG Negative / Absent POS Positive / Present **PQL Practical Quantitation Limit PRES** Presumptive QC **Quality Control RER** Relative Error Ratio (Radiochemistry) Reporting Limit or Requested Limit (Radiochemistry) RL RPD Relative Percent Difference, a measure of the relative difference between two points TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) TEQ **TNTC** Too Numerous To Count

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

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

Eddy Co., NM

Job ID: 880-14811-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-14811-1

Receipt

The samples were received on 5/16/2022 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.7°C

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-25653 and analytical batch 880-25750 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: WSW #1 (880-14811-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

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

1

7

Ŏ

1 0

4.0

13

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Job ID: 880-14811-1

Client Sample ID: SWSWb Date Collected: 05/12/22 00:00

%Recovery Qualifier

95 95 Lab Sample ID: 880-14811-1 Matrix: Solid

Analyzed

05/17/22 16:46

Prepared

05/17/22 09:20

05/17/22 09:20 05/17/22 16:46

Date Received: 05/16/22 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/18/22 08:44	1
Method: 8015B NM - Diesel Range	Organics (DI	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/17/22 09:20	05/17/22 16:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/17/22 09:20	05/17/22 16:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/17/22 09:20	05/17/22 16:46	1

Limits

70 - 130

70 - 130

Client Sample ID: WSW #1

Surrogate

o-Terphenyl

1-Chlorooctane

Lab Sample ID: 880-14811-2

Date Collected: 05/12/22 00:00 **Matrix: Solid** Date Received: 05/16/22 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/22 15:56	05/17/22 20:57	
Toluene	< 0.00199	U	0.00199		mg/Kg		05/16/22 15:56	05/17/22 20:57	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		05/16/22 15:56	05/17/22 20:57	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 15:56	05/17/22 20:57	
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 15:56	05/17/22 20:57	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 15:56	05/17/22 20:57	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130				05/16/22 15:56	05/17/22 20:57	
1,4-Difluorobenzene (Surr)	102		70 - 130				05/16/22 15:56	05/17/22 20:57	
Method: Total BTEX - Total BTEX						_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX - -	<0.00398	U	0.00398		mg/Kg			05/18/22 09:15	•
Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier	RL	MDI	Unit	D	Duamanad	Amakanad	Dil Fa
Analyte Total TPH			49.9	MDL			Prepared	Analyzed 05/18/22 08:44	Dil Fa
	<49.9	U	49.9		mg/Kg			05/16/22 06:44	
Method: 8015B NM - Diesel Rang	, ,	, , ,				_	_		
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		05/17/22 09:20	05/17/22 17:54	,
(GRO)-C6-C10									
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		05/17/22 09:20	05/17/22 17:54	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)									
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9 <49.9		49.9 49.9		mg/Kg		05/17/22 09:20 05/17/22 09:20	05/17/22 17:54 05/17/22 17:54	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)		U							
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9				05/17/22 09:20	05/17/22 17:54	Dil Fac

Eurofins Midland

Dil Fac

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

Client Sample ID: WSW #1

Lab Sample ID: 880-14811-2

. Matrix: Solid

Date Collected: 05/12/22 00:00 Date Received: 05/16/22 10:45

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResult ChlorideQualifierRL MDL mit mg/KgD Prepared mg/KgAnalyzed Dil Fac

5

6

8

40

11

13

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

ogate Recovery (Acceptance Limits)				
	DFBZ1	BFB1		
	(70-130)	(70-130)	Client Sample ID	Lab Sample ID
	88	103	Matrix Spike	880-14809-A-10-A MS
	93	107	Matrix Spike Duplicate	880-14809-A-10-B MSD
	102	133 S1+	WSW #1	880-14811-2
	94	102	Lab Control Sample	LCS 880-25653/1-A
	95	101	Lab Control Sample Dup	LCSD 880-25653/2-A
	93	82	Method Blank	MB 880-25653/5-A
				Surrogate Legend

DFBZ = 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14811-1	SWSWb	95	95
880-14811-1 MS	SWSWb	91	82
880-14811-1 MSD	SWSWb	91	83
880-14811-2	WSW #1	95	96
LCS 880-25676/2-A	Lab Control Sample	127	115
LCSD 880-25676/3-A	Lab Control Sample Dup	127	116

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

Client: Etech Environmental & Safety Solutions

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25653/5-A

Lab Sample ID: LCS 880-25653/1-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 25750

Analysis Batch: 25750

Matrix: Solid

Analysis Batch: 25750

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25653

	мв	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 15:56	05/17/22 18:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 15:56	05/17/22 18:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 15:56	05/17/22 18:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 15:56	05/17/22 18:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 15:56	05/17/22 18:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 15:56	05/17/22 18:16	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	05/16/22 15:56	05/17/22 18:16	1
1,4-Difluorobenzene (Surr)	93		70 - 130	05/16/22 15:56	05/17/22 18:16	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25653

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09157 mg/Kg 92 70 - 130 Toluene 0.100 0.09298 mg/Kg 93 70 - 130 0.100 Ethylbenzene 0.09072 mg/Kg 91 70 - 130 0.200 0.1805 70 - 130 m-Xylene & p-Xylene mg/Kg 90 0.100 0.09064 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25653

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1007		mg/Kg		101	70 - 130	9	35	
Toluene	0.100	0.1029		mg/Kg		103	70 - 130	10	35	
Ethylbenzene	0.100	0.1014		mg/Kg		101	70 - 130	11	35	
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		103	70 - 130	13	35	
o-Xylene	0.100	0.1090		mg/Kg		109	70 - 130	18	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1.4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-14809-A-10-A MS

Lab Sample ID: LCSD 880-25653/2-A

Matrix: Solid

Analysis Batch: 25750

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

Prep Batch: 25653

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F1	0.100	0.07949		mg/Kg		79	70 - 130	
Toluene	<0.00202	U	0.100	0.08307		mg/Kg		83	70 - 130	

Eurofins Midland

Page 8 of 19

Client: Etech Environmental & Safety Solutions

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-14809-A-10-A MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 25750

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U	0.100	0.08620		mg/Kg		86	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1736		mg/Kg		87	70 - 130	
o-Xylene	<0.00202	U	0.100	0.08637		mg/Kg		86	70 - 130	

MS MS

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-14809-A-10-B MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 25750

Prep Type: Total/NA Prep Batch: 25653

RPD

Prep Batch: 25653

Sample Sample Spike MSD MSD %Rec RPD Limit Analyte Result Qualifier babbA Result Qualifier Limits Unit Benzene <0.00202 UF1 0.0990 0.06488 F1 mg/Kg 66 70 - 130 20 35 Toluene <0.00202 0.0990 0.07059 mg/Kg 71 70 - 130 16 35 Ethylbenzene <0.00202 0.0990 0.07525 76 70 - 130 35 U mg/Kg 14 0.198 m-Xylene & p-Xylene <0.00403 U 0.1500 mg/Kg 76 70 - 130 15 35 0.0990 <0.00202 U 0.07580 77 70 - 130 o-Xylene mg/Kg 13

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

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

Lab Sample ID: LCS 880-25676/2-A Client Sample ID: Lab Control Sample M

1000

1000

Gasoline Range Organics

Diesel Range Organics (Over

(GRO)-C6-C10

Ar

Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 25684							Prep Batch: 25676
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits

1246

1072

mg/Kg

mg/Kg

125

107

70 - 130

70 - 130

C10-C28) LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 127 70 - 130 70 - 130 o-Terphenyl 115

Lab Sample ID: LCSD 880-25676/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25684 Prep Batch: 25676 Spike LCSD LCSD %Rec **RPD** Analyte RPD Limit Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1186 119 70 - 130 mg/Kg 5 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1079 mg/Kg 108 70 - 130 20

C10-C28)

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

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

Lab Sample ID: LCSD 880-25676/3-A **Matrix: Solid**

Analysis Batch: 25684

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25676

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 127 70 - 130 o-Terphenyl 116 70 - 130

Lab Sample ID: 880-14811-1 MS Client Sample ID: SWSWb

Matrix: Solid

Analysis Batch: 25684

Prep Type: Total/NA

Prep Batch: 25676

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <50.0 U 1000 1206 118 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 <50.0 U 951.8 mg/Kg 95 70 - 130C10-C28)

> MS MS

%Recovery Surrogate Qualifier Limits 91 70 - 130 1-Chlorooctane 82 70 - 130 o-Terphenyl

Lab Sample ID: 880-14811-1 MSD Client Sample ID: SWSWb

Matrix: Solid

Analysis Batch: 25684

Prep Type: Total/NA

Prep Batch: 25676

Sample Sample MSD MSD Spike Analyte Result Qualifier hahhA Result Qualifier Unit %Rec Limits RPD Limit D Gasoline Range Organics <50.0 U 999 1167 mg/Kg 114 70 - 130 3 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 951.2 mg/Kg 95 70 - 130 0 20

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 91 70 - 130 o-Terphenyl 83

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25730/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 25928

мв мв

MDL Unit Dil Fac Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 05/19/22 20:27

Lab Sample ID: LCS 880-25730/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 25928

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit Limits Chloride 250 238.5 mg/Kg 90 - 110

Client: Etech Environmental & Safety Solutions

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-25730/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 25928

		Spike	LCSD	LCSD				%Rec		RPD	
Analyte	£	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride		250	238.4		mg/Kg		95	90 - 110	0	20	

Lab Sample ID: 880-14809-A-11-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble

Analysis Batch: 25928

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	102		249	327.6		mg/Kg		91	90 - 110	

Lab Sample ID: 880-14809-A-11-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 25928

MSD MSD %Rec RPD Spike Sample Sample Result Qualifier Limit Analyte Added Result Qualifier Unit Limits **RPD** Chloride 102 249 336.7 90 - 110 mg/Kg

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

GC VOA

Prep Batch: 25653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-2	WSW #1	Total/NA	Solid	5035	
MB 880-25653/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25653/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25653/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14809-A-10-A MS	Matrix Spike	Total/NA	Solid	5035	
880-14809-A-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-2	WSW #1	Total/NA	Solid	8021B	25653
MB 880-25653/5-A	Method Blank	Total/NA	Solid	8021B	25653
LCS 880-25653/1-A	Lab Control Sample	Total/NA	Solid	8021B	25653
LCSD 880-25653/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25653
880-14809-A-10-A MS	Matrix Spike	Total/NA	Solid	8021B	25653
880-14809-A-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25653

Analysis Batch: 25804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-2	WSW #1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 25676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-1	SWSWb	Total/NA	Solid	8015NM Prep	
880-14811-2	WSW #1	Total/NA	Solid	8015NM Prep	
LCS 880-25676/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25676/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14811-1 MS	SWSWb	Total/NA	Solid	8015NM Prep	
880-14811-1 MSD	SWSWb	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-1	SWSWb	Total/NA	Solid	8015B NM	25676
880-14811-2	WSW #1	Total/NA	Solid	8015B NM	25676
LCS 880-25676/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25676
LCSD 880-25676/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25676
880-14811-1 MS	SWSWb	Total/NA	Solid	8015B NM	25676
880-14811-1 MSD	SWSWb	Total/NA	Solid	8015B NM	25676

Analysis Batch: 25783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-1	SWSWb	Total/NA	Solid	8015 NM	
880-14811-2	WSW #1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-2	WSW #1	Soluble	Solid	DI Leach	
MB 880-25730/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25730/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

HPLC/IC (Continued)

Leach Batch: 25730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-25730/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14809-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-14809-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 25928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14811-2	WSW #1	Soluble	Solid	300.0	25730
MB 880-25730/1-A	Method Blank	Soluble	Solid	300.0	25730
LCS 880-25730/2-A	Lab Control Sample	Soluble	Solid	300.0	25730
LCSD 880-25730/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25730
880-14809-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	25730
880-14809-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25730

Date Received: 05/16/22 10:45

Client Sample ID: WSW #1 Date Collected: 05/12/22 00:00

Date Received: 05/16/22 10:45

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Lab Sample ID: 880-14811-1

Client Sample ID: SWSWb Date Collected: 05/12/22 00:00

Matrix: Solid

Job ID: 880-14811-1

SDG: Rural Eddy Co., NM

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 8015 NM Total/NA Analysis 25783 05/18/22 08:44 AJ XEN MID Total/NA Prep 8015NM Prep 10.01 g 10 mL 25676 05/17/22 09:20 DM XEN MID Total/NA Analysis 8015B NM 25684 05/17/22 16:46 ΑJ XEN MID 1

Lab Sample ID: 880-14811-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25653	05/16/22 15:56	MR	XEN MID
Total/NA	Analysis	8021B		1			25750	05/17/22 20:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25804	05/18/22 09:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25783	05/18/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25676	05/17/22 09:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25684	05/17/22 17:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25730	05/17/22 12:18	CH	XEN MID
Soluble	Analysis	300.0		1			25928	05/20/22 00:26	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-14811-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-21-22	06-30-22	
The following analytes	are included in this report by	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytee for	
the agency does not of	• •	it the laboratory is not certifi	ed by the governing authority. This list his	ay include arialytes for t	
0 ,	• •	Matrix	Analyte	ay include analytes for t	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1 SDG: Rural Eddy Co., NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-14811-1

