

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2307356662
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Silverback Operating	OGRID 330968
Contact Name Mark Ritchie	Contact Telephone 210-874-2406
Contact email mritchie@silverbackexp.com	Incident # (assigned by OCD)
Contact mailing address 108 S. 4th st Artesia, NM 88211	

Location of Release Source

Latitude 32.721378 Longitude -104.368495
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Dayton Water Recycle	Site Type Produced Water Recycle Facility
Date Release Discovered 2/21/2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
J	27	18S	26E	Eddy

Surface Owner: State Federal Tribal Private (Name: Silverback Operating)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe) Recycled Water and Fresh Water	Volume/Weight Released (provide units) 2312 bbls	Volume/Weight Recovered (provide units) 0 bbls

Cause of Release: Third party personnel removed a meter from lay-flat line during pigging operations which left the end of the line being pigged open which resulted in the release.



Volume Justification

This form is to be used to convey justification of spill volumes in the event of a release. Clearly indicate by calculations or description in the space provided below.

Justification:

Surface Area, sqft	77077
Estimated Depth, in	2
Estimated Depth, ft	0.166667
Calculated Volume, cu. ft	12846.17
cu. ft to bbl	0.18
Calculated Volume, bbl	2312.31



Approved by: Mark Ritchie

Date: 3/14/2023

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

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS
 Action 197096

CONDITIONS

Operator: Silverback Operating II, LLC 19707 IH10 West, Suite 201 San Antonio, TX 78256	OGRID: 330968
	Action Number: 197096
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/15/2023

Incident ID	nAPP2307356662
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Mark Ritchie Title: HSE Manager
 Signature: Mark Ritchie Date: 7/18/2023
 email: mritchie@silverbackexp.com Telephone: 210-874-2406

OCD Only

Received by: Shelly Wells Date: 9/8/2023

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

Environmental Site Remediation Work Plan

General Information

NMOCD District:	<u>2 – Artesia</u>	Incident ID:	<u>nAPP2307356662</u>
Landowner:	<u>Silverback Operating</u>	RP Reference:	<u>N/A</u>
Client:	<u>Silverback Exploration</u>	Site Location:	<u>Dayton Recycle Release</u>
Date:	<u>July 15, 2023</u>	Project #:	<u>23E-02248</u>
Client Contact:	<u>Mark Ritchie</u>	Phone #:	<u>713.553.8320</u>
Vertex PM:	<u>Michael Moffitt</u>	Phone #:	<u>575.988.2681</u>

Objective

The objective of the environmental remediation work plan is to identify exceedances found during the site assessment/characterization activity and propose an appropriate remediation technique to address these areas. Areas of environmental concern identified and delineated include the perimeter road adjacent to the Dayton Water Recycle facility’s frac ponds, the ramp leading to the perimeter road, the outlying lease road, and surrounding pasture. Closure criteria have been selected as per New Mexico Administrative Code 19.15.29. All applicable research as it pertains to closure criteria selection is presented in Attachment 2. The closure criteria for the site are presented below.

Table 1. Closure Criteria for Soils to Remediation & Reclamation Standards		
	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	Chloride	10,000 mg/kg
DTGW 51-100 feet (19.15.29.12)	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

bgs – below ground surface, DTGW – depth to groundwater, TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics, BTEX – benzene, toluene, ethylbenzene and xylenes

Table 2. Closure Criteria for On-Site Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
51 feet - 100 feet	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

Site Assessment/Characterization

Site characterization was completed on June 30, 2023. A total of 82 sample points were established and samples collected at various discreet depth intervals for field screening. In total, 196 samples were submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analysis. The sample locations are presented in Attachment 1. Laboratory analysis results have been





Environmental Site Remediation Work Plan

compared to the above closure criteria and the results from the characterization activity are presented in Attachment 3. Exceedances are identified in the table as bold with a colored background.

Vertex Resource Services Inc. (Vertex) is requesting deferral for the portion of the spill area within the boundaries of the Dayton Water Recycle facility. The area has been outlined with an orange polygon on the characterization schematic presented in Attachment 1. Excavation into the foundation of the ramp and elevated perimeter road parallel to the ponds could cause a major facility deconstruction and is not technically feasible to vertically delineate or remediate while in service. The facility has a water storage capacity of 1.2 million barrels. Additionally, due to the hard packed construction materials the facility was built with, the use of mechanical equipment to remove soils would be necessary and has potential to affect the structural integrity of the containment ponds. Horizontal characterization, however, would still be completed in the requested deferral area during remediation activities.

Remedial Activities

Areas identified with contaminant concentrations above closure criteria will be remediated through excavation. Laboratory results from the site characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. Soil will be excavated to the extents of the known contamination outside of the applicable closure criteria. Field screening will be utilized to confirm that all areas of the excavation base and walls meet the applicable closure criteria. Contaminated soils will be stored on a 30mil liner prior to disposal at an approved facility. Once excavation is complete, confirmatory samples will be collected and laboratory analysis completed to confirm closure criteria guidelines are met. Excavations will be backfilled with clean soil sourced locally.

Regarding remedial efforts within the proposed deferral portions of the facility, the surface will be carefully scraped in areas identified as exceeding closure criteria as shown in Table 2. The remediation of all impacted soils left in situ will be sampled, removed and disposed of at the end of life of the facility when deconstruction and final reclamation occurs. All impacted areas outside of the frac pond fence will be excavated to the reclamation criteria shown in Table 1.

Samples were collected at a total of 82 sample points in and around the lease road. Nine sample points were established on the ramp, and 73 outside of the fence. Exceedances to closure criteria were found at sample points shown in the table below. Soil will be excavated at a planned depth of 6 inches to 1 foot for the majority of the excavation. The excavation is also planned to extend to a depth of 4 feet for an approximately 200 square foot area around sample points BH23-23 and BH23-43, as contamination was found at a greater depth in those locations during delineation. Hand excavation will be utilized to remove contaminated soil within the 30" tolerance zone of buried flowlines near BH23-29, and the remaining excavation will be performed using heavy equipment. Field screening will be utilized to find the horizontal and vertical extents of the spill area. Due to the large area of the excavation, Vertex is requesting a confirmatory sampling variance of 400 square feet per base sample, per the email in Attachment 4. Wall samples will be collected every 200 square feet as per NMOCD guidance and all confirmatory samples will be submitted for laboratory analysis of all applicable parameters. The estimated volume to be excavated is 2,800 cubic yards.



Environmental Site Remediation Work Plan

Table 3. Excavation Plan		
Sample Point	Excavation Depth	Remediation Method
BH23-02	1'	Trackhoe
BH23-04	1'	Trackhoe
BH23-05	1'	Trackhoe
BH23-07-BH23-14	1'	Trackhoe
BH23-18	1'	Trackhoe
BH23-21	1'	Trackhoe
BH23-22	1'	Trackhoe
BH23-23	4'	Trackhoe
BH23-24	1'	Trackhoe
BH23-25	1'	Trackhoe
BH23-27	1'	Trackhoe
BH23-29	1'	Hand/Hydrovac
BH23-30	1'	Trackhoe
BH23-31	1'	Trackhoe
BH23-36	1'	Trackhoe
BH23-38	1'	Trackhoe
BH23-43	4'	Trackhoe
BH23-44	1'	Trackhoe
BH23-50-BH23-54	1'	Trackhoe
BH23-56	1'	Trackhoe
BH23-57	1'	Trackhoe
BH23-62-BH23-68	1'	Trackhoe
BBH23-71	6"	Trackhoe

Should you have any questions or concerns, please do not hesitate to contact Michael Moffitt at 575.988.2681 or mmoffitt@vertex.ca.



Sally Carttar, B.A.

ENVIRONMENTAL TECHNOLOGIST, REPORTING

7/18/2023

Date



Michael Moffitt, B.Sc.

MANAGER ENVIRONMENT, REPORT REVIEW

7/18/2023

Date

Environmental Site Remediation Work Plan

Attachments

- Attachment 1. Characterization Sampling Site Schematic
- Attachment 2. Closure Criteria Research
- Attachment 3. Laboratory Results Table and Laboratory Data Reports
- Attachment 4. Correspondence with NMOCD

ATTACHMENT 1



- ◆ Borehole (Prefixed by "BH23-")
- Point of Release
- Testpit (Prefixed by "TP23-")
- ✂ Fence
- Pipeline (Underground)
- ▭ Approximate Release Area (~55,825 sq.ft.)
- ▭ Proposed Excavation to 4' bgs (~716 sq.ft.)
- ▭ Proposed Excavation to 6" bgs (~686 sq.ft.)
- ▭ Facility Deferral Area (~7,168 sq.ft.)