SDG: Rural Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14811-1	SWSWb	Solid	05/12/22 00:00	05/16/22 10:45
880-14811-2	WSW #1	Solid	05/12/22 00:00	05/16/22 10:45

Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701 Atlanta GA (770) 449-8800

Work Order No:	14811	

5/20/2022

Page 18 of 19

Released to Imaging: 1/27/2023 10:04:50 AM

	1						,, ,, ,, ,, ,, ,, ,, ,									,				www	xenc	o.con	<u>n</u> Page	1	of1
Project Manager	Joel Lowr						Bill to (if differe	ent)								_				W	ork C	Order	Commer	ts	
Company Name.	Etech Env	vironme	ental ar	nd Safety			Company Na	me.									Progi	am: L	JST/P	зт∐ і	PRF.	Brov	vnfield[RR(Sup	erfund
Address	2617 Wes	st Marla	and				Address.												Proje						
City, State ZIP	Hobbs, N	M 8824	40				City, State ZI	Р									Reporting Level Level PST/U TRF Level								
Phone	(575) 264	-9884			<u> </u>	Email	Email Resu	lts to	РМ@	etech	env.c	<u>om</u> +	Client				Deliverables EDD ADaPT					РТ □	Other		
Project Name		Astro	o Dog 6	3-Inch		Tui	rn Around						AN	IALYS	SIS RE	QUE	ST						Pre	servative	Codes
Project Number		***************************************	15649			Routi	ne 🗵															T	HNO3 I	-IN	
Project Location		Rural	Eddy C	o , NM		Rush		š.															H2S04 I		
Sampler's Name		J	oel Low	vry		Due [Date	ervative															HCL HL		
PO#:	1		S	RS# 2022-0	12			ese													1		None N)	
SAMPLE RECE		-	p Blank.	Yes (No) We	et Ice.	Yes No	s/Pr															NaOH N	а	
Temperature (°C)	3-	113		4	Thermor	meter	ID	le le															MeOH N		
Received Intact:	**********	-	No			FF	28	Containe		Ext.)													1	te+ NaOH Z	Zn
Cooler Custody Seal			- Janes -	Correction F			2	177		<u> </u>															
Sample Custody Sea	als: Ye	s No	(N/A/	Total Conta	iners.			erof	8021)	odifie	(((((((((((((((((((lab	rts the day rec if received by	4 30pm
Sample Ider	ntification		Matrix	Date Sampled	Tim Samp		Depth	Number Code	BTEX (8021)	TPH (Modified	CI- (E300)												Sa	mple Comi	ments
SWSWb			Soil	5/12/2022				1/NO		Х														***	AL. HINNEY
WSW #1			Soil	5/12/2022				1/NO	Х	Х	Х											<u> </u>		······	
																								HE HE HE	
																		i							
																····		-	880-	14811	Cha	in of C	ustody	11/1/1/1/1/1/	
																		\vdash	1		1		ı		
					ļ																				
					<u></u>						<u> </u>								<u> </u>						
Total 200.7 / 6	6010 20	0.8 / 60	020:	8RC	CRA 1	3PPN	1 Texas 11	AI S	b As	Ва	Be B	Cd (Ca Cr	r Co	Cu Fe	e Pb	Mq	Mn N	/lo Ni	K S	e Aa	SiO	2 Na Sr	TI Sn U \	/ Zn
Circle Method	i(s) and Me	etal(s) to	to be an	nalyzed	TCLP	/ SPL	_P 6010 8F	RCRA	Sb /	As B	а Ве	Cd C	Cr Co	Cu I	Pb Mn	Mo	Ni S	e Aç	TI U	<u> </u>				1 / 7470 / 7	
Notice Signature of this	document an	d relinqui	ishment o	of samples cons	stitutes a	valid pu	urchase order fr	om clien	t comp	any to)	Kenco, i	ts affilia	tes and	subcor	ntractors	. It as	signs st	andard	terms	and co	ndition	_			
of service. Xenco will be of Xenco. A minimum cl	e liable only fo	r the cost	t of samp	les and shall no	of assume	e anv ro	enoneibility for	any loce		vnanaa	a ina			15								ol			
Relinquished by		7727 S		Received						/Time					by (Si			7	7			Sian-			Jerra de la companya de la companya de la companya de la companya de la companya de la companya de la companya
1/1/7/2	Tu		D	ADIO)	J		<-	3-8	2072	2:2		$\lambda \beta a$		y (SI	gnatt	, (C)	H	/ Nec	rived	DA (S	Signat	1 -	خندخنند تبر خانور	/Time
Man	5	-	لـــــــــــــــــــــــــــــــــــــ						<u>ر د</u>	701		F		<u>>1\</u>				AH	<u> </u>	<u></u>		Barre	V	8/10/3	(4800
												14						1 ~						1 7 .	
5												4						Ľ.	·····					' (<u>0,45</u>

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-14811-1

SDG Number: Rural Eddy Co., NM $\,$

Login Number: 14811 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	
s 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	

Eurofins Midland

3

4

7

Ŏ

11

12

13

| "



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-15058-1

Laboratory Sample Delivery Group: 15649 Client Project/Site: Astro Dog 6-inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: Joel Lowry

MAMER

Authorized for release by: 5/24/2022 11:57:14 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through

------ LINKS ------

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 1/27/2023 10:04:50 AM

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.

1

2

5

5

6

0

9

11

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-inch Laboratory Job ID: 880-15058-1 SDG: 15649

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receint Checklists	22

3

4

6

7

9

10

12

Definitions/Glossary

Client: Etech Environmental & Safety Solutions Job ID: 880-15058-1

SDG: 15649 Project/Site: Astro Dog 6-inch

Qualifiers

GC VOA

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits. 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.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

Practical Quantitation Limit PQL

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: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

Job ID: 880-15058-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15058-1

Receipt

The samples were received on 5/23/2022 2:49 PM and 5/23/2022 2:50 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 4.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-26102 and analytical batch 880-26017 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-26028 and analytical batch 880-26024 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.

HPLC/IC

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

Job ID: 880-15058-1 SDG: 15649

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-inch

Client Sample ID: WSW #1b Lab Sample ID: 880-15058-1

Date Collected: 05/20/22 00:00 **Matrix: Solid** Date Received: 05/23/22 14:50

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Chloride 4.98 05/23/22 16:12 124 mg/Kg

Client Sample ID: WSW #2 Lab Sample ID: 880-15058-2 Date Collected: 05/20/22 00:00 **Matrix: Solid**

Date Received: 05/23/22 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		05/23/22 15:02	05/23/22 23:38	
Toluene	< 0.00199	U F1	0.00199		mg/Kg		05/23/22 15:02	05/23/22 23:38	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		05/23/22 15:02	05/23/22 23:38	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/22 15:02	05/23/22 23:38	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		05/23/22 15:02	05/23/22 23:38	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/22 15:02	05/23/22 23:38	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	115		70 - 130				05/23/22 15:02	05/23/22 23:38	
1,4-Difluorobenzene (Surr)	97		70 - 130				05/23/22 15:02	05/23/22 23:38	
Analyte Total BTEX	<0.00398		RL 0.00398	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/24/22 11:05	Dil Fa
Total BTEX Method: 8015 NM - Diesel Rar	<0.00398	U S (DRO) (0	0.00398 GC)		mg/Kg	_ =		05/24/22 11:05	Dil Fac
Total BTEX	<0.00398	s (DRO) (Qualifier	0.00398	MDL	mg/Kg	<u>D</u>	Prepared Prepared		
Total BTEX Method: 8015 NM - Diesel Rar Analyte	<0.00398 nge Organic Result <49.9 ange Organ	S (DRO) (O	0.00398 GC) RL 49.9	MDL	mg/Kg Unit	_ =		05/24/22 11:05 Analyzed	Dil Fa
Total BTEX Method: 8015 NM - Diesel Rar Analyte Total TPH Method: 8015B NM - Diesel Ra	<0.00398 nge Organic Result <49.9 ange Organ	S (DRO) (O Qualifier U	0.00398 GC) RL 49.9	MDL	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	05/24/22 11:05 Analyzed 05/24/22 09:21	Dil Fa
Total BTEX Method: 8015 NM - Diesel Rar Analyte Total TPH Method: 8015B NM - Diesel Rar Analyte Gasoline Range Organics	<0.00398 nge Organic Result <49.9 ange Organ Result	S (DRO) (O Qualifier U Qualifier U	0.00398 RL 49.9 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit	<u>D</u>	Prepared Prepared	05/24/22 11:05 Analyzed 05/24/22 09:21 Analyzed 05/23/22 18:47	Dil Fa
Method: 8015 NM - Diesel Rar Analyte Total TPH Method: 8015B NM - Diesel Rar Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00398 nge Organic Result <49.9 ange Organ Result <49.9	S (DRO) (O Qualifier U Qualifier U U U U	0.00398 RL 49.9 (GC) RL 49.9	MDL	mg/Kg Unit mg/Kg Unit mg/Kg	<u>D</u>	Prepared Prepared 05/23/22 15:30	05/24/22 11:05 Analyzed 05/24/22 09:21 Analyzed 05/23/22 18:47 05/23/22 18:47	Dil Fa
Method: 8015 NM - Diesel Rar Analyte Total TPH Method: 8015B NM - Diesel Rar Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00398 nge Organic Result <49.9 ange Organ Result <49.9 <49.9	S (DRO) (O Qualifier U Qualifier U U U	0.00398 RL 49.9 (GC) RL 49.9 49.9	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 05/23/22 15:30 05/23/22 15:30	05/24/22 11:05 Analyzed 05/24/22 09:21 Analyzed 05/23/22 18:47 05/23/22 18:47	Dil Fa
Method: 8015 NM - Diesel Rar Analyte Total TPH Method: 8015B NM - Diesel Rar Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00398 nge Organic Result <49.9 <49.9 <49.9	S (DRO) (O Qualifier U Qualifier U U U	0.00398 RL 49.9 (GC) RL 49.9 49.9	MDL	mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg	<u>D</u>	Prepared 05/23/22 15:30 05/23/22 15:30	05/24/22 11:05 Analyzed 05/24/22 09:21 Analyzed 05/23/22 18:47 05/23/22 18:47	Dil Fa

o respiration	770	70-700			00/20/22 10:00	00/20/22 10.11	•
Method: 300.0 - Anions, Ion Ch	romatograph	ny - Soluble					
Analyte	Result Q	ualifier RL	MDL U	Init D	Prepared	Analyzed	Dil Fac
Chloride	78.0	4.95	m	na/Ka		05/23/22 16:21	1

Lab Sample ID: 880-15058-3 Client Sample ID: FL-8b Matrix: Solid

Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

Sample Depth: 18-20

Method: 8015 NM - Diesel Ran	ge Organic	s (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/24/22 09:21	1

SDG: 15649

Job ID: 880-15058-1

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Lab Sample ID: 880-15058-3

Date Collected: 05/20/22 00:00

Client Sample ID: FL-8b

Matrix: Solid Date Received: 05/23/22 14:50

Sample Depth: 18-20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/23/22 15:30	05/23/22 19:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 15:30	05/23/22 19:09	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 15:30	05/23/22 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				05/23/22 15:30	05/23/22 19:09	1
o-Terphenyl	112		70 - 130				05/23/22 15:30	05/23/22 19:09	1

Client Sample ID: FL-9b Lab Sample ID: 880-15058-4 **Matrix: Solid**

Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

Sample Depth: 18-20

Method: 8015 NM - Diesel Ran	ge Organic	s (DRO) (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/24/22 09:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/23/22 15:30	05/23/22 19:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 15:30	05/23/22 19:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 15:30	05/23/22 19:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/23/22 15:30	05/23/22 19:31	1
o-Terphenyl	110		70 - 130				05/23/22 15:30	05/23/22 19:31	1

Client Sample ID: FL-11 Lab Sample ID: 880-15058-5 Matrix: Solid

Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

Sample Depth: 18-20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/23/22 15:02	05/23/22 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				05/23/22 15:02	05/23/22 23:58	1
1,4-Difluorobenzene (Surr)	98		70 - 130				05/23/22 15:02	05/23/22 23:58	1
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	TT .	0.00399		mg/Kg			05/24/22 11:05	1

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Lab Sample ID: 880-15058-5

Client Sample ID: FL-11 Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

Matrix: Solid

SDG: 15649

Job ID: 880-15058-1

Sample Depth: 18-20

Me	hod: 8015 NM - Diesel Range Organ	ics (DRO) (GC))						
Ana	lyte Resu	It Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tota	11 TPH 79	9	49.9		mg/Kg			05/24/22 09:21	1

79.9		49.9	mg/Kg			05/24/22 09:21	1
		(GC)					
Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
<49.9	U	49.9	mg/Kg		05/23/22 15:30	05/23/22 19:52	1
79.9		49.9	mg/Kg		05/23/22 15:30	05/23/22 19:52	1
<49.9	U	49.9	mg/Kg		05/23/22 15:30	05/23/22 19:52	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
103		70 - 130			05/23/22 15:30	05/23/22 19:52	1
111		70 - 130			05/23/22 15:30	05/23/22 19:52	1
	Recovery ange Organ Result <49.9 79.9 **Recovery** 103	Result Qualifier Cappair Cap	Result Qualifier RL	Result Qualifier RL MDL Unit mg/Kg	Result Qualifier RL MDL Unit mg/Kg	Result Qualifier RL MDL Unit mg/Kg D Prepared 05/23/22 15:30	Result Qualifier RL MDL Unit mg/Kg D Prepared Analyzed 05/23/22 15:30 05/23/22 19:52

Method: 300.0 - Anions, Ion C	hromatography	- Soluble						
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.3	4.99		mg/Kg			05/23/22 16:30	1

Lab Sample ID: 880-15058-6 **Client Sample ID: FL-12**

Date Collected: 05/20/22 00:00 **Matrix: Solid**

Date Received: 05/23/22 14:49

Sample Depth: 18-20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/23/22 15:02	05/24/22 00:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				05/23/22 15:02	05/24/22 00:19	1
1,4-Difluorobenzene (Surr)	98		70 - 130				05/23/22 15:02	05/24/22 00:19	1
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/24/22 11:05	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/24/22 09:21	1
Method: 8015B NM - Diesel Rar	nge Organ	ics (DRO) (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9		RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 05/23/22 15:30	Analyzed 05/23/22 20:14	Dil Fac
Gasoline Range Organics		U		MDL		<u>D</u>			Dil Fac

Client Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15058-1 SDG: 15649

Project/Site: Astro Dog 6-inch Lab Sample ID: 880-15058-6 Client Sample ID: FL-12

Matrix: Solid

Date Received: 05/23/22 14:49 Sample Depth: 18-20

Date Collected: 05/20/22 00:00

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	105		70 - 130	05/23/22 15:30	05/23/22 20:14	1
L	o-Terphenyl	114		70 - 130	05/23/22 15:30	05/23/22 20:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 5.00 05/23/22 16:40 105 mg/Kg

Surrogate Summary

Client: Etech Environmental & Safety Solutions Job ID: 880-15058-1 Project/Site: Astro Dog 6-inch SDG: 15649

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Perc	ent Surrogate R
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
80-15058-2	WSW #2	115	97	
80-15058-2 MS	WSW #2	106	94	
80-15058-2 MSD	WSW #2	108	95	
80-15058-5	FL-11	110	98	
80-15058-6	FL-12	114	98	
.CS 880-26102/1-A	Lab Control Sample	108	95	
CSD 880-26102/2-A	Lab Control Sample Dup	105	95	
/IB 880-26086/5-A	Method Blank	107	89	
/IB 880-26102/5-A	Method Blank	113	97	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Rec	overy (Acceptance Limits)
		1CO1	ОТРН1	
Lab Sample ID	Client Sample ID	(70-130)	70-130)	
880-15058-2	WSW #2	105	113	
880-15058-3	FL-8b	103	112	
880-15058-4	FL-9b	102	110	
880-15058-5	FL-11	103	111	
880-15058-6	FL-12	105	114	
890-2323-A-2-B MS	Matrix Spike	101	102	
890-2323-A-2-C MSD	Matrix Spike Duplicate	93	93	
LCS 880-26028/2-A	Lab Control Sample	103	107	
LCSD 880-26028/3-A	Lab Control Sample Dup	109	113	
MB 880-26028/1-A	Method Blank	107	122	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15058-1 Project/Site: Astro Dog 6-inch SDG: 15649

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26086/5-A

Matrix: Solid

Analysis Batch: 26017

Client Sample ID: Method Blan

Prep Type: Total/NA

Prep Batch: 26086

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	05/23/22 11:13	05/23/22 12:40	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/23/22 11:13	05/23/22 12:40	1

Lab Sample ID: MB 880-26102/5-A Matrix: Solid

Analysis Batch: 26017

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

Prep Batch: 26102

l .									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/22 15:02	05/23/22 23:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 15:02	05/23/22 23:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/22 15:02	05/23/22 23:16	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/23/22 15:02	05/23/22 23:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/23/22 15:02	05/23/22 23:16	1

Lab Sample ID: LCS 880-26102/1-A

Matrix: Solid

Analysis Batch: 26017

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26102

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09146		mg/Kg		91	70 - 130	
Toluene	0.100	0.1010		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.1026		mg/Kg		103	70 - 130	
m-Xylene & p-Xylene	0.200	0.2101		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1.4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-26102/2-A

Matrix: Solid

Analyte Benzene

Analysis Batch: 26017

						Prep Ty	pe: Tot	al/NA
						Prep E	Batch: 2	26102
Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.07726		mg/Kg		77	70 - 130	17	35

Eurofins Midland

Page 10 of 22

QC Sample Results

Client: Etech Environmental & Safety Solutions Job ID: 880-15058-1 Project/Site: Astro Dog 6-inch

SDG: 15649

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

Lab Sample ID: LCSD 880-26102/2-A

Matrix: Solid

Analysis Batch: 26017

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 26102

LCSD LCSD %Rec **RPD** Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Toluene 0.100 0.08319 mg/Kg 83 70 - 130 19 35 Ethylbenzene 0.100 0.08612 mg/Kg 86 70 - 130 17 35 0.200 0.1736 mg/Kg 87 70 - 130 35 m-Xylene & p-Xylene 19 0.100 35 o-Xylene 0.08878 mg/Kg 89 70 - 130 18

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-15058-2 MS Client Sample ID: WSW #2

Matrix: Solid

Analysis Batch: 26017

Prep Type: Total/NA

Prep Batch: 26102 %Rec

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier D %Rec Limits Unit Benzene <0.00199 U F1 0.101 0.07431 74 70 - 130 mg/Kg Toluene <0.00199 UF1 0.101 0.08116 mg/Kg 81 70 - 130 Ethylbenzene <0.00199 U 0.101 0.08279 mg/Kg 82 70 - 130 m-Xylene & p-Xylene <0.00398 U 0.201 83 0.1676 mg/Kg 70 - 130 o-Xylene <0.00199 U 0.101 0.08543 mg/Kg 85 70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	106	70 - 130
1,4-Difluorobenzene (Surr)	94	70 - 130

Lab Sample ID: 880-15058-2 MSD

Matrix: Solid

Analysis Batch: 26017

Client Sample ID: WSW #2

Prep Type: Total/NA

Prep Batch: 26102

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06158	F1	mg/Kg		61	70 - 130	19	35
Toluene	<0.00199	U F1	0.100	0.06799	F1	mg/Kg		68	70 - 130	18	35
Ethylbenzene	<0.00199	U	0.100	0.07009		mg/Kg		70	70 - 130	17	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1437		mg/Kg		72	70 - 130	15	35
o-Xylene	<0.00199	U	0.100	0.07514		mg/Kg		75	70 - 130	13	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-26028/1-A

Matrix: Solid

Analysis Batch: 26024

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

Prep Batch: 26028

MB MB Result Qualifier MDL Unit Analyte RL Prepared Analyzed Gasoline Range Organics <50.0 U 50.0 mg/Kg 05/23/22 08:23 05/23/22 09:53

(GRO)-C6-C10

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

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

Lab Sample ID: MB 880-26028/1-A

Lab Sample ID: LCS 880-26028/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 26024

Analysis Batch: 26024

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 26028

	IVIB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1
Oll Range Organics (Over C28-C36)	<50.0		50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1
	MB	МВ							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/23/22 08:2	3 05/23/22 09:53	1
o-Terphenyl	122		70 - 130	05/23/22 08:2	3 05/23/22 09:53	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26028

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	888.2		mg/Kg		89	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	800.7		mg/Kg		80	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-26028/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid**

LCSD LCSD

908.6

914.8

Result Qualifier Unit

mg/Kg

mg/Kg

Spike

Added

1000

1000

70 - 130

Gasoline Range Organics

Diesel Range Organics (Over

Analyte

(GRO)-C6-C10

Analysis Batch: 26024

Prep Type: Total/NA Prep Batch: 26028

D %Rec

91

91

%Rec **RPD** Limits RPD Limit 70 - 130 2 20

13

20

C10-C28)			
	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130

113

Lab Sample ID: 890-2323-A-2-B MS

Matrix: Solid

o-Terphenyl

Analysis Ratch: 26024

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

70 - 130

Pren Batch: 26028

Alialysis Datcil. 20024									Liehr	Jaicii. 20020	9
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	1000	1466	F1	mg/Kg		144	70 - 130		_
Diesel Range Organics (Over	<50.0	U	1000	948.2		mg/Kg		95	70 - 130		

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	102		70 - 130

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

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

Lab Sample ID: 890-2323-A-2-C MSD

Matrix: Solid

Analysis Batch: 26024

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 26028 %Rec **RPD**

Sample Sample Spike MSD MSD Result Qualifier Result Qualifier Added D %Rec Limits **RPD** Limit Analyte Unit <50.0 U F1 F2 Gasoline Range Organics 999 1176 F2 mg/Kg 116 70 - 130 22 20 (GRO)-C6-C10 Diesel Range Organics (Over 999 871.0 <50.0 U mg/Kg 87 70 - 1308 20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	93		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26083/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 26099

MB MB

MDL Unit Result Qualifier RL Analyte Prepared Analyzed Dil Fac 5.00 Chloride <5.00 U mg/Kg 05/23/22 13:07

Lab Sample ID: LCS 880-26083/2-A

Matrix: Solid

Analysis Batch: 26099

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	236.5		mg/Kg		95	90 - 110	

Lab Sample ID: LCSD 880-26083/3-A

Matrix: Solid

Analysis Batch: 26099

•	Spike	LCSD	LCSD			%Rec		RPD
Analyte	Added	Result	Qualifier L	Jnit D	%Rec	Limits	RPD	Limit
Chloride	250	236.2	n	ma/Ka	94	90 - 110	0	20

Lab Sample ID: 890-2323-A-7-E MS

Matrix: Solid

Analysis Batch: 26099

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	382		253	634.6		ma/Ka		100	90 - 110	

Lab Sample ID: 890-2323-A-7-F MSD

Matrix: Solid

Analysis Batch, 20000

Alialysis Dalcii. 20033											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	382		253	614.2		mg/Kg		92	90 - 110	3	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1 SDG: 15649

GC VOA

Analysis Batch: 26017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-2	WSW #2	Total/NA	Solid	8021B	26102
880-15058-5	FL-11	Total/NA	Solid	8021B	26102
880-15058-6	FL-12	Total/NA	Solid	8021B	26102
MB 880-26086/5-A	Method Blank	Total/NA	Solid	8021B	26086
MB 880-26102/5-A	Method Blank	Total/NA	Solid	8021B	26102
LCS 880-26102/1-A	Lab Control Sample	Total/NA	Solid	8021B	26102
LCSD 880-26102/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26102
880-15058-2 MS	WSW #2	Total/NA	Solid	8021B	26102
880-15058-2 MSD	WSW #2	Total/NA	Solid	8021B	26102

Prep Batch: 26086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-26086/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 26102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-2	WSW #2	Total/NA	Solid	5035	
880-15058-5	FL-11	Total/NA	Solid	5035	
880-15058-6	FL-12	Total/NA	Solid	5035	
MB 880-26102/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26102/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26102/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-15058-2 MS	WSW #2	Total/NA	Solid	5035	
880-15058-2 MSD	WSW #2	Total/NA	Solid	5035	

Analysis Batch: 26173

Lab Sample ID 880-15058-2	Client Sample ID WSW #2	Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch
880-15058-5	FL-11	Total/NA	Solid	Total BTEX	
880-15058-6	FL-12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 26024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-2	WSW #2	Total/NA	Solid	8015B NM	26028
880-15058-3	FL-8b	Total/NA	Solid	8015B NM	26028
880-15058-4	FL-9b	Total/NA	Solid	8015B NM	26028
880-15058-5	FL-11	Total/NA	Solid	8015B NM	26028
880-15058-6	FL-12	Total/NA	Solid	8015B NM	26028
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015B NM	26028
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26028
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26028
890-2323-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	26028
890-2323-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26028

Prep Batch: 26028

Lab Sample ID 880-15058-2	Client Sample ID WSW #2	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
880-15058-3	FL-8b	Total/NA	Solid	8015NM Prep	
880-15058-4	FL-9b	Total/NA	Solid	8015NM Prep	

Eurofins Midland

5

3

5

7

10

12

13

14

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

GC Semi VOA (Continued)