0 25 50 100 ft.
 NAD 1983 UTM Zone 13N
 Date: Jul 17/23

Map Center:
 Lat: 32.722727,
 Long: -104.367986



**Characterization Schematic
 Dayton Recycle Release**

FIGURE:
1



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Bing. Site features from GPS, Vertex Professional Services Ltd., 2023.

ATTACHMENT 2

Closure Criteria Worksheet			
Site Name: Dayton Recycle Release			
Spill Coordinates:		X: 32.72119	Y: -104.36827
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	85	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	7,205	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	10,652	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	1,888 ft	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	1,138	feet
	ii) Within 1000 feet of any fresh water well or spring		feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	26,752	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
10	Within a 100-year Floodplain	>100	year
11	Soil Type	Reagan Loam	
12	Ecological Classification	Loamy	
13	Geology	Piedmont Alluvial Deposits	
NMAC 19.15.29.12 E (Table 1) Closure Criteria		51-100'	<50' 51-100' >100'

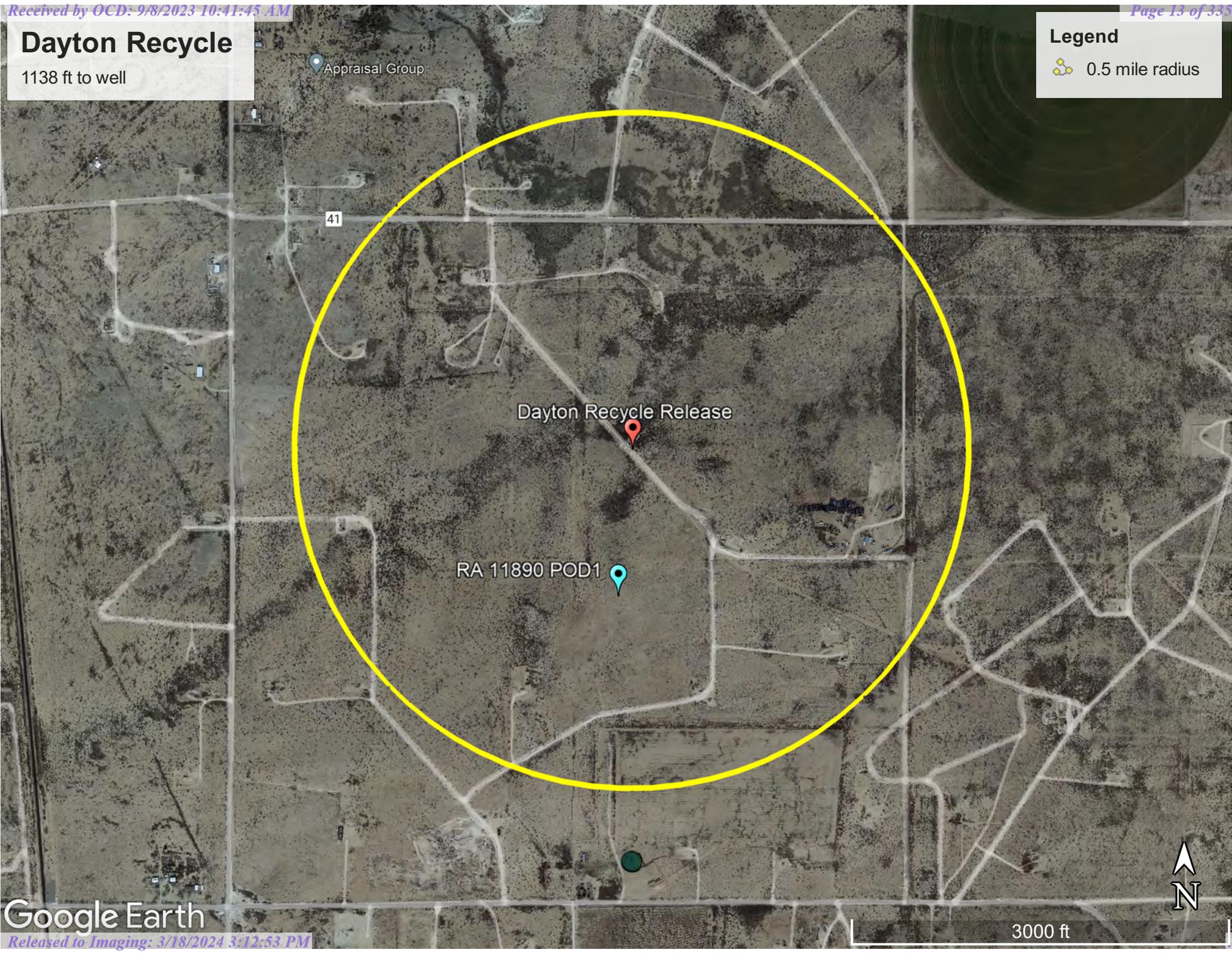
Dayton Recycle

1138 ft to well

Appraisal Group

Legend

-  0.5 mile radius





New Mexico Office of the State Engineer

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)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 11890 POD1	RA	ED		1	1	4	28	18S	26E	559161	3620210	347	175	85	90
RA 10490	RA	ED		4	2	27	18S	26E	559659	3620486*	465	200	75	125	
RA 03055	RA	ED		1	2	1	27	18S	26E	558757	3620986*	617	146	85	61
RA 04003	RA	ED		3	3	4	27	18S	26E	559161	3619578*	977	100		
RA 09437	RA	ED		3	3	4	27	18S	26E	559161	3619578*	977	120	60	60
RA 04701	RA	ED		3	3	22	18S	26E	558456	3621290*	1045	80	55	25	
RA 11952 POD1	RA	ED		4	2	2	28	18S	26E	558153	3620727	1059	170	90	80
RA 11506 POD1	RA	ED		1	3	3	22	18S	26E	558290	3621345	1204	160	78	82
RA 01881	RA	ED		3	3	26	18S	26E	560060	3619681*	1226	2450			
RA 12961 POD1	RA	ED		4	3	3	27	18S	26E	558578	3619477	1243	215	180	35
RA 03771	RA	ED		3	1	3	22	18S	26E	558354	3621592*	1337	110	75	35
RA 07408	RA	ED		2	4	4	21	18S	26E	558152	3621389*	1338	155	85	70
RA 12890 POD1	RA	ED		2	4	4	21	18S	26E	558105	3621429	1400	180	102	78
RA 05425	RA	ED		4	4	28	18S	26E	558060	3619677*	1438	160	90	70	
RA 04046	RA	ED		4	28	18S	26E	557859	3619879*	1500	125				
RA 07654	RA	ED		2	4	21	18S	26E	558052	3621693*	1615	180	170	10	
RA 01296	RA	ED		3	3	1	23	18S	26E	559954	3622001*	1631	180	80	100
RA 06828	RA	CH		4	21	18S	26E	557851	3621491*	1641	130	105	25		

RA 03598	RA	ED	1	3	2	22	18S	26E	559154	3622198*		1643	1815			
RA 09466	RA	ED	3	3	1	22	18S	26E	558353	3621996*		1670	160	70	90	
RA 03340	RA	ED		3	1	22	18S	26E	558454	3622097*		1712	100	60	40	
RA 03580	RA	ED		3	1	22	18S	26E	558454	3622097*		1712	1700			
RA 04287	RA	ED	1	2	4	21	18S	26E	557951	3621792*		1757	170	140	30	
RA 01144 -S	RA	CH		3	1	23	18S	26E	560055	3622102*		1767	809			
RA 09763	RA	ED	4	1	4	21	18S	26E	557748	3621592*		1783	240	140	100	
RA 04022	RA	CH		2	1	35	18S	26E	560465	3619281*		1796	520			
RA 09874	RA	ED		2	1	35	18S	26E	560465	3619281*		1796	150			
RA 01296 CLW229885	O	RA	ED	1	3	1	23	18S	26E	559954	3622201*		1810	180	70	110
RA 04018	RA	CH	3	3	4	26	18S	26E	560762	3619581*		1841	250			
RA 07242 EXP	RA	ED		3	4	26	18S	26E	560863	3619682*		1879	102	55	47	
RA 07243 EXP	RA	ED		3	4	26	18S	26E	560863	3619682*		1879	110	50	60	
RA 07219	RA	ED			4	26	18S	26E	561064	3619883*		1982	110	50	60	
RA 02786	RA	CH	1	2	1	28	18S	26E	557148	3620987*		2095	250	60	190	
RA 11784 POD1	RA	ED	1	2	2	22	18S	26E	559480	3622632		2096	154	98	56	
RA 03599	RA	ED	2	1	1	22	18S	26E	558552	3622599*		2143	1765			
RA 06102	RA	ED				21	18S	26E	557447	3621893*		2204	202	136	66	
RA 01703 REPAR	RA	ED		1	3	34	18S	26E	558468	3618471*		2208	735			
RA 04004	RA	ED	3	2	2	21	18S	26E	557948	3622399*		2228	140			
RA 02627	RA	ED	1	2	2	35	18S	26E	561169	3619382*		2292	75	40	35	
RA 01703	RA	ED	3	1	3	34	18S	26E	558367	3618370*		2338	735			
RA 01703 CLW	RA	ED	3	1	3	34	18S	26E	558367	3618370*		2338	871			
RA 01703 REPAR 2	RA	ED	3	1	3	34	18S	26E	558367	3618370*		2338	754	70	684	
RA 01858	RA	ED	3	1	3	34	18S	26E	558367	3618370*		2338	735			
RA 02804	RA	CH	3	1	3	34	18S	26E	558367	3618370		2338	750			