Prep Batch: 26028 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-5	FL-11	Total/NA	Solid	8015NM Prep	
880-15058-6	FL-12	Total/NA	Solid	8015NM Prep	
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2323-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2323-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-2	WSW #2	Total/NA	Solid	8015 NM	
880-15058-3	FL-8b	Total/NA	Solid	8015 NM	
880-15058-4	FL-9b	Total/NA	Solid	8015 NM	
880-15058-5	FL-11	Total/NA	Solid	8015 NM	
880-15058-6	FL-12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 26083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-1	WSW #1b	Soluble	Solid	DI Leach	
880-15058-2	WSW #2	Soluble	Solid	DI Leach	
880-15058-5	FL-11	Soluble	Solid	DI Leach	
880-15058-6	FL-12	Soluble	Solid	DI Leach	
MB 880-26083/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26083/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26083/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2323-A-7-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2323-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 26099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15058-1	WSW #1b	Soluble	Solid	300.0	26083
880-15058-2	WSW #2	Soluble	Solid	300.0	26083
880-15058-5	FL-11	Soluble	Solid	300.0	26083
880-15058-6	FL-12	Soluble	Solid	300.0	26083
MB 880-26083/1-A	Method Blank	Soluble	Solid	300.0	26083
LCS 880-26083/2-A	Lab Control Sample	Soluble	Solid	300.0	26083
LCSD 880-26083/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26083
890-2323-A-7-E MS	Matrix Spike	Soluble	Solid	300.0	26083
890-2323-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	26083

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1 SDG: 15649

Client Sample ID: WSW #1b

Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50 Lab Sample ID: 880-15058-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	26083	05/23/22 15:15	SC	XEN MID
Soluble	Analysis	300.0		1			26099	05/23/22 16:12	CH	XEN MID

Lab Sample ID: 880-15058-2 Client Sample ID: WSW #2

Date Collected: 05/20/22 00:00 Matrix: Solid

Date Received: 05/23/22 14:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	26102	05/23/22 15:02	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 23:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26173	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26131	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 18:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	26083	05/23/22 15:15	SC	XEN MID
Soluble	Analysis	300.0		1			26099	05/23/22 16:21	CH	XEN MID

Lab Sample ID: 880-15058-3 **Client Sample ID: FL-8b**

Date Collected: 05/20/22 00:00

Date Received: 05/23/22 14:50

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26131	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26028	05/23/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 19:09	AJ	XEN MID

Client Sample ID: FL-9b Lab Sample ID: 880-15058-4 Matrix: Solid

Date Collected: 05/20/22 00:00

Date Received: 05/23/22 14:50

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Pr	ер Туре	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
To	tal/NA	Analysis	8015 NM		1			26131	05/24/22 09:21	SM	XEN MID
То	tal/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 15:30	DM	XEN MID
То	tal/NA	Analysis	8015B NM		1			26024	05/23/22 19:31	AJ	XEN MID

Client Sample ID: FL-11 Lab Sample ID: 880-15058-5

Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26102	05/23/22 15:02	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 23:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26173	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26131	05/24/22 09:21	SM	XEN MID

Eurofins Midland

Matrix: Solid

Released to Imaging: 1/27/2023 10:04:50 AM

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Lab Sample ID: 880-15058-5

Matrix: Solid

SDG: 15649

Job ID: 880-15058-1

Client Sample ID: FL-11 Date Collected: 05/20/22 00:00 Date Received: 05/23/22 14:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26028	05/23/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 19:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26083	05/23/22 15:15	SC	XEN MID
Soluble	Analysis	300.0		1			26099	05/23/22 16:30	CH	XEN MID

Lab Sample ID: 880-15058-6 **Client Sample ID: FL-12** Date Collected: 05/20/22 00:00 **Matrix: Solid**

Date Received: 05/23/22 14:49

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	26102	05/23/22 15:02	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/24/22 00:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26173	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26131	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26028	05/23/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 20:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	26083	05/23/22 15:15	SC	XEN MID
Soluble	Analysis	300.0		1			26099	05/23/22 16:40	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

Laboratory: Eurofins Midland

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

Authority	Pro	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analyte:	s are included in this repo	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for w
the agency does not	•	,	g aanen,	The liet may include analytee for w
the agency does not of Analysis Method	•	Matrix	Analyte	The let may more analytes for w
0 ,	offer certification.	•	, , ,	

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Midland

1

5

6

8

9

11

14

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-inch

Job ID: 880-15058-1

SDG: 15649

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-15058-1	WSW #1b	Solid	05/20/22 00:00	05/23/22 14:50	
880-15058-2	WSW #2	Solid	05/20/22 00:00	05/23/22 14:50	
880-15058-3	FL-8b	Solid	05/20/22 00:00	05/23/22 14:50	18-20
880-15058-4	FL-9b	Solid	05/20/22 00:00	05/23/22 14:50	18-20
880-15058-5	FL-11	Solid	05/20/22 00:00	05/23/22 14:50	18-20
880-15058-6	FL-12	Solid	05/20/22 00:00	05/23/22 14:49	18-20

Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296

Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Atlanta GA (770) 449-8800

3

5/24/2022

Page 21 of 22

Released to Imaging: 1/27/2023 10:04:50 AM

		Atlanta GA (770) 449-0000				www.xenco.com Pageof																	
Project Manager	Joel L	000	7		Bill to (if differe	ent)	E	rel										W	ork O	rder C	commen	ts	
Company Name.	Etech Environn	nental a	nd Safety		Company Na	me	01	۵	50	41	-0	,,,,			Progr	am U	ST/PS	T∏F	RF	Brown	nfield F	RRd Sı	perfund _
Address.	2617 West Mar	rland			Address							1			1		Projec						.periana
City, State ZIP	Hobbs NM 882	240			City, State ZI	P									Repoi	ting Le	evel [Lev	/el 🗌	PST	/U\$□ T	RF∐ L	evel[[/
Phone	(575) 264-9884			Email	Email Resu	lts to	PM@	etech	nenv c	<u>om</u> + (Client			1	Delive	erables	EDD			ADaP ⁻		Other	
Project Name	Astro Di	09 6	Inch.	To	rn Around						AN	IALYS	SIS RE	QUE	ST				3979		Pres	servativo	Codes
Project Number	15649	<u> </u>		Routi	ne 🖳																HNO3 H	N	
Project Location	Rural /	Edd	1	Rush	. Mid	24															H2S04 H		
Sampler's Name	Joelle	wý		Due I	Date 15/1	Zat /															HCL HL	_	
PO#:	15649					ese														1	None NC)	
SAMPLE RECE	25 5 1	np Blank.	Yes No	Wet Ice	(Yes) No	S/P															NaOH Na	a	
Temperature (°C).						Je .															МеОН М	е	
Received Intact: (Yes) No Correction Factors					FC_	ata		Ext.)													Zn Acetat	e+ NaOH	Zn
Cooler Custody Seals Yes No N/A Correction Factor Sample Custody Seals: Yes No N/A Total Containers					-2/	Ç	_	led E													TAT star	ts the day r	ecevied by the
Sample Custody Sea	ls: Yes No	N/A	Total Contai	ners.		5	8021	odif	(g													f received b	
Sample Iden	tification	Matrix	Date Sampled	Time Sampled	Depth	Numb Code	BTEX (8021)	TPH (Modified	CI- (E300)										l		San	nple Cor	nments
WSW #15		5	5/20/22				T =	m	¥											1	Rush	1	
WSW #7		1	3				×	X	1		-	HIII									Know	·	
FL-85			']		18-20		,	d			-												
FL-85 FL-95					18-20			X				880-1	5058 C	Chair	of Cu	stody						····	
FL-11			,		18-20		X	1	ž.		-				1	ı	ı			1	and the same of th		
FL-12		4	4		18-20		ol	1	*												1		
							-																
															-								
	s) and Metal(s)	to be ar	alyzed	TCLP / SPI	// Texas 11 L P 6010 8R	CRA	Sb .	As B	a Be	Cd C	r Co	Cu F	^o b Mn	Мо	Ni S	e Ag	TI U						V Zn / 7471 Hg
Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client or of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitte																	/ 1						
Relinquished by			***************************************	by (Signatι	25000000000000000000000000000000000000		V	/Time		-							17				7 a		
1 god formy but						Date/Time Relinquished by (Signature) Received by (Signature) Date/T					te/Time												
3					7	age	~~ }		4	//	<u></u>				 		-			-	4-3	14:49	
										6													101-1-1

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-15058-1

SDG Number: 15649

Login Number: 15058 **List Source: Eurofins Midland**

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-15494-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: PM List

KRAMER

Authorized for release by:

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

6/7/2022 9:13:49 AM

Have a Question?

EOL

------ LINKS ------

Review your project results through

Visit us at: www.eurofinsus.com/Env

Released to Imaging: 1/27/2023 10:04:50 AM

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

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

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-15494-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Racaint Chacklists	15

2

3

4

6

8

10

11

13

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC Semi VOA

Qualifier **Qualifier Description**

Surrogate recovery exceeds control limits, low biased. S1-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**

Detection Limit (DoD/DOE) DΙ

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

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 MLMinimum Level (Dioxin) Most Probable Number MPN 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**

Relative Error Ratio (Radiochemistry) RER

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) Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Job ID: 880-15494-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15494-1

Receipt

The sample was received on 6/6/2022 4:29 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-15469-A-1-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Client Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: 6/6 NSW

Date Collected: 06/06/22 12:15 Date Received: 06/06/22 16:29

Lab Sample ID: 880-15494-1 **Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1630		50.0		mg/Kg			06/07/22 08:06	1
Method: 8015B NM - Diesel Ra	ange Organi	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/06/22 14:00	06/07/22 01:20	1
(GRO)-C6-C10									
Diesel Range Organics (Over	1630		50.0		mg/Kg		06/06/22 14:00	06/07/22 01:20	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/06/22 14:00	06/07/22 01:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				06/06/22 14:00	06/07/22 01:20	1
o-Terphenyl	90		70 - 130				06/06/22 14:00	06/07/22 01:20	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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)	
880-15469-A-1-B MS	Matrix Spike	75	67 S1-	
880-15469-A-1-C MSD	Matrix Spike Duplicate	86	76	
880-15494-1	6/6 NSW	84	90	
LCS 880-26872/2-A	Lab Control Sample	105	104	
LCSD 880-26872/3-A	Lab Control Sample Dup	103	103	
MB 880-26872/1-A	Method Blank	93	103	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: MB 880-26872/1-A

Matrix: Solid

Analysis Batch: 26868

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26872

	MR	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
	МВ	MB							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	06/06/22 08:40	06/06/22 21:55	1
o-Terphenyl	103		70 - 130	06/06/22 08:40	06/06/22 21:55	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-26872/2-A **Matrix: Solid** Prep Type: Total/NA Prep Batch: 26872 **Analysis Batch: 26868** LCS LCS Spike %Rec

Analyte Added Result Qualifier Unit Limits %Rec 1000 753.8 75 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1025 102 mg/Kg 70 - 130C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	105	70 - 130
o-Terphenyl	104	70 - 130

Lab Sample ID: LCSD 880-26872/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 26868 Prep Batch: 26872 Spike LCSD LCSD %Rec **RPD** Added Result Qualifier RPD Limit Analyte Unit %Rec Limits Gasoline Range Organics 1000 715.7 mg/Kg 72 70 - 130 5 20 (GRO)-C6-C10

1008

mg/Kg

101

70 - 130

2

Prep Type: Total/NA

20

1000

Diesel Range Organics (Over C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	103	70 - 130
o-Terphenyl	103	70 - 130

Lab Sample ID: 880-15469-A-1-B MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 26868

Prep Batch: 26872 Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U 800.5 Gasoline Range Organics 997 mg/Kg 80 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 62.4 997 929.7 87 70 - 130 mg/Kg C10-C28)

QC Sample Results

Client: Etech Environmental & Safety Solutions Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-15469-A-1-B MS

Matrix: Solid

Analysis Batch: 26868

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 26872

MS MS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 75 70 - 130 o-Terphenyl 67 S1-70 - 130

Analysis Batch: 26868

ab Sample ID: 880-15469-A-1-C MSD	Client Sample ID: Matrix Spike Duplicate
Matrix: Solid	Prep Type: Total/NA

1000

RPD MSD MSD %Rec Sample Sample Spike Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <49.9 U Gasoline Range Organics 1000 923.7 mg/Kg 92 70 - 130 14 20

mg/Kg

1128

Diesel Range Organics (Over C10-C28)

(GRO)-C6-C10

Analyte

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenvl	76		70 - 130

62.4

70 - 130

107

Prep Batch: 26872

19

20

QC Association Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 26868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15494-1	6/6 NSW	Total/NA	Solid	8015B NM	26872
MB 880-26872/1-A	Method Blank	Total/NA	Solid	8015B NM	26872
LCS 880-26872/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26872
LCSD 880-26872/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26872
880-15469-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	26872
880-15469-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26872

Prep Batch: 26872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15494-1	6/6 NSW	Total/NA	Solid	8015NM Prep	
MB 880-26872/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26872/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26872/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-15469-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-15469-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15494-1	6/6 NSW	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: 6/6 NSW

Lab Sample ID: 880-15494-1 Date Collected: 06/06/22 12:15 Matrix: Solid

Date Received: 06/06/22 16:29

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26962	06/07/22 08:06	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26872	06/06/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26868	06/07/22 01:20	SM	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15494-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes are the agency does not offer	a ara inaludad in thia rand	art but the laboratory is r	act cortified by the governing outhority	This list may include analytes for y
	•	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for v
the agency does not	offer certification.	•		This list may include analytes for w
• • •	•	ort, but the laboratory is r Matrix	not certified by the governing authority. Analyte	This list may include analytes for v

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15494-1

SDG: Rural Eddy Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15494-1 SDG: Rural Eddy Co., NM

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 880-15494-1
 6/6 NSW
 Solid
 06/06/22 12:15
 06/06/22 16:29

2

3

Λ

5

9

10

40

13

112

Received by OCD: 10/4/2022 8:36:47 AM

6/7/2022

Revised Date101419 Rev 2019 1



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296

Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Atlanta GA (770) 449-8800

Work Order	No:	15494

<u></u>		······································					1 3											www	xenc	o com	Page		_ of
Project Manager	Joel L	,	· · · · · · · · · · · · · · · · · · ·		Bill to (if differ	ent)	E	ech						11				W	ork C	rder (Commen	ts	
Company Name	Etech Environr	nental a	nd Safety		Company Na	me	CI	0	5 oe	(L	ow	.4			Progr	am [.] US	ST/PS	Т[] F	RF	Brow	nfield[] F	RR S	uperfund
Address	2617 West Ma	rland			Address.							,		7		ite of F						<u> </u>	
City, State ZIP	Hobbs, NM 88	240			City, State ZI	IP								7 1	Repor	ting Le	vel [Lev	/el 🔲	PST	7U\$	Rf∏ L	.evel[]/
Phone	(575) 264-9884	1		Email	Email Resu	Its to	PM@	etech	env co	<u>om</u> + (Client			-	Delive	rables	EDD			ADaP		Other	L
Project Name.	Astro Doc	6 ''		Tu	rn Around	I		· · · · · · · · · · · · · · · · · · ·			AN	IALYS	IS REC	UE	ST						Pre	servativ	e Codes
Project Number	15649			Rout	ne 🗆 /	1													T	T	HNO3 H	INI	
Project Location	Rural 6	Eddle	1	Rush		l e								_	\neg				 	 	H2S04 H		
Sampler's Name	JOEL L	-0W/	(Due I	Date	reservative								1							HCL HL	12	
PO#:	15649] se				3				Ì						}	None NO)	
SAMPLE RECE	IPT Ter	np Blank	Yes No	Wet Ice	Yes No	توا		Bos		NOXFD				1							NaOH N		
Temperature (°C)	474	5		Thermometer	ID	Containers/		100		13%				I	- 1						MeOH M		
Received Intact:	(es			TP		ığı [Ext.)		2				1	1	1					Zn Aceta		1.7n
Cooler Custody Seal	s. Yes No		Correction F	actor	52		_	3d E		ر					- 1								
Sample Custody Seals. Yes No WA Total Containers			iners		jo	021)	diffic	()	434				1		- 1						is the day i if received	recevied by the by 4:30pm	
Sample Ider	tification	Matrix	Date Sampled	Time Sampled	Depth	Numbe	BTEX (8021)	TPH (Modified	CI- (E300)	Ru											Sar	nple Co	mments
616 NSW		3	6/8/22	12:15	i			V		7				$\neg \uparrow$					 	+	 		
														-		$\neg \uparrow$			├─	 	<u> </u>		
														_					 	†	 		
														7	'			' 					·
														_									***************************************
							 							$\neg \dagger$									
						†								$\neg \dagger$									
						T^-	 				 -			\dashv		880	-1549	4 Cha	in of	Custo	dy		
						T	t						-						1	1	1		· Propins Commission of the Co
		 				 	 				 								-	┼	 	·····	
Total 200.7 / 6	010 200.8/	5020-	0D/	ים אם אם אם	1 Toxa- 11	A. /	<u> </u>		D										<u> </u>		<u> </u>		
	(s) and Metal(s)		onu nalvzed	RA 13PP	n Texas 11 L P 6010 8F	AI S	SA GC	δe D. Δe D.	pe B	Ca (Ja Ci	r Co	Cu re	Pb	Mg I	Vin M⊲	o Ni	K S	e Ag				
													***************************************	***************************************							31 / 245.	1 / 7470	17471 Hg
Notice: Signature of this of service. Xenco will be of Xenco. A minimum ch	liable only for the co arge of \$75.00 will be	ost of samp e applied to	samples cons les and shall no each project a	stitutes a valid p ot assume any re nd a charge of \$	urchase order fr esponsibility for 5 for each samp	om clied any los le subm	it comp ses or e itted to	any to X xpenses Xenco,	enco, if incurri but not	is affilia ed by th analyze	tes and le client ld Thes	subcon if such e terms	tractors, losses are will be er	It ass due Iforce	gns sta to circu d unles	andard Imstanc s previo	terms a es bey usly ne	ind cor ond the egotiate	ditions contro d	i ol			
Relinguished by				by (Signati	The second second second	}	-	/Time					oy [.] (Sig					-		ignatu	ıre)	Da	nte/Time
Doellow	n	T	111	e	VE	HE	HL	21	02	2							······						
3 /	$\overline{\chi}$	V	~	· · · · · · · · · · · · · · · · · · ·	†		1,3	3: 2	9	4													
5				······································	······································	1				6													

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-15494-1 SDG Number: Rural Eddy Co., NM

List Source: Eurofins Midland

Login Number: 15494 List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-15495-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: PM List

KRAMER

Authorized for release by:

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

6/7/2022 9:14:36 AM

------ LINKS ------

Review your project results through

EOL

Have a Question?

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/27/2023 10:04:50 AM

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

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

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-15495-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Receipt Checklists	15

1

2

3

4

6

8

10

13

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC Semi VOA

Qualifier **Qualifier Description**

Surrogate recovery exceeds control limits, low biased. S1-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**

Detection Limit (DoD/DOE) DΙ

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

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 MLMinimum Level (Dioxin) Most Probable Number MPN 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**

Relative Error Ratio (Radiochemistry) RER

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) Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15495-1 SDG: Rural Eddy Co., NM

Job ID: 880-15495-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15495-1

Receipt

The sample was received on 6/6/2022 1:29 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-15469-A-1-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Client Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: 6/3 NSW

Date Collected: 06/03/22 17:45 Date Received: 06/06/22 13:29

Lab Sample ID: 880-15495-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1440		50.0		mg/Kg			06/07/22 08:06	1
Method: 8015B NM - Diesel R	ange Organi	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/06/22 14:00	06/07/22 01:41	1
(GRO)-C6-C10									
Diesel Range Organics (Over	1440		50.0		mg/Kg		06/06/22 14:00	06/07/22 01:41	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/06/22 14:00	06/07/22 01:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				06/06/22 14:00	06/07/22 01:41	1
o-Terphenyl	95		70 - 130				06/06/22 14:00	06/07/22 01:41	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Matrix: Solid Prep Type: Total/NA

			Percent	t Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-15469-A-1-B MS	Matrix Spike	75	67 S1-	
880-15469-A-1-C MSD	Matrix Spike Duplicate	86	76	
880-15495-1	6/3 NSW	90	95	
LCS 880-26872/2-A	Lab Control Sample	105	104	
LCSD 880-26872/3-A	Lab Control Sample Dup	103	103	
MB 880-26872/1-A	Method Blank	93	103	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: MB 880-26872/1-A

Matrix: Solid

Lab Sample ID: LCS 880-26872/2-A

Lab Sample ID: LCSD 880-26872/3-A

Matrix: Solid

Analysis Batch: 26868

Analysis Batch: 26868

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26872

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/06/22 08:40	06/06/22 21:55	1
	MD	MD							

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	06/06/22 08:40	06/06/22 21:55	1
o-Terphenyl	103		70 - 130	06/06/22 08:40	06/06/22 21:55	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 26872

Spike LCS LCS %Rec Added Result Qualifier Unit Limits Analyte D %Rec 1000 753.8 75 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1025 102 mg/Kg 70 - 130C10-C28)

LCS LCS

l	Surrogate	%Recovery	Qualifier	Limits
	1-Chlorooctane	105		70 - 130
	o-Terphenyl	104		70 - 130

Client Sample ID: Lab Control Sample Dup

87

mg/Kg

70 - 130

Prep Type: Total/NA Prep Batch: 26872

Analysis Batch: 26868

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	715.7		mg/Kg		72	70 - 130	5	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1008		mg/Kg		101	70 - 130	2	20
C10 C28)									

C10-C28)

Matrix: Solid

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

62.4

Lab Sample ID: 880-15469-A-1-B MS **Client Sample ID: Matrix Spike**

Diesel Range Organics (Over

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 26868** Prep Batch: 26872 Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U 800.5 Gasoline Range Organics 997 mg/Kg 80 70 - 130 (GRO)-C6-C10

929.7

C10-C28)

Eurofins Midland

997

QC Sample Results

Client: Etech Environmental & Safety Solutions Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 880-15469-A-1-B MS

Matrix: Solid

Analysis Batch: 26868

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 26872

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 75 70 - 130 o-Terphenyl 67 S1-70 - 130

Lab Sample ID: 880-15469-A-1-C MSD

Matrix: Solid

Analysis Batch: 26868									Prep E	Batch: 2	26872
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	1000	923.7		mg/Kg		92	70 - 130	14	20
(GRO)-C6-C10											
Diesel Range Organics (Over	62.4		1000	1128		mg/Kg		107	70 - 130	19	20

C10-C28) MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 86 70 - 130 70 - 130 o-Terphenyl 76

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

QC Association Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 26868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15495-1	6/3 NSW	Total/NA	Solid	8015B NM	26872
MB 880-26872/1-A	Method Blank	Total/NA	Solid	8015B NM	26872
LCS 880-26872/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26872
LCSD 880-26872/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26872
880-15469-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	26872
880-15469-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26872

Prep Batch: 26872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15495-1	6/3 NSW	Total/NA	Solid	8015NM Prep	
MB 880-26872/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26872/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26872/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-15469-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-15469-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15495-1	6/3 NSW	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: 6/3 NSW

Lab Sample ID: 880-15495-1 Matrix: Solid Date Collected: 06/03/22 17:45

Date Received: 06/06/22 13:29

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26963	06/07/22 08:06	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26872	06/06/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26868	06/07/22 01:41	SM	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15495-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority Texas		ogram ELAP	T104704400-21-22	Expiration Date 06-30-22
The following analyte the agency does not o		ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15495-1 SDG: Rural Eddy Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15495-1 SDG: Rural Eddy Co., NM

Lab Sample ID Client Sample ID Collected Received Matrix 880-15495-1 6/3 NSW Solid 06/03/22 17:45 06/06/22 13:29

Received by OCD: 10/4/2022 8:36:47 AM

6/7/2022

Chain of Custody

Work Order No: 15495

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296

Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Atlanta GA (770) 449-8800

First Advisor	Joel L	_			1							¬ г	www.xenco.com Pageof									
Project Manager		aury			Bill to (if differ	ent)		Pch						4)	Work Order Comments							
Company Name	Etech Environi		nd Safety		Company Na	me.	CI	0 -	50e	<u>(L</u>	owr	7_		.	Progra	am: U	ST/PS	T P	RF.	Brov	/nfield	RR(Superfund
Address.	2617 West Ma	rland			Address	d'anagement	,						State of Project.									
City, State ZIP	Hobbs, NM 88	240			City, State Zi	Р							Reporting Level Level PST/US TRF Level									
Phone	(575) 264-9884 Email Email Results to							etech	env c	<u>om</u> + (Client			_	Deliverables EDD ADaPT Other					Other:		
Project Name.	AStro Des 6" Turn Around										ΔN	AI VS	IS REC	711E	IEST				Pre	eservative Codes		
Project Number	15649)		Rou								7210	, IS IVE	JOL	<u> </u>	T		<u> </u>	T	Γ	 	
Project Location	Rural 6	Eddle	1	Rus	h 🔃	10	<u> </u>													 	HNO3 I	
Sampler's Name	50e1 L	Lowr	1	Due	Date	reservative									j	1					H2S04 I	
PO#:	15649					Ş e		,		1 2						-					None No	
SAMPLE RECE	EIPT Tej	mp Blank	Yes No	Wet Ice	(Yes) No			80 N		2				- 1	İ	1			1		NaOH N	
Temperature (°C)	4.2/	45	7	Thermomete	ŗβQ] ខ្ល		α		4											MeOH N	
Received Intact.	(Yes)	No	J,	#		Containers/P		Ext.)		MARF				- 1	İ	}					ł	ite+ NaOH Zn
Cooler Custody Sea			Correction F		1:2		_	ed E							ļ						TAT sta	rts the day recevied by the
Sample Custody Sea	ils. Yes N	o MA	Total Conta	iners.		er of	8021	odifi	ē	изц					l			}				if received by 4 30pm
Sample Ide	ntification	Matrix	Date Sampled	Time Sampled	Depth	Number Code	BTEX (8021)	TPH (Modified	CI- (E300)	Ru											Sa	mple Comments
413 NSW		3	613/22	17:45		100 G 100 L		У		7									†	 	 	<u></u>
																			†	 	 	
																			<u> </u>	\vdash	 	
																		 	 	 	†	
														-	111111)) ((4.64) (1881 81111		i in in in in in in in in in in in in in	
														-								
														•	111111							
														•	880-1	5495	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII					· · · · · · · · · · · · · · · · · · ·
														. ~			Orian	1010	ustody			
																				1	1	-
Total 200.7 / 6	010 200.8 /	6020:	880	CRA 13PP	M Tevas 11	ΔΙ Ο	Sh As	Вa	Re P	۲۵ (3 0		Cu Ec	D-	Mc 1	4n 14		<u> </u>			<u> </u>	TI Sn U V Zn
11	(s) and Metal(s)		nalyzed	TCLP / SF	LP 6010 8F	CRA	Sb	As Ba	Be	Cd C	r Co	Cu F	ou re ob Mn	Мо	Ni S	vin ivit e Ag	IN U	r Se J	e Ag			TISnUVZn 1/7470/7471 Hg
Notice Signature of this	document and relind	quishment	samples con	stitutes a valid	nurchase order fr	om clier	t comp	any to V	onco i	to offilio									nditions			The state of the s
of service. Xenco will be of Xenco. A minimum cl	liable only for the co	net at earnr	ibe and chall n	of accuma anu	mananaihilik, fau															1		
Relinquished by	Marie 1, 1980 Marie 19	17		by (Signal		<u> </u>		/Time		T										iacat	uro)	Bot T
Doel Lores	- 	1/	1/ 0	7/1	1	10/	Date/Time Relinquished by (Signature) Received by (Signature) Di					Date/Time										
3	D	1	<i>y</i> <u> </u>	Y		104		<u>0</u> 0	<u>a</u>	4												
5	5				 	1.5	> 2			······································						······						
L		1		·		<u> </u>				Ľ						<u> </u>						<u> </u>