RA 02804 POD2	RA	ED	3	1	3	34	18S	26E	558425	3618324		2360	200	168	32
RA 08976	RA	ED	2	3	3	21	18S	26E	556943	3621389*		2405	225	120	105
RA 13268	RA	ED	2	2	3	35	18S	26E	560556	3618499		2463	185	60	125
RA 06029	RA	ED	3	3	21	18S	26E	556844	3621290*		2466	183	140	43	
RA 06979	RA	ED	1	1	25	18S	26E	561660	3620896*		2484	100			
RA 12706 POD1	RA	ED	4	1	3	21	18S	26E	556871	3621549		2531	210	140	70
RA 00773	RA	ED	1	2	23	18S	26E	560856	3622508*		2561				
RA 00774	RA	ED	1	2	23	18S	26E	560856	3622508*		2561				
RA 00775	RA	ED	1	2	23	18S	26E	560856	3622508*		2561	900			
RA 11480 POD1	RA	ED	2	1	3	21	18S	26E	556958	3621808		2567	199	175	24
RA 01296 S3	RA	ED	1	3	3	15	18S	26E	558351	3623003*		2590	230	70	160
RA 01296 S5	RA	ED	1	3	3	15	18S	26E	558351	3623003*		2590	223	35	188
RA 01446 CLW	RA	ED	1	3	3	15	18S	26E	558351	3623003*		2590	165	42	123
RA 02800	RA	ED	1	3	3	15	18S	26E	558351	3623003*		2590	102	30	72
RA 09374	RA	ED	2	1	1	25	18S	26E	561759	3620995*		2597	101		
RA 12897 POD1	RA	ED	1	4	1	21	18S	26E	557046	3622199		2708	180	120	60
RA 01474 REPAR	RA	ED	1	1	1	33	18S	26E	556754	3619377*		2714	200		
RA 01474 SUP	RA	ED	1	1	1	33	18S	26E	556754	3619377*		2714	210		
RA 07394	RA	ED	3	3	3	34	18S	26E	558369	3617968*		2717	166	100	66
RA 01474 CLW	RA	ED	2	3	1	33	18S	26E	556956	3618975*		2743	225		
RA 09207	RA	ED	2	4	3	35	18S	26E	560574	3618175*		2748	140	50	90
RA 09208	RA	ED	2	4	3	35	18S	26E	560574	3618175*		2748	160	50	110
RA 09209	RA	ED	2	4	3	35	18S	26E	560574	3618175*		2748	105	45	60
RA 09210	RA	ED	2	4	3	35	18S	26E	560574	3618175*		2748	140	50	90
RA 01884	RA	ED	1	1	3	21	18S	26E	556741	3621792*		2751	127		
RA 09286	RA	ED	2	4	4	29	18S	26E	556550	3619778*		2760	300		

RA 04309	RA	ED	1	21	18S	26E	557041	3622297*		2773	180					
RA 13107 POD1	RA	ED	4	2	4	20	18S	26E	556595	3621516		2776	185	166	19	
RA 05241	RA	ED	3	4	16	18S	26E	557644	3622903*		2816	200	100	100		
RA 01446	RA	ED	1	3	15	18S	26E	558450	3623307*		2851	175				
RA 01474	RA	ED	4	3	1	33	18S	26E	556956	3618775*		2863	300			
RA 03900	RA	ED	1	3	1	24	18S	26E	561557	3622206*		2878	845	90	755	
RA 08812 REPAR	RA	ED	4	4	29	18S	26E	556451	3619679*		2884	350	150	200		
RA 09211	RA	ED	4	4	3	35	18S	26E	560574	3617975*		2923	100	45	55	
RA 09212	RA	ED	4	4	3	35	18S	26E	560574	3617975*		2923	120	45	75	
RA 09213	RA	ED	4	4	3	35	18S	26E	560574	3617975*		2923	120	45	75	
RA 09214	RA	ED	4	4	3	35	18S	26E	560574	3617975*		2923	100	45	55	
RA 12483 POD5	RA	ED	1	4	4	14	18S	26E	561126	3622920		3050	59	53	6	
RA 12483 POD4	RA	ED	1	4	4	14	18S	26E	561086	3622959		3056	60	48	12	
RA 12483 POD1	RA	ED	1	4	4	14	18S	26E	561070	3623006		3083	72	55	17	
RA 12483 POD2	RA	ED	1	4	4	14	18S	26E	561084	3622999		3086	62	51	11	
RA 12483 POD3	RA	ED	1	4	4	14	18S	26E	561120	3623003		3111	58	47	11	
L 04209 POD3	L	LE	2	2	2	04	19S	36E	560772	3617845		3132	162	72	90	
RA 12364 POD1	RA	ED	1	3	2	03	19S	26E	559177	3617411		3143	195	155	40	
RA 03499	RA	ED	3	2	15	18S	26E	559251	3623715*		3160	616	40	576		
RA 03499 CLW261762	O	RA	ED	3	2	15	18S	26E	559251	3623715*		3160	616	40	576	
RA 03585	RA	ED	4	1	4	14	18S	26E	560955	3623216*		3188	1849			
RA 11874 POD1	R	RA	ED	3	1	2	02	19S	26E	560707	3617638		3283	140	40	100
RA 11874 POD2	RA	ED	3	1	2	02	19S	26E	560710	3617630		3292	125	58	67	
RA 11179 POD2	RA	ED	4	4	2	16	18S	26E	558180	3623696		3302	71	60	11	
RA 03750	RA	ED	3	4	24	18S	26E	562465	3621299*		3349	110	35	75		
RA 11179 POD1	RA	ED	2	3	2	16	18S	26E	558172	3623807		3410	74	60	14	

RA 02132 B		RA	ED	1	2	1	24	18S	26E	561958	3622611*		3440	166		
RA 01343 CLW	O	RA	CH	1	2	4	14	18S	26E	561157	3623417*		3467	150	23	127
RA 07526		RA	ED		4	2	04	19S	26E	558076	3617273*		3468	140	95	45
RA 03618		RA	ED		3	2	20	18S	26E	556037	3622093*		3516	1838		
RA 07562		RA	ED	4	4	2	04	19S	26E	558175	3617172*		3534	161	125	36
RA 11682 POD2		RA	ED	4	2	2	16	18S	26E	558236	3623959		3537	98		
RA 12698 POD1		RA	ED	4	4	1	02	19S	26E	560619	3617198		3644	140	90	50
RA 04160		RA	ED	1	4	1	29	18S	26E	555542	3620580*		3657	160	100	60
RA 12572 POD1		RA	ED	4	4	1	02	19S	26E	560592	3617171		3659	159		
RA 12740 POD1		RA	ED	2	3	2	14	18S	26E	560985	3623759		3668	150	86	64
RA 02389		RA	ED	1	2	2	15	18S	26E	559551	3624221*		3682	209		
RA 06431		RA	ED	1	1	1	04	19S	26E	556765	3617775*		3695	200		
RA 03600		RA	ED	2	3	2	14	18S	26E	560956	3623821*		3708	955		
RA 03731		RA	ED	1	1	1	14	18S	26E	559953	3624223*		3744	120	30	90
RA 04283		RA	LE	1	4	3	20	18S	26E	555538	3621384*		3753	158	125	33
RA 07324		RA	ED		2	4	04	19S	26E	558080	3616870*		3851	150	105	45
RA 03421		RA	ED	1	2	2	16	18S	26E	557942	3624213*		3867	665	130	535
RA 12771 POD1		RA	ED	1	1	4	04	19S	26E	557469	3617067		3893	250	150	100
RA 10246		RA	ED	3	4	2	02	19S	26E	561189	3617174*		3923	220	50	170
RA 03409		RA	ED	1	4	2	24	18S	26E	562763	3622210*		3929	175	18	157
RA 08875		RA	ED	1	2	2	05	19S	26E	556362	3617773*		3973	220	150	70
RA 06995		RA	ED		1	4	04	19S	26E	557679	3616869*		3987	150	100	50
RA 12238 POD1		RA	ED	2	4	4	04	19S	26E	558180	3616638		4046	171	103	68
RA 00011	O	RA	ED		3	3	11	18S	26E	560054	3624529*		4064	1100		
RA 00011 A		RA	ED		3	3	11	18S	26E	560054	3624529*		4064	1100		
RA 01171		RA	ED	1	3	4	10	18S	26E	559149	3624622*		4067	864	8	856