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-15495-1 SDG Number: Rural Eddy Co., NM

List Source: Eurofins Midland

Login Number: 15495

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	N/A	

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-15715-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: PM List

MAMER

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by: 6/10/2022 9:12:35 AM

Visit us at: www.eurofinsus.com/Env

····· Links ······

Review your project results through

EOL

Have a Question?

Released to Imaging: 1/27/2023 10:04:50 AM

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

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

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-15715-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Receint Checklists	15

2

3

4

6

8

10

4.0

13

14

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15715-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

Percent Recovery %R CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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)

Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL 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: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15715-1 SDG: Rural Eddy Co., NM

Job ID: 880-15715-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15715-1

Receipt

The sample was received on 6/9/2022 4:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

GC Semi VOA

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

2

4

0

7

8

_

1 1

4.0

14

Client Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Job ID: 880-15715-1

,

Lab Sample ID: 880-15715-1

Client Sample ID: 6/8 NSW Date Collected: 06/08/22 00:00

Date Received: 06/09/22 16:18

C28-C36)

	Matrix: Solid

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac 50.0 06/10/22 09:46 **Total TPH** 704 mg/Kg Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier MDL Unit RLD Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 06/09/22 17:00 06/10/22 03:08 mg/Kg (GRO)-C6-C10 **Diesel Range Organics (Over** 637 50.0 mg/Kg 06/09/22 17:00 06/10/22 03:08 C10-C28) 50.0 06/09/22 17:00 06/10/22 03:08 **Oll Range Organics (Over** mg/Kg 67.0

ıc	

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fa 1-Chlorooctane 102 70 - 130 06/09/22 17:00 06/10/22 03:08 106 70 - 130 06/09/22 17:00 06/10/22 03:08 o-Terphenyl

15

14

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15715-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-15715-1	6/8 NSW	102	106	
890-2387-A-61-C MS	Matrix Spike	84	82	
890-2387-A-61-D MSD	Matrix Spike Duplicate	84	82	
LCS 880-27170/2-A	Lab Control Sample	115	119	
LCSD 880-27170/3-A	Lab Control Sample Dup	108	112	
MB 880-27170/1-A	Method Blank	83	89	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Eurofins Midland

Released to Imaging: 1/27/2023 10:04:50 AM

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15715-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

MD MD

89

Lab Sample ID: MB 880-27170/1-A

Analysis Batch: 27127

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27170

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				06/09/22 11:40	06/09/22 20:34	1

70 - 130

Lab Sample ID: LCS 880-27170/2-A

Matrix: Solid

o-Terphenyl

Analysis Batch: 27127

Client Sample ID: Lab Control Sample

06/09/22 20:34

06/09/22 11:40

Prep Type: Total/NA

Prep Batch: 27170

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	953.3		mg/Kg		95	70 - 130	 -
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	917.9		mg/Kg		92	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 115 70 - 130 o-Terphenyl 119 70 - 130

Lab Sample ID: LCSD 880-27170/3-A

Matrix: Solid

Analysis Batch: 27127

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 27170

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	834.9		mg/Kg		83	70 - 130	13	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	832.9		mg/Kg		83	70 - 130	10	20
C10-C28)									

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 108 112 70 - 130 o-Terphenyl

Lab Sample ID: 890-2387-A-61-C MS

Matrix: Solid

Analysis Batch: 27127

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 27170

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	997	877.0	-	mg/Kg		88	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	997	800.5		mg/Kg		79	70 - 130	
C10-C28)										

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15715-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 890-2387-A-61-C MS

Matrix: Solid

Analysis Batch: 27127

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 27170

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 84 70 - 130 o-Terphenyl 82 70 - 130

Lab Sample ID: 890-2387-A-61-D MSD Client Sample ID: Matrix Spike Duplicate

watrix. Soliu									Frep	rype. ro	lai/INA
Analysis Batch: 27127									Pre	p Batch:	27170
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyto	Pocult	Qualifier	habbA	Posult	Qualifier	Unit	n	%Pac	Limite	PPD	Limit

Analyte Added Result <49.9 U 1000 947.0 95 70 - 130 20 Gasoline Range Organics mg/Kg 8 (GRO)-C6-C10 mg/Kg Diesel Range Organics (Over <49.9 U 1000 808.6 79 20 70 - 130 C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	82		70 - 130

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15715-1 SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 27127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15715-1	6/8 NSW	Total/NA	Solid	8015B NM	27170
MB 880-27170/1-A	Method Blank	Total/NA	Solid	8015B NM	27170
LCS 880-27170/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	27170
LCSD 880-27170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	27170
890-2387-A-61-C MS	Matrix Spike	Total/NA	Solid	8015B NM	27170
890-2387-A-61-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	27170

Prep Batch: 27170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15715-1	6/8 NSW	Total/NA	Solid	8015NM Prep	
MB 880-27170/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-27170/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-27170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2387-A-61-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2387-A-61-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 27266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15715-1	6/8 NSW	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

SDG: Rural Eddy Co., NM

Job ID: 880-15715-1

- Toject/Site: Astro Dog 0-Inch

Lab Sample ID: 880-15715-1

Matrix: Solid

Client Sample ID: 6/8 NSW Date Collected: 06/08/22 00:00 Date Received: 06/09/22 16:18

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			27266	06/10/22 09:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	27170	06/09/22 17:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27127	06/10/22 03:08	AJ	XEN MID

Laboratory References:

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

9

10

12

13

12

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15715-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for
the agency does not of	• •	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for
,	• •	it the laboratory is not certifi Matrix	ied by the governing authority. This list ma Analyte	ay include analytes for

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15715-1

SDG: Rura

al Eddy Co., NM	

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15715-1

~	
SDG: Rura	Eddy Co., NM

Lab Sample ID Client Sample ID Matrix Collected Received 880-15715-1 6/8 NSW Solid 06/08/22 00:00 06/09/22 16:18

Received by OCD: 10/4/2022 8:36:47 AM

6/10/2022













Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701 Atlanta GA (770) 449-8800

880-15715 Chain of Custonia	

																V	ww	xenco	com	Page _	of	1		
Project Manager	Joel Lo	Joel Lowry				Bill to: (if differe	nt)												Wo	ork Or	der C	comments		
Company Name:	Etech	Environm	ental an	d Safety		Company Na	me:									Progr	am: US	T/PST	[] P	RF∏ I	Brown	nfield∏ RI	R(☐ Super	fund[
Address.	2617 V	Nest Marl	and			Address.										1	ite of F	-						
City, State ZIP	City, State ZIP Hobbs, NM 88240			City, State ZI	р.									1	ting Le						F□ Level			
Phone:	Phone: (575) 264-9884 Email			ail Email Resu	lts to	PM@	etech	env.cc	<u>m</u> + C	lient				Delive	rables	EDD		/	ADaP	г 🗆 С	ther			
Project Name.		Astr	o Dog 6	-Inch		Turn Around	1			Carlot Hill y Hillows		AN	ALYS	IS RE	QUI	ST						Pres	ervative Co	odes
Project Number			15649		Ro	outine \square																ниоз ни	ı	
Project Location		Rural	Eddy C	o , NM	Ru	ısh 🗓	Ne															H2S04 H2	!	
Sampler's Name:			Joel Low	ry	Du	e Date ASAP	rvat					1										HCL HL		
PO#:			S	RS# 2022-01	2 2		ese				- 1											None NO	2S04 H2 CL HL one NO aOH Na	
SAMPLE RECE	EIPT		ip Blank:	Yes No	Wet lo	ce: (Yes No	Containers/Preservative															NaOH Na		
Temperature (°C):	K	5945		3	hermome	ter ID_	iner															МеОН Ме	,	
Received Intact:	2000 A. C. C. C. C. C. C. C. C. C. C. C. C. C.	(Yes)	-	portion on the second second second second	J	10	onta		Xt.)													Zn Acetate	+ NaOH Zn	
Cooler Custody Seals:		Yes No		Correction F	0		2 00		fied															
Sample Custody Sea	als.	Yes No	(N/A/	Total Contai	ners:		₫ 5	(802	Aodii	(00)												lab if	received by 4	30pm
Sample Ide	ntificati	on	Matrix	Date Sampled	Time Sample	1 Dente	Number Code	BTEX (8021)	TPH (Modified Ext.)	CI- (E300)												Sam	ple Comm	ents
6/8 NSW			Soil	6/8/2022			1/NO		Х															
	-4.11.																	-			<u> </u>			
								ļ													_			
																					<u> </u>			
										1							 			_	_			
											<u> </u>						<u></u>	<u> </u>	<u></u>	<u></u>	<u></u>	<u> </u>		
	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 Hg																							
Notice Signature of this document and relinquishment of samples constitutes a valid purch of service. Xenco will be liable only for the cost of samples and shall not assume any respond Xenco A minimum charge of \$75.00 will be applied to each groject and a charge of \$5 for				ny responsibility fo	r any los	ses or	expense	s incur	red by th	ne client	if such	n losses	are d	ue to cir	umstan	ces bey	ond th	e contro						
Comment and the Comment of the Comme	Relinquished by: (Signature) Received by: (Signa				Þ		e/Time	quya lah ya i			17 to 100	by: (Si	okan a.		1	V.25044		by (S	ignat	ure)	Date/	Time		
1 Quel form			N	61		2 41		2	to the same of the same		- contract all and	9,000		T						anni anni anggari	Topon III			
				+-/		7 /	U	 						+										

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-15715-1 SDG Number: Rural Eddy Co., NM

List Source: Eurofins Midland

Login Number: 15715 List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	N/A	

4

Eurofins Midland

<6mm (1/4").



ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-15716-1

Laboratory Sample Delivery Group: Rural Eddy Co., NM

Client Project/Site: Astro Dog 6-Inch

For:

eurofins 🙀

Etech Environmental & Safety Solutions PO BOX 62228 Midland, Texas 79711

Attn: PM List

MAMER

Authorized for release by:

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

6/10/2022 9:17:51 AM

EOL

Have a Question?

LINKS

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/27/2023 10:04:50 AM 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

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

Client: Etech Environmental & Safety Solutions Project/Site: Astro Dog 6-Inch Laboratory Job ID: 880-15716-1 SDG: Rural Eddy Co., NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Receipt Checklists	15

Definitions/Glossary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15716-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Qualifiers

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Not Detected at the reporting limit (or MDL or EDL if shown)

Glossary

MPN

MQL

NC

ND NEG

POS

PQL

QC

RER

RL RPD

TEF

TEQ

TNTC

PRES

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)

Case Narrative

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1 SDG: Rural Eddy Co., NM

Job ID: 880-15716-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15716-1

Receipt

The sample was received on 6/9/2022 4:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

GC Semi VOA

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

6

4

5

7

0

10

12

13

114

Client Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15716-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

Client Sample ID: 6/9 NSW

Date Collected: 06/09/22 00:00 Date Received: 06/09/22 16:18

Lab Sample ID: 880-15716-1

Matrix: Solid

Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	382		49.9		mg/Kg			06/10/22 09:46	1
- Method: 8015B NM - Diesel Range	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		06/09/22 17:00	06/10/22 03:30	1
(GRO)-C6-C10									
Diesel Range Organics (Over	382		49.9		mg/Kg		06/09/22 17:00	06/10/22 03:30	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/09/22 17:00	06/10/22 03:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				06/09/22 17:00	06/10/22 03:30	1
o-Terphenyl	95		70 - 130				06/09/22 17:00	06/10/22 03:30	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions

Job ID: 880-15716-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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)	
880-15716-1	6/9 NSW	89	95	
890-2387-A-61-C MS	Matrix Spike	84	82	
890-2387-A-61-D MSD	Matrix Spike Duplicate	84	82	
LCS 880-27170/2-A	Lab Control Sample	115	119	
LCSD 880-27170/3-A	Lab Control Sample Dup	108	112	
MB 880-27170/1-A	Method Blank	83	89	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15716-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: MB 880-27170/1-A

Lab Sample ID: LCS 880-27170/2-A

Matrix: Solid

Analysis Batch: 27127

Matrix: Solid Analysis Batch: 27127

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27170

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/09/22 11:40	06/09/22 20:34	1
	MB	MB							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	06/09/22 11:40	06/09/22 20:34	1
o-Terphenyl	89		70 - 130	06/09/22 11:40	06/09/22 20:34	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 27170

LCS LCS Spike Added Result Qualifier Analyte Unit D %Rec Limits Gasoline Range Organics 1000 953.3 mg/Kg 95 70 - 130 (GRO)-C6-C10 1000 917.9 Diesel Range Organics (Over mg/Kg 92 70 - 130C10-C28)

LCS LCS

l	Surrogate	%Recovery	Qualifier	Limits
	1-Chlorooctane	115		70 - 130
l	o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-27170/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 27127

Prep Type: Total/NA Prep Batch: 27170 Calles

	эріке	LCSD	LCSD				%Rec		KPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	834.9		mg/Kg		83	70 - 130	13	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	832.9		mg/Kg		83	70 - 130	10	20	
C10-C28)										

LCSD LCSD

Surrogate	%Recovery Qu	alifier Limits
1-Chlorooctane	108	70 - 130
o-Terphenyl	112	70 - 130

Lab Sample ID: 890-2387-A-61-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 27127 Prep Batch: 27170 MS MS Sample Sample Spike %Rec

		- up.o	- p						,0.100
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	<49.9	U	997	877.0		mg/Kg		88	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	997	800.5		mg/Kg		79	70 - 130
C10-C28)									

QC Sample Results

Client: Etech Environmental & Safety Solutions

Job ID: 880-15716-1 Project/Site: Astro Dog 6-Inch SDG: Rural Eddy Co., NM

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

Lab Sample ID: 890-2387-A-61-C MS

Matrix: Solid

Analysis Batch: 27127

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 27170

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 84 70 - 130 o-Terphenyl 82 70 - 130

Lab Sample ID: 890-2387-A-61-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 27127 Prep Batch: 27170

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics <49.9 U 1000 947.0 95 70 - 130 8 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1000 808.6 mg/Kg 79 20 70 - 130C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 84 70 - 130 o-Terphenyl 82 70 - 130

QC Association Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1 SDG: Rural Eddy Co., NM

GC Semi VOA

Analysis Batch: 27127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15716-1	6/9 NSW	Total/NA	Solid	8015B NM	27170
MB 880-27170/1-A	Method Blank	Total/NA	Solid	8015B NM	27170
LCS 880-27170/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	27170
LCSD 880-27170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	27170
890-2387-A-61-C MS	Matrix Spike	Total/NA	Solid	8015B NM	27170
890-2387-A-61-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	27170

Prep Batch: 27170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15716-1	6/9 NSW	Total/NA	Solid	8015NM Prep	
MB 880-27170/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-27170/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-27170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2387-A-61-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2387-A-61-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 27267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15716-1	6/9 NSW	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1

SDG: Rural Eddy Co., NM

Client Sample ID: 6/9 NSW

Lab Sample ID: 880-15716-1 Date Collected: 06/09/22 00:00

Matrix: Solid

Date Received: 06/09/22 16:18

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			27267	06/10/22 09:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27170	06/09/22 17:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27127	06/10/22 03:30	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1 SDG: Rural Eddy Co., NM

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date 06-30-22	
		ELAP	T104704400-21-22		
The fellowing analytes	are included in this report by	it the laboratory is not cortifi	ad by the gayerning outherity. This list ma	u inaluda analutaa fa	
The following analytes are included in this report, but		it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes to	
				,	
the agency does not of	fer certification.				
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte		

2

4

5

3

4 4

12

1 4

Method Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1

SDG: Rural Eddy Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions

Project/Site: Astro Dog 6-Inch

Job ID: 880-15716-1

SDG: Rural Eddy Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-15716-1	6/9 NSW	Solid	06/09/22 00:00	06/09/22 16:18

Received by OCD: 10/4/2022 8:36:47 AM

Relinquished by: (Signature)

6/10/2022













Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334

Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701

Atlanta GA (770) 449-8800

Work Order No: 1511

Project Manager.	Joel Lowry				Bill to: (if differe	nii.								7	10/22				1,010.00(1-5111-1-5-02.		Comments
adeated and antiques on me in the electrical at a reference than it	Etech Environmental and Safety				Company Na									\dashv	Progr	am: U	eT/De		Distriction, Edit V	CTHO-OLDSALL.	nfield RR Superfund
Address:	2617 West Marland				Address.	iic.								\dashv	1	ate of I		_	МП	DIOWI	ineid KKL Superidid
The property of the second sec	Hobbs, NM 88240				The state of the s	ittonenen in								\dashv	1		•		rel 🖂	PST	/US TRF Level 7
The state of the s					City, State ZIP Email Results to PM@etechenv com + Client							Reporting Level Level PST/USTRE Level									
Phone:	(575) 264-9884			Email	Email Resu	ts to	PM(a)	etecne	env co	<u>m</u> + C	llent	,/211	w		Delive	Tables	LDE	<u>' </u>		ADAI	
Project Name:	Astro Dog 6-Inch Tui				rn Around	nu maket	1010		-	· · · · · ·	AN	ALYS	IS RE	QUE	ST				T		Preservative Codes
Project Number	15649 Routi																			HNO3 HN	
Project Location	Rural Eddy Co , NM Rush			X	ive							1]		H2S04 H2	
Sampler's Name:	's Name: Joel Lowry Due			Date ASAP	Z.		,				- 1									HCL, HL	
PO# SRS# 2022-012				ese		BOB			1	1	1 1						1		None NO		
SAMPLE RECE		np Blank.	Yes (No)	✓ Wet Ice:	AND DECEMBERS OF THE PARTY OF T	S/P		8	- 1			1									NaOH Na
Temperature (°C)	S.9/S.7 Thermome			hermometer	ID (C)	ine			1			1	İ								MeOH Me
Received Intact:	Stranger and Al	No.		+1		Contai		Ext.)	İ												Zn Acetate+ NaOH Zn
Cooler Custody Seal Sample Custody Sea	Contraction - Superior Superio			There are a boundaries and the second of the second		ত	BTEX (8021)	odified	(0)												TAT starts the day recevied by the lab if received by 4:30pm
Sample Ider	ntification Matrix Date Sampled		Time Sampled	Depth	Number	TPH (Modified		CI- (E300)												Sample Comments	
6/9 NSW		Soil	6/9/2022			1/NC	1	Х													

																	11				
																	- 11				
						<u> </u>										_	111				
						<u> </u>		<u> </u>							880-15716 Chain of Custody					Custody	
		<u> </u>				1	1								1				+	+	
							1									<u> </u>					
					<u> </u>			<u></u>													
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti 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 Ti U 1631 / 245.1 / 7470 / 7471 Hg																					
Notice: Signature of this	document and relin	quishment o	of eamples cons	titutes a valid	purchase order f	rom clie	nt comp	oany to	(enco, i	ts affilia	tes and	subcor	ntractors	. It a	ssigns s	tandard	terms	and cor	nditions		
of service. Xenco will be of Xenco A minimum c																				l.	

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Revised Date 101419 Rev 2019 1

Date/Time

Received by: (Signature)

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-15716-1 SDG Number: Rural Eddy Co., NM

List Source: Eurofins Midland

Login Number: 15716 List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	

Appendix E Regulatory Correspondence

From: <u>Karolanne Hudgens</u>

To: Hamlet, Robert, EMNRD; "stucker@blm.gov"
Cc: Bratcher, Mike, EMNRD; Camille J Bryant

Subject: [EXTERNAL] Astro Dog Release Site nAPP2204733624 - Discussion Notes

Date: Wednesday, May 11, 2022 12:14:19 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Per the conference call between Plains, NMOCD and BLM, the following was discussed regarding the Astro Dog 6-inch, hereinafter referred to as the 'Site':

- The release at the Site was caused by a third-party line strike on the Plains Astro Dog 6-inch pipeline on February 14, 2022.
- The majority of the excavation has been vertically and/or horizontally delineated, with the exception of the north/northwest sidewall/floor and the west sidewall and floor.
- The lithology of the excavation area is mostly resilient hard rock (capable of breaking a hammerhoe) with interbedded lenses of more porous material (on average approximately 6" 8" in thickness).
- Our main issue at the site has been chasing relatively low-level hydrocarbon impacts within these lenses to beneath a 16-inch Crestwood high-pressure gas line, which runs through the site from the southwest to the northeast and comprises the north/northwest boundary of the excavation.
- Plains is currently waiting on sample results from the western floor to determine if delineation has been achieved.
- Due to the location of the Crestwood gas line to the excavation area, and the safety risks associated with excavation of the hard rock material in proximity to the line, Plains requested an alternative method of remediation for this area.
- Plains also requests an extension for completion of remediation to closure at the Site.

Based on the results of the conference call, the following site activities have been agreed upon:

- The NMOCD will grant Plains an extension for completion of remediation activities at the Site.
- Plains will continue to delineate the area to the west, if applicable based on the sample results, where it is viable to excavate and collect samples to confirm delineation.
- Plains will treat the affected portion of the north/northwest sidewall of the excavation that is in proximity to the Crestwood gas line with an application of a 30% hydrogen peroxide solution utilizing a slow applicator dripper to ensure penetration into the hydrocarbon affected lenses. Plains will treat only the affected areas of the sidewall at or below 14 feet below ground surface (bgs).
- Plains will complete two (2) applications of the hydrogen peroxide treatment, and then collect samples for analysis. Based on the results of the soil samples, viability of the treatment will be determined and reviewed/discussed on another conference call with Plains, NMOCD and BLM. The effectiveness of the treatment and/or the need for further site remediation activities will be discussed at this time.

Plains greatly appreciates your time, and will follow-up with a conference call meeting invite once information is available regarding the sample results from the hydrogen peroxide treatment.

Thanks,

Karolanne Hudgens

HSE Remediation Specialist II Plains All American 1106 Griffith Drive Midland, Texas 79706 Office: 432.221.7921

Mobile: 575.200.5517

ATTENTION:

This message is intended only for the use of the individual or entity to which it is addressed. This message, including any attachments, may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited.

If you have received this communication in error, please notify the sender by return email and delete this message and any attachments from your system.

If you no longer wish to receive electronic messages from this sender, please respond and advise accordingly in your return email.

ATTENTION:

This message is intended only for the use of the individual or entity to which it is addressed. This message, including any attachments, may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited.

If you have received this communication in error, please notify the sender by return email and delete this message and any attachments from your system.

If you no longer wish to receive electronic messages from this sender, please respond and advise accordingly in your return email.

From: Hamlet, Robert, EMNRD

To: <u>Camille J Bryant</u>; <u>"Tucker, Shelly J"</u>; <u>Bratcher, Mike, EMNRD</u>

Cc: Karolanne Hudgens; "Joel Lowry"

Subject: RE: [EXTERNAL] FW: Plain"s/San Mateo - Astro Dog 6-Inch - Project Update

Date: Thursday, July 7, 2022 11:47:00 AM

Camille,

Please, go ahead and backfill the excavation. The OCD grants approval of the remediation activities at the Astro Dog 6" Line Strike Release Site. A best case effort was put forth to remediate the affected lenses within the hardened rock. Thank you for your efforts.

Regards,

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/



From: Camille J Bryant <CJBryant@paalp.com>

Sent: Thursday, July 7, 2022 8:47 AM

To: 'Tucker, Shelly J' <stucker@blm.gov>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>

Cc: Karolanne Hudgens <KHudgens@paalp.com>; 'Joel Lowry' <joel@etechenv.com> **Subject:** RE: [EXTERNAL] FW: Plain's/San Mateo - Astro Dog 6-Inch - Project Update

Good morning,

Plains is submitting this follow-up email to address the status of the Astro Dog 6" Line Strike Release Site (NMOCD Incident # nAPP2204733624). As indicated below, the BLM has granted approval of the remediation activities at the Astro Dog 6" Line Strike Release Site, these activities include excavation and transportation off-site of approximately 5,928 cubic yards of crude oil impacted material and application of a 30% hydrogen peroxide solution to an area located directly beneath a high-pressure gas pipeline. These activities were discussed and approved during a meeting in May 2022 with the BLM, NMOCD, Etech and Plains representatives. The area where the hydrogen peroxide solution was applied was the only area which exhibited TPH concentrations above NMOCD regulatory guidelines. This area was saturated with the solution and confirmation soil samples were obtained and submitted for laboratory analysis. The laboratory analytical results indicated a TPH concentration of 386 mg/Kg (please see detailed description of remediation activities below).