RA 03639	RA	ED	4	4	3	11	18S	26E	560555	3624429*		4104	1710			
RA 08097	RA	ED	3	2	2	05	19S	26E	556362	3617573*		4116	210	120	90	
RA 03326	RA	ED	4	4	09	18S	26E	558041	3624518*		4128	75	40	35		
RA 11036 POD1	RA	ED	2	4	2	05	19S	26E	556567	3617370*		4131	210	110	100	
RA 11733 POD1	RA	ED	2	1	2	05	19S	26E	556153	3617740		4147	210	143	67	
RA 00010	RA	ED	1	3	3	10	18S	26E	558344	3624616*		4149	863	32	831	
RA 00010 A	RA	ED	1	3	3	10	18S	26E	558344	3624616*		4149	863	32	831	
RA 04136	RA	ED	1	1	32	18S	26E	555246	3619273*		4155	152	90	62		
RA 00012 A	RA	ED	3	3	4	11	18S	26E	560757	3624430*		4176	600			
RA 11682 POD5	RA	ED	4	2	1	16	18S	26E	558214	3624632		4194	66	51	15	
RA 11633 POD1	RA	ED	2	1	2	05	19S	26E	556059	3617756		4206	180	130	50	
RA 07260	RA	ED	1	2	05	19S	26E	556060	3617672*		4262	198	100	98		
RA 07053	RA	ED	4	2	05	19S	26E	556468	3617271*		4271	135	90	45		
RA 07142	RA	ED	4	2	05	19S	26E	556468	3617271*		4271	217	98	119		
RA 07448	RA	ED	4	2	05	19S	26E	556468	3617271*		4271	207	105	102		
RA 09276	RA	ED	4	2	05	19S	26E	556468	3617271*		4271	265	100	165		
RA 10318	RA	ED	4	2	05	19S	26E	556468	3617271*		4271	240	100	140		
RA 00012	O	RA	ED	3	4	11	18S	26E	560858	3624531*		4308	600			
RA 03596	RA	ED	3	4	11	18S	26E	560858	3624531*		4308	1736				
RA 01230 CLW	O	RA	ED	1	1	3	04	19S	26E	556774	3616966*		4331	705		
RA 03168	RA	ED	1	1	3	04	19S	26E	556774	3616966*		4331	150	70	80	
RA 03181 REPAR-3	O	RA	ED	1	1	4	17	18S	26E	555929	3623401*		4334	309	100	209
RA 03181 SUP	O	RA	ED	1	1	4	17	18S	26E	555929	3623401*		4334	290	60	230
RA 00010 CLW202760	O	RA	ED	3	1	3	10	18S	26E	558343	3624821*		4350	863	32	831
RA 00010 CLW202772	O	RA	ED	3	1	3	10	18S	26E	558343	3624821*		4350	863	32	831
RA 00010 CLW202817	O	RA	ED	3	1	3	10	18S	26E	558343	3624821*		4350	863	32	831

RA 00010 CLW202829	O	RA	ED	3	1	3	10	18S	26E	558343	3624821*		4350	863	32	831
RA 02877		RA	ED	3	1	3	10	18S	26E	558343	3624821*		4350	150		
RA 03181		RA	ED	4	2	3	17	18S	26E	555726	3623199*		4364	200		
RA 09549		RA	ED	1	1	2	10	19S	26E	559195	3616159*		4396	189	90	99
RA 12324 POD1		RA	ED	3	4	2	05	19S	26E	556339	3617207		4403	235	135	100
RA 08098		RA	ED	3	1	2	05	19S	26E	555959	3617571*		4404	215	100	115
RA 08315		RA	ED	3	1	2	05	19S	26E	555959	3617571*		4404	195	100	95
RA 01215 CLW		RA	ED	2	1	1	10	19S	26E	558590	3616159*		4438	880	50	830
RA 01215 CLWPU		RA	ED	2	1	1	10	19S	26E	558590	3616159*		4438	1000		
RA 03118		RA	ED	2	1	1	10	19S	26E	558590	3616159*		4438	195		
RA 03756		RA	ED	1	1	4	10	18S	26E	559147	3625027*		4472	148	55	93
RA 01230 #2	O	RA	ED	3	1	3	04	19S	26E	556774	3616766*		4498			
RA 01230 REPAR	O	RA	ED	3	1	3	04	19S	26E	556774	3616766*		4498	800		
RA 03181 COMB	O	RA	ED	2	3	17	18S	26E	555627	3623300*		4504	229	55	174	
RA 09709		RA	ED	2	2	17	18S	26E	556428	3624113*		4509	235	110	125	
RA 12627 POD1		RA	ED	1	2	4	05	19S	26E	556415	3617007		4509	220	100	120
RA 02013		RA	ED	2	2	2	17	18S	26E	556527	3624212*		4529	136		
RA 07165		RA	ED	3	2	05	19S	26E	556065	3617269*		4541	193	110	83	
RA 07508		RA	ED	3	2	05	19S	26E	556065	3617269*		4541	185	150	35	
RA 10133		RA	ED	3	2	05	19S	26E	556065	3617269*		4541	177	138	39	
RA 01144		RA	ED	1	1	3	10	18S	26E	558343	3625021*		4547	697		
RA 03564		RA	ED	1	1	10	19S	26E	558491	3616060*		4550	200	70	130	
RA 03634		RA	ED	3	1	4	11	18S	26E	560757	3624835*		4554	1797		
RA 12265 POD1		RA	ED	2	2	2	17	18S	26E	556509	3624232		4555	330	185	145
RA 07239		RA	ED	2	4	05	19S	26E	556472	3616866*		4587	191	100	91	
RA 07124		RA	CH	4	2	4	05	19S	26E	556571	3616765*		4612	133	94	39

RA 01462 #3	RA	ED	3	3	09	18S	26E	556830	3624520*		4618	230				
RA 06131	RA	ED	3	3	09	18S	26E	556830	3624520*		4618	225	90	135		
RA 08557	RA	ED	2	1	4	05	19S	26E	556169	3616964*		4698	232	100	132	
RA 03789	RA	ED	4	3	1	10	18S	26E	558541	3625227*		4717	114	50	64	
RA 12984 POD1	RA	ED	4	4	2	09	18S	26E	558209	3625197		4746	85	69	16	
RA 11682 POD3	RA	ED	3	4	2	09	18S	26E	557934	3625136		4752	70	54	16	
RA 03382	RA	ED	1	3	3	09	18S	26E	556729	3624619*		4755	129			
RA 04272	RA	ED	2	4	4	05	19S	26E	556576	3616561*		4778	102	58	44	
RA 07066 POD2	RA	ED	4	4	1	05	19S	26E	555761	3617166*		4827	150			
RA 06986	RA	ED	1	4	05	19S	26E	556070	3616865*		4838	195	165	30		
RA 07172	RA	ED	1	4	05	19S	26E	556070	3616865*		4838	210	95	115		
RA 04479	RA	ED	2	4	4	08	18S	26E	556525	3624616*		4862	215	120	95	
RA 10386	R	RA	ED	2	4	4	08	18S	26E	556525	3624616*		4862	210	70	140
RA 08567	RA	ED	1	4	4	05	19S	26E	556376	3616561*		4891	264	80	184	
RA 02048	RA	ED				09	18S	26E	557433	3625123*		4897				
RA 06129	RA	ED	4	4	05	19S	26E	556477	3616462*		4915	125	190	-65		
RA 05162	RA	ED	3	1	3	09	18S	26E	556727	3624823*		4932	220	120	100	
RA 04784	RA	ED				30	18S	26E	554252	3620259*		4955	205	190	15	
RA 01462	RA	ED	1	3	09	18S	26E	556828	3624924*		4970	163				
RA 07066	RA	ED	3	4	1	05	19S	26E	555561	3617166*		4972	202	100	102	
RA 03049	RA	ED	1	4	4	08	18S	26E	556325	3624616*		4974	129	60	69	

Average Depth to Water: **86 feet**
 Minimum Depth: **8 feet**
 Maximum Depth: **190 feet**

Record Count: 195

UTMNAD83 Radius Search (in meters):

Easting (X): 559199

Northing (Y): 3620555.15

Radius: 5000

***UTM location was derived from PLSS - see Help**

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.