Due to safety concerns associated with excavating beneath the high-pressure gas pipeline and the limited area of impact remaining in-situ, Plains respectfully requests NMOCD approval to conduct backfilling activities at the site. On completion of backfilling activities a Remediation Summary and Closure Request along with a Final C-141 will be submitted for approval to the NMOCD and BLM.

Please contact Joel Lowry or myself with any questions or concerns.

Plains appreciates your assistance with regard to this matter.

Respectfully,

Camille J. Bryant

HSE Remediation Supervisor

Plains All American

1106 Griffith Drive

Midland, Texas 79706

Office: 432.221.7924

Cell: 575.441.1099

From: Tucker, Shelly J <<u>stucker@blm.gov</u>>
Sent: Thursday, June 30, 2022 12:06 PM

To: Camille J Bryant < <u>CJBryant@paalp.com</u>>; <u>mike.bratcher@state.nm.us</u>;

robert.hamlet@state.nm.us

Cc: Karolanne Hudgens < KHudgens@paalp.com>; 'Joel Lowry' < joel@etechenv.com>

Subject: Re: [EXTERNAL] FW: Plain's/San Mateo - Astro Dog 6-Inch - Project Update [External]

Caution: The email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Upon review of the information provided, the BLM hereby approves backfilling activities. The BLM acknowledges the impact (which is above NMOCD guidelines) being left in place. Based on the dense subsurface rock, depth and width of the excavation, and estimated volume of impacted material being left in place, the BLM feels Plains has made a good faith effort in removing all impacted material. The BLM feels that further excavation activities could result in elevated safety issues for the contractors on site and potentially for the public driving on US Refinery Rd (due to the fact the excavation is directly next to the roadway.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Realty - Compliance

Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5706 - Direct 575.499.6831 - Mobile

stucker@blm.gov

Please note a new spill/release email account has been set up. Please forward future email notifications for **spills/releases only** to this central email to ensure if I am unavailable, my supervisor will be able to assist with any questions.

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

From: Camille J Bryant < CJBryant@paalp.com>

Sent: Tuesday, June 14, 2022 7:49 AM

To: mike.bratcher@state.nm.us <mike.bratcher@state.nm.us>; robert.hamlet@state.nm.us

<<u>robert.hamlet@state.nm.us</u>>; Tucker, Shelly J <<u>stucker@blm.gov</u>>

Cc: Karolanne Hudgens < KHudgens@paalp.com; 'Joel Lowry' < joel@etechenv.com> Subject: [EXTERNAL] FW: Plain's/San Mateo - Astro Dog 6-Inch - Project Update

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good Morning,

Please see the email below and the attached information packet describing remediation activities conducted at the Astro Dog 6" Line Strike Release Site (NMOCD Incident # nAPP2204733624). At this time Plains respectfully requests approval to conduct backfilling activities at the site. On completion of backfilling activities a Remediation Summary and Closure Request along with a Final C-141 will be submitted for approval to the NMOCD and BLM.

Please contact Joel Lowry or myself with any questions or concerns.

Plains appreciates your assistance with regard to this matter.

Respectfully,

Camille J. Bryant

4SE Remediation Supervisor

Plains All American

1106 Griffith Drive

Midland, Texas 79706

Office: 432.221.7924 Cell: 575.441.1099

From: Joel Lowry < joel@etechenv.com>
Sent: Monday, June 13, 2022 4:06 PM

To: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Karolanne Hudgens <<u>KHudgens@paalp.com</u>>

Subject: FW: Plain's/San Mateo - Astro Dog 6-Inch - Project Update [External]

Caution: The email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mrs. Bryant,

Please find attached an information packet that has been prepared for the Plains/San Mateo Astro Dog 6-Inch crude oil release site. On February 14, 2022, a contractor for an unaffiliated pipeline operator inadvertently struck a 6-inch pipeline belonging to Plains while conducting pipelining activities in the area. The release was limited to the open bell hole. On February 14, 2022, Matador/San Mateo reported the release to NMOCD and the incident was assigned NMOCD Incident Number **nAPP2204566669**. On February 16, 2022, Plains prepared its own NOR and C-141 and the release was assigned incident number **nAPP2204733624**. The initial report indicated approximately 12 barrels of crude oil were released. During initial response activities a vacuum truck was utilized to recover approximately 11 barrels of crude oil. Upon completion of Remediation Activities C-141's will be prepared to cover both incidents.

On February 22, 2022, remediation activities commenced at the release site. Impacted material within the release margins was excavated and stockpiled on-site, atop an impermeable liner, pending final disposition at an NMOCD surface waste facility. Upon beginning remediation activities it was determined that a hammer hoe would be required to remove affected material at the release site.

On March 3, 2022, Etech collected six (6) samples (FL-1 @ 14', FL-2 @ 12', ESW #1, ESW #2, NSW #1 and SSW #1) from the floor and sidewalls of the recently excavated area. The collected samples were submitted to an NMOCD-certified laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. Excavation of impacted material continued toward the west.

On March 10, 2022, Etech collected six (6) samples (FL-3 @ 14', FL-4 @ 14', FL-5 @ 14.5', FL-6 @ 14.5', NW #2 and SW#2) from the floor and sidewalls of the recently excavated area. Laboratory analytical results indicated BTEX and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. TPH concentrations ranged from less than the laboratory reporting limited in sample SW #2 to 999 mg/kg in sample FL-3 @ 14'. TPH concentrations exceeded the NMOCD Closure Criteria in each of the submitted samples with the exception of sample SW #2. Excavation activities continued toward the west and the floor and sidewalls of the excavated area were advanced in the areas characterized by samples FL-3 @ 14', FL-4 @ 14', FL-5 @ 14.5', FL-6 @ 14.5' and NW #2.

On March 23, 2022, Etech collected six (6) samples (FL-3b @ 16′, FL-4b @ 16′, FL-5b @ 14′, NSW #2b, NSW #3, and SSW #3) from the floor and sidewalls of the recently excavated area. Laboratory analytical results indicated that BTEX and/or chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. TPH concentrations were below the NMOCD Closure Criteria in each of the submitted sampled with the exception of samples FL-4b @ 16′ (155 mg/kg), NSW #2b (886 mg/kg) and NSW #3 (341 mg/kg). Impacted material in the area characterized by sample FL-4b @ 16′ was removed. Further advancement of the north sidewall in the area characterized by samples NSW #2b and NSW #3 was limited due to safety concerns associated with the continued use of the hammer in such close proximity to an active 16-inch high-pressure gas line binding the Site toward the north.

On March 24, 2022, Etech collected one (1) sample (FL-6b @ 17') from the floor of the recently excavated area. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be less than the laboratory MDL. Excavation activities continued toward the west.

On April 1, 2022, Etech collected one (1) sample (FL-4c @ 17') from the floor of the recently excavated area. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be 93.4 mg/kg. Excavation activities continued toward the west.

On April 8, 2022, Etech advanced an investigative trench (NT) on the north side of the high-pressure gas line in the areas characterized by soil samples NSW #2b and NSW #3. During the advancement of the investigative trench, three (3) soil samples (NT-10', NT-15' and NT-20') were collected and submitted to the laboratory for analysis of BTEX and TPH concentrations which were determined to be below the applicable laboratory MDL in each of the submitted soil samples. Based on laboratory analytical results it was determined that impacts did not migrate horizontally toward the north beyond the high-pressure gas line.

On April 27, 2022, Etech collected three (3) samples (FL-7 @ 16-18′, FL-10 @ 18′ and SWSW) from the floor and sidewalls of the recently excavated area. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated that BTEX and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. TPH concentrations were below the NMOCD Closure Criteria in each of the submitted sampled with the exception of sample SWSW (1,840 mg/kg). Excavation activities continued toward the west and the sidewall of the excavation was advanced in the area characterized by sample SWSW.

On May 10, 2022, Etech collected three (3) samples (FL-5b, FL-8 and FL-9) from the floor of the recently excavated area. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. TPH concentrations ranged from 70.4 mg/kg in sample FL-5b to 1,680 mg/kg in sample FL-8. Excavation activities continued toward the west and the floor of the excavated area was advanced in the areas characterized by samples FL-8 and FL-9.

On May 11, 2022, representatives of Plains, the NMOCD and BLM met to discuss the remediation Site. During the meeting it was determined that the removal of hydrocarbon impacts on the north sidewall beneath the high-pressure gas line posed a significant safety risk and was impracticable. Since the impacted areas were limited to two small porous lenses between 12 and 14 ft. bgs and did not extend toward the north beyond the high-pressure gas line, saturating the affected areas with a 30% hydrogen peroxide solution may be sufficient to mitigate the contaminants.

On May 12, 2022, Etech collected two (2) samples (SWSWb and WSW #1) from sidewalls of the recently excavated area. The collected samples were submitted to the laboratory for analysis of BTEX, TPH and/or chloride concentrations. Laboratory analytical results indicated that BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples with the exception of the chloride concentration in soil sample WSW #1 which was determined to be 964 mg/kg. Excavation activities continued toward the west and the sidewall of the excavation was advanced in the area characterized by sample WSW #1.

On May 20, 2022, Etech collected six (6) samples (FL-8b, FL-9b, FL-11, FL-12, WSW #1b and WSW #2) from the floor and sidewalls of the recently excavated area. The collected samples were submitted to the laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted samples. In addition, Etech treated the impacted areas on the north sidewall proximate to the high-pressure gas line by saturating it with a 30% hydrogen peroxide solution.

On June 3, 2022, Etech collected one (1) sample (6/3 NSW) from the treated area characterized by soil samples NSW #2b and NSW #3. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be 1,440 mg/kg. Upon collecting the sample, the affected area was saturated with a 30% hydrogen peroxide solution.

On June 6, 2022, Etech collected one (1) sample (6/6 NSW) from the treated area characterized by

soil samples NSW #2b and NSW #3. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be 1,630 mg/kg. Upon collecting the sample, the affected area was saturated with a 30% hydrogen peroxide solution.

On June 8, 2022, Etech collected one (1) sample (6/8 NSW) from the treated area characterized by soil samples NSW #2b and NSW #3. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be 784 mg/kg. Upon collecting the sample, the affected area was saturated with a 30% hydrogen peroxide solution.

On June 9, 2022, Etech collected one (1) sample (6/9 NSW) from the treated area characterized by soil samples NSW #2b and NSW #3. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations which were determined to be 382 mg/kg.

Remediation activities were conducted in accordance with the BLM and NMOCD. During the course of remediation activities approximately 5,928 cubic yards of impacted material was excavated with a hammer hoe and transported to an NMOCD-approved surface waste facility for disposal. Based on laboratory analytical results and remediation activities conducted to date, Etech recommends Plains request permission to backfill the excavated area with locally-sourced, non-impacted material. Upon completion of backfilling activities, a *Remediation Summary and Closure Request* (C-141) will be prepared detailing remediation activities and laboratory analytical results from confirmation soil samples for submission to the NMOCD.

If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks.

Joel W. Lowry

Etech Environmental & Safety Solutions, Inc.

3100 Plains Highway Lovington, NM 88260 Office: (575) 396-2378

Fax: (575) 396-1429 Cell: (432) 466-4450

ATTENTION:

This message is intended only for the use of the individual or entity to which it is addressed. This message, including any attachments, may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited.

If you have received this communication in error, please notify the sender by return email and delete this message and any attachments from your system.

If you no longer wish to receive electronic messages from this sender, please respond and advise accordingly in your return email.

Total Control Panel Login

To: <u>joel@etechenv.com</u> Message Score: 10 High (60): Pass
From: <u>cjbryant@paalp.com</u> My Spam Blocking Level: High Medium (75): Pass

Low (90): Pass

Block this sender
Block paalp.com

This message was delivered because the content filter score did not exceed your filter level.

ATTENTION:

This message is intended only for the use of the individual or entity to which it is addressed. This message, including any attachments, may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited.

If you have received this communication in error, please notify the sender by return email and delete this message and any attachments from your system.

If you no longer wish to receive electronic messages from this sender, please respond and advise accordingly in your return email.

ATTENTION:

This message is intended only for the use of the individual or entity to which it is addressed. This message, including any attachments, may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited.

If you have received this communication in error, please notify the sender by return email and delete this message and any attachments from your system.

If you no longer wish to receive electronic messages from this sender, please respond and advise accordingly in your return email.

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

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 148443

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P.	34053
333 Clay Street Suite 1900	Action Number:
Houston, TX 77002	148443
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created I	By Condition	Condition Date
rhamle	We have received your closure report and final C-141 for Incident #NAPP2204733624 PLAINS ASTRO DOG 6 INCH, thank you. This closure is approved.	1/27/2023