4/18/23 3:17 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 11890	POD1	1	1	4	28	18S	26E	559161	3620210

x

Driller License: 1064	Driller Company: DELFORD W. MARTIN	
Driller Name: MARTIN, DELFORD		
Drill Start Date: 01/12/2013	Drill Finish Date: 01/20/2013	Plug Date:
Log File Date: 01/31/2013	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 10 GPM
Casing Size: 5.50	Depth Well: 175 feet	Depth Water: 85 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	144	175	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	95	175

x

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.

4/18/23 3:18 PM

POINT OF DIVERSION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2013 JAN 30 A 12 13

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) RA-11890			OSE FILE NUMBER(S) RA-11890		
	WELL OWNER NAME(S) Guillermo Camacho			PHONE (OPTIONAL) 575 365-7894		
	WELL OWNER MAILING ADDRESS PO Box 1514			CITY STATE ZIP Artesia NM 88211		
	WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LATITUDE 32	43	509 N	* DATUM REQUIRED: WGS 84		
	LONGITUDE 104	22	732 W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						

2. DRILLING & CASING INFORMATION	LICENSE NUMBER 1064	NAME OF LICENSED DRILLER Delford Martin			NAME OF WELL DRILLING COMPANY Martin Waterwell Drllg			
	DRILLING STARTED 1-12-13	DRILLING ENDED 1-20-13	DEPTH OF COMPLETED WELL (FT) 175	BORE HOLE DEPTH (FT) 175	DEPTH WATER FIRST ENCOUNTERED (FT) 144			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 85			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	95	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8
	95	175	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	175	7 7/8	3/8 gravel	54	dropped

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER Rh - 11890	POD NUMBER Dam	TRN NUMBER SI 8081
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Locator Tool Report

General Information:

Application ID:29 Date: 02-07-2013 Time: 09:35:04

WR File Number: RA
Purpose: POINT OF DIVERSION

Applicant First Name: GUILLERMO
Applicant Last Name: CAMACHO

GW Basin: ROSWELL ARTESIAN
County: EDDY

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NE 1/4 of NW 1/4 of NW 1/4 of SE 1/4 of Section 27, Township 18S, Range 26E.

Coordinate System Details:

Geographic Coordinates:

Latitude: 32 Degrees 43 Minutes 5.1 Seconds N
Longitude: 104 Degrees 22 Minutes 7.3 Seconds W

Universal Transverse Mercator Zone: 13N

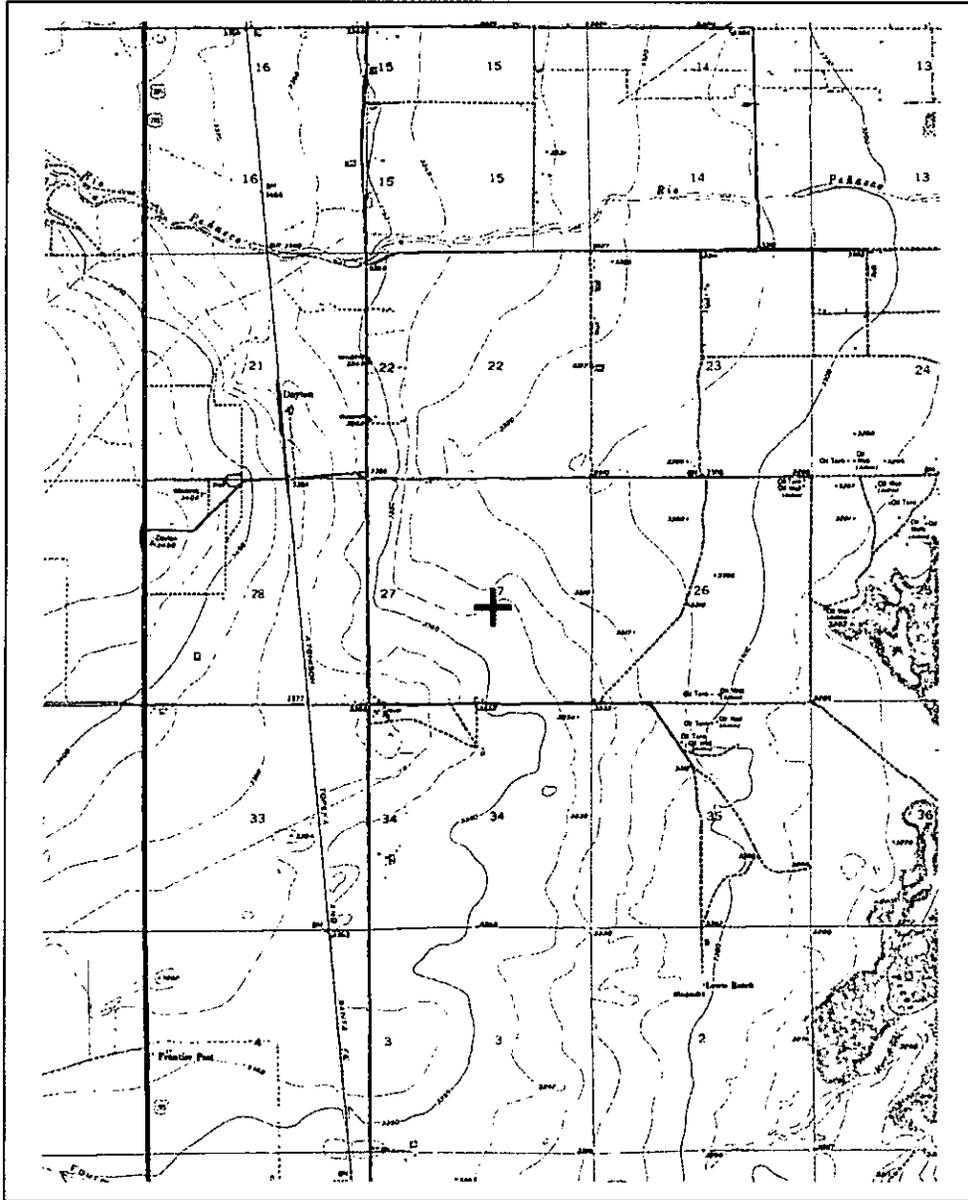
NAD 1983(92) (Meters)	N: 3,620,210	E: 559,161
NAD 1983(92) (Survey Feet)	N: 11,877,306	E: 1,834,513
NAD 1927 (Meters)	N: 3,620,008	E: 559,211
NAD 1927 (Survey Feet)	N: 11,876,642	E: 1,834,677

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 190,492	E: 161,685
NAD 1983(92) (Survey Feet)	N: 624,971	E: 530,461
NAD 1927 (Meters)	N: 190,473	E: 149,133
NAD 1927 (Survey Feet)	N: 624,909	E: 489,282

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RA

Scale: 1:54,512

Northing/Easting: UTM83(92) (Meter): N: 3,620,210

E: 559,161

Northing/Easting: SPCS83(92) (Feet): N: 624,971

E: 530,461

GW Basin: Roswell Artesian



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

1. GENERAL AND WELL LOCATION	OSB POD NUMBER (WELL NUMBER) RA-11890 Guillermo Camacho			OSB FILE NUMBER 32 A 12 18 RA-11890		
	WELL OWNER NAME(S) Guillermo Camacho			PHONE (OPTIONAL) 575-365-7894		
	WELL OWNER MAILING ADDRESS P.O. Box 1514			CITY STATE ZIP Artesia NM 88211		
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 43	SECONDS 509	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
	LONGITUDE 104	22	732			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						

2. DRILLING & CASING INFORMATION	LICENSE NUMBER 1064	NAME OF LICENSED DRILLER Delford Martin			NAME OF WELL DRILLING COMPANY Martin Waterwell Drilling			
	DRILLING STARTED 1-12-13	DRILLING ENDED 1-20-13	DEPTH OF COMPLETED WELL (FT) 175	BORE HOLE DEPTH (FT) 175	DEPTH WATER FIRST ENCOUNTERED (FT) 144			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 85			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	95	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8
	95	175	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	175	7 7/8	3/8 gravel	54	dropped

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER RA-11890	POD NUMBER Dom	TRN NUMBER 518081
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Locator Tool Report

General Information:

Application ID:29 Date: 02-07-2013 Time: 09:35:04

WR File Number: RA
Purpose: POINT OF DIVERSION

Applicant First Name: GUILLERMO
Applicant Last Name: CAMACHO

GW Basin: ROSWELL ARTESIAN
County: EDDY

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NE 1/4 of NW 1/4 of NW 1/4 of SE 1/4 of Section 27, Township 18S, Range 26E.

Coordinate System Details:

Geographic Coordinates:

Latitude: 32 Degrees 43 Minutes 5.1 Seconds N
Longitude: 104 Degrees 22 Minutes 7.3 Seconds W

Universal Transverse Mercator Zone: 13N

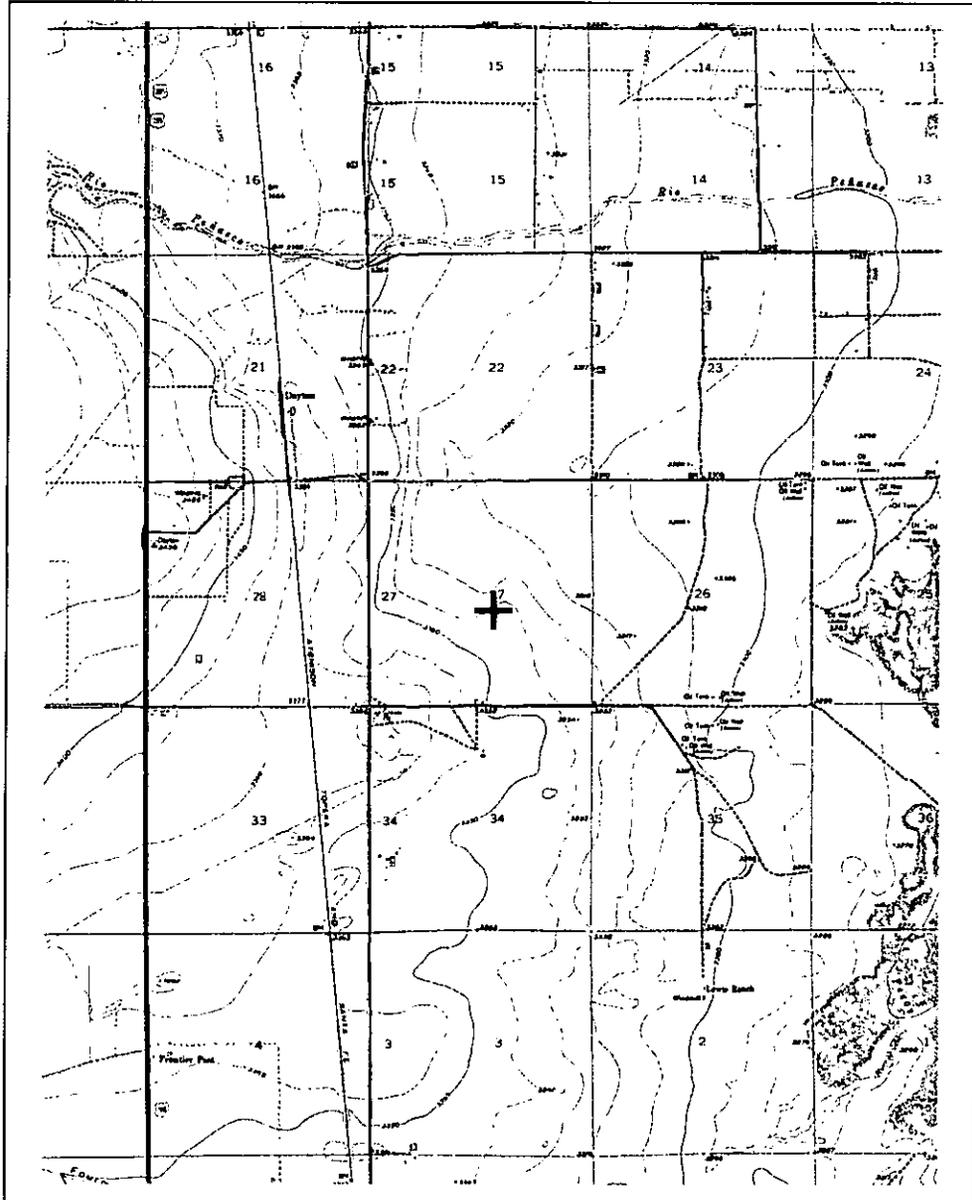
NAD 1983(92) (Meters)	N: 3,620,210	E: 559,161
NAD 1983(92) (Survey Feet)	N: 11,877,306	E: 1,834,513
NAD 1927 (Meters)	N: 3,620,008	E: 559,211
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State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 190,492	E: 161,685
NAD 1983(92) (Survey Feet)	N: 624,971	E: 530,461
NAD 1927 (Meters)	N: 190,473	E: 149,133
NAD 1927 (Survey Feet)	N: 624,909	E: 489,282

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RA

Scale: 1:54,512

Northing/Easting: UTM83(92) (Meter): N: 3,620,210

E: 559,161

Northing/Easting: SPCS83(92) (Feet): N: 624,971

E: 530,461

GW Basin: Roswell Artesian



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2013 JAN 30 A 12 13

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) RA-11890				OSE FILE NUMBER(S) RA-11890	
	WELL OWNER NAME(S) Guillermo Camacho				PHONE (OPTIONAL) 575 365-7894	
	WELL OWNER MAILING ADDRESS PO Box 1514				CITY STATE ZIP Artesia NM 88211	
	WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84
		LATITUDE	32	43	509	N
		LONGITUDE	104	22	732	W
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						

2. DRILLING & CASING INFORMATION	LICENSE NUMBER 1064		NAME OF LICENSED DRILLER Delford Martin			NAME OF WELL DRILLING COMPANY Martin Waterwell Drllg		
	DRILLING STARTED 1-12-13	DRILLING ENDED 1-20-13	DEPTH OF COMPLETED WELL (FT) 175	BORE HOLE DEPTH (FT) 175	DEPTH WATER FIRST ENCOUNTERED (FT) 144			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 85		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
0	95	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8	
95	175	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8	

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	175	7 7/8	3/8 gravel	54	dropped

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER Rh - 11890	POD NUMBER Dam	TRN NUMBER SI 8081
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Locator Tool Report

General Information:

Application ID:29 Date: 02-07-2013 Time: 09:35:04

WR File Number: RA
Purpose: POINT OF DIVERSION

Applicant First Name: GUILLERMO
Applicant Last Name: CAMACHO

GW Basin: ROSWELL ARTESIAN
County: EDDY

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NE 1/4 of NW 1/4 of NW 1/4 of SE 1/4 of Section 27, Township 18S, Range 26E.

Coordinate System Details:

Geographic Coordinates:

Latitude: 32 Degrees 43 Minutes 5.1 Seconds N
Longitude: 104 Degrees 22 Minutes 7.3 Seconds W

Universal Transverse Mercator Zone: 13N

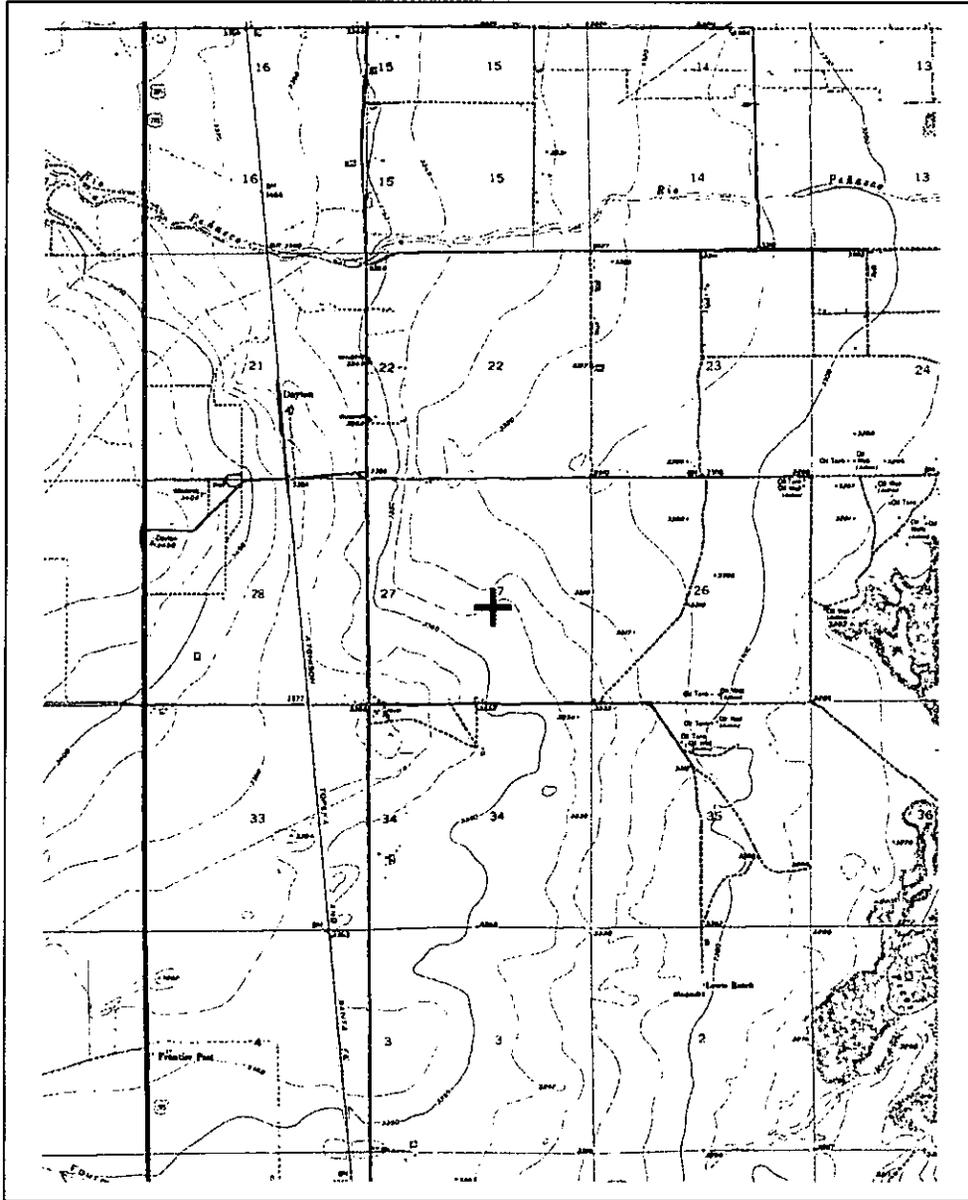
NAD 1983(92) (Meters)	N: 3,620,210	E: 559,161
NAD 1983(92) (Survey Feet)	N: 11,877,306	E: 1,834,513
NAD 1927 (Meters)	N: 3,620,008	E: 559,211
NAD 1927 (Survey Feet)	N: 11,876,642	E: 1,834,677

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 190,492	E: 161,685
NAD 1983(92) (Survey Feet)	N: 624,971	E: 530,461
NAD 1927 (Meters)	N: 190,473	E: 149,133
NAD 1927 (Survey Feet)	N: 624,909	E: 489,282

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RA

Scale: 1:54,512

Northing/Easting: UTM83(92) (Meter): N: 3,620,210

E: 559,161

Northing/Easting: SPCS83(92) (Feet): N: 624,971

E: 530,461

GW Basin: Roswell Artesian



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

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	WELL OWNER MAILING ADDRESS P.O. Box 1514			CITY STATE ZIP Artesia NM 88211		
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 43	SECONDS 509	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE 104	22	732	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						

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	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 85			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	95	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8
	95	175	7 7/8	5 1/2 PVC	Bell	5	1/4	1/8

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	175	7 7/8	3/8 gravel	54	dropped

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER RA-11890	POD NUMBER Dom	TRN NUMBER 518081
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Locator Tool Report

General Information:

Application ID:29 Date: 02-07-2013 Time: 09:35:04

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Applicant First Name: GUILLERMO
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County: EDDY

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Universal Transverse Mercator Zone: 13N

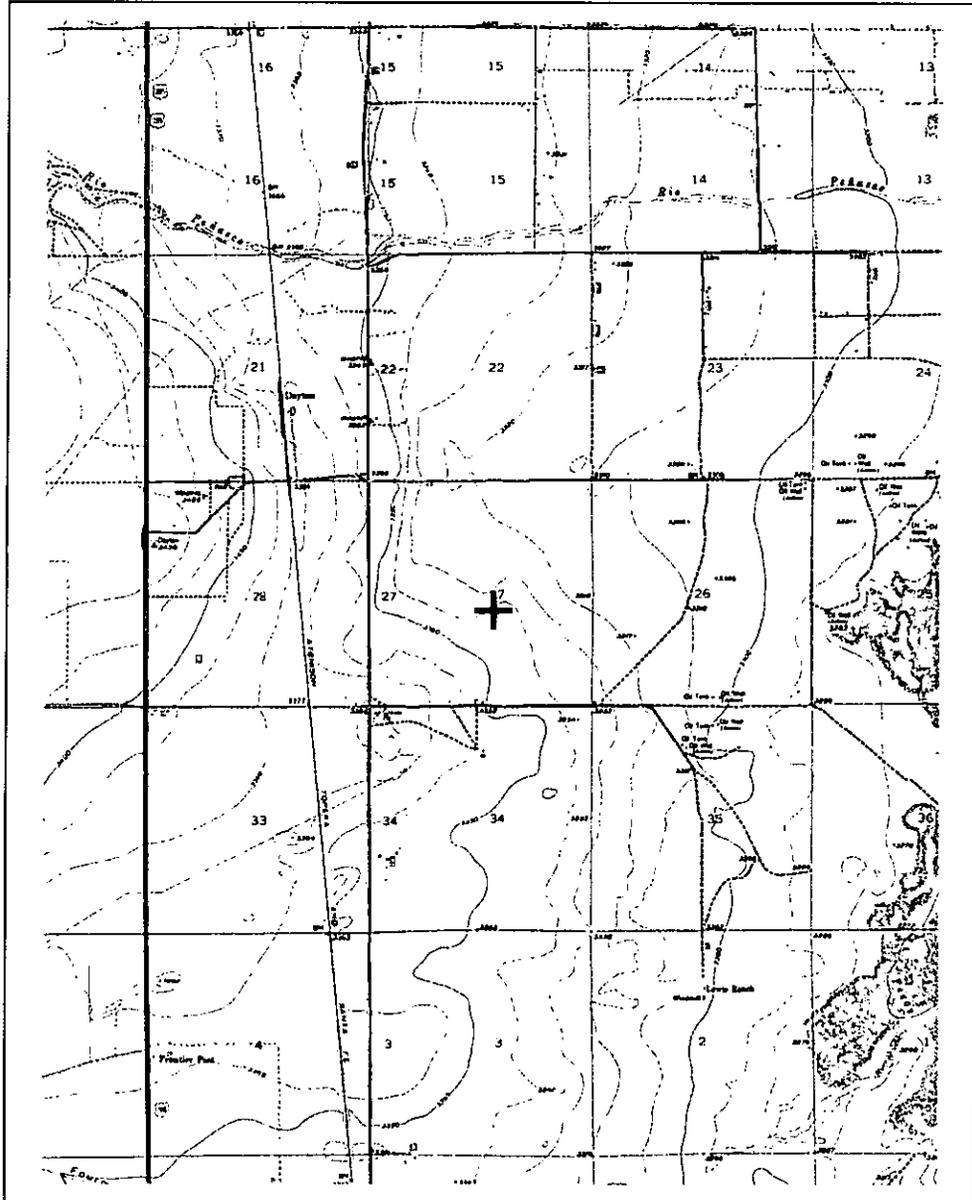
NAD 1983(92) (Meters)	N: 3,620,210	E: 559,161
NAD 1983(92) (Survey Feet)	N: 11,877,306	E: 1,834,513
NAD 1927 (Meters)	N: 3,620,008	E: 559,211
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NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RA

Scale: 1:54,512

Northing/Easting: UTM83(92) (Meter): N: 3,620,210

E: 559,161

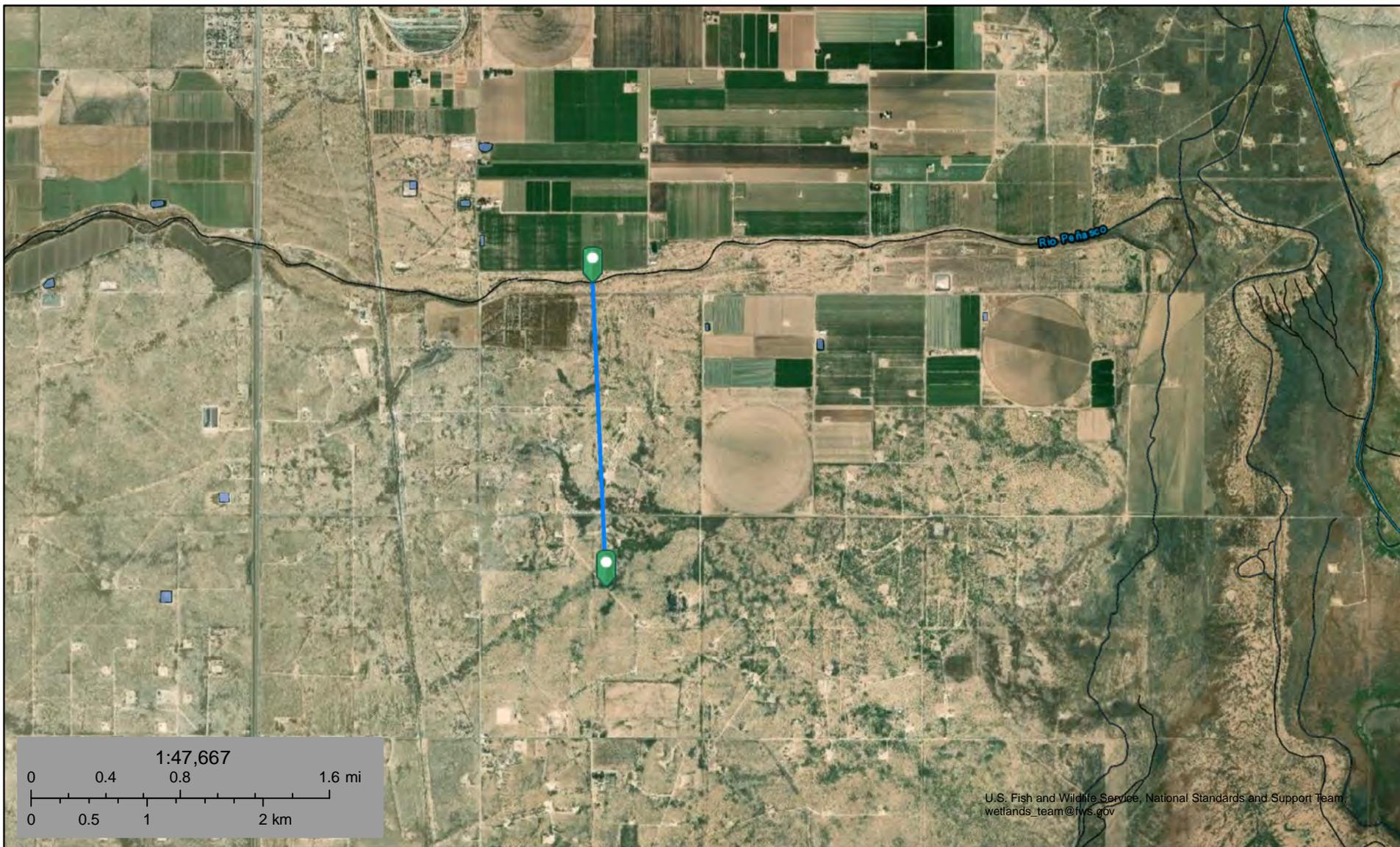
Northing/Easting: SPCS83(92) (Feet): N: 624,971

E: 530,461

GW Basin: Roswell Artesian



Dayton Recycle Watercourse 7,205 ft



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

April 18, 2023

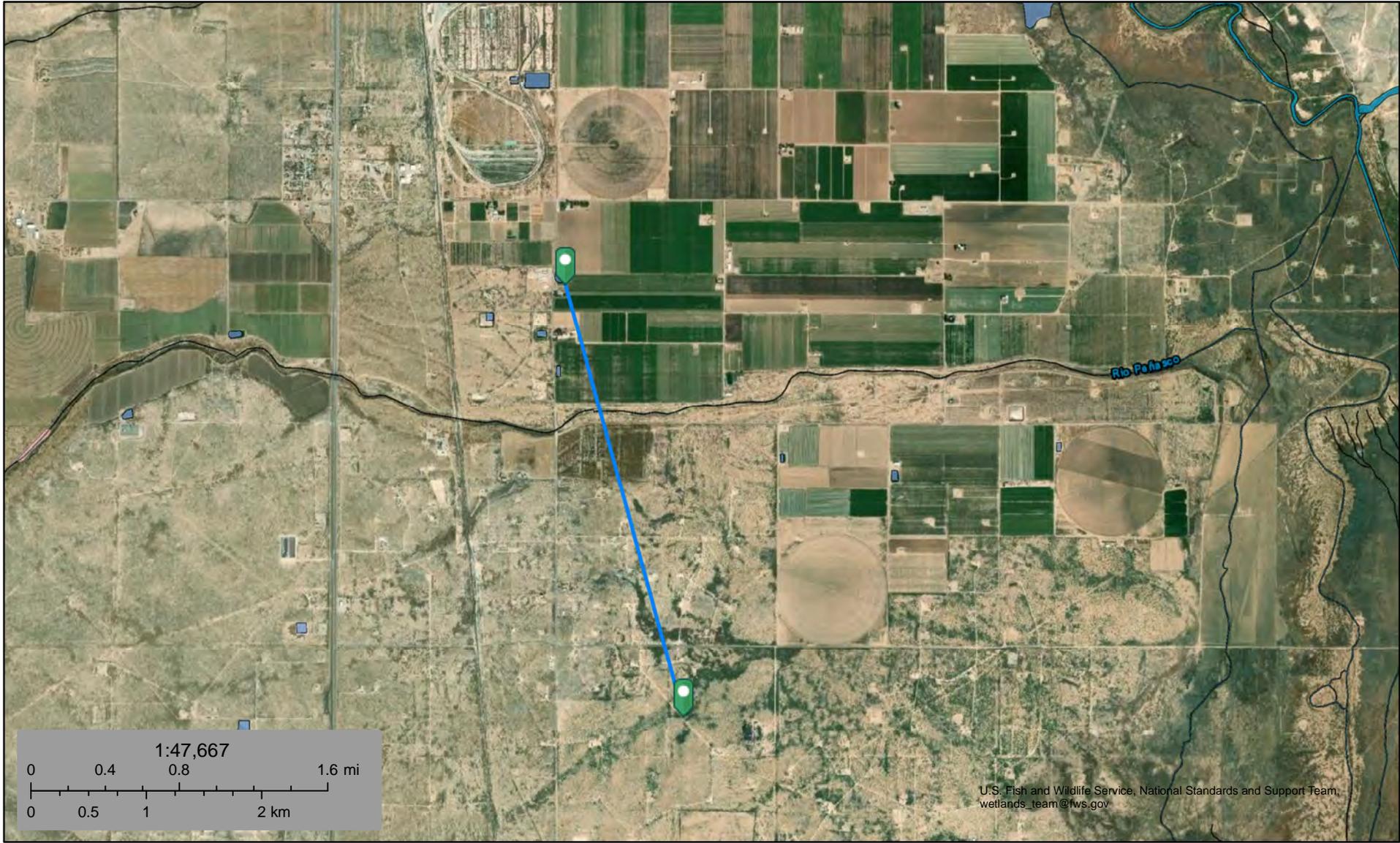
Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Dayton Recycle Lake 10,652 ft



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

April 18, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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Dayton Recycle

1,888 ft to the nearest residence

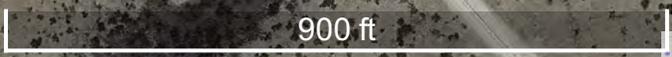
Legend

-  1,888 feet
-  Residence



Residence

Dayton Recycle Release



Dayton Recycle

1138 ft to well

Legend

 1,138 feet

Dayton Recycle Release

RA 11890 POD1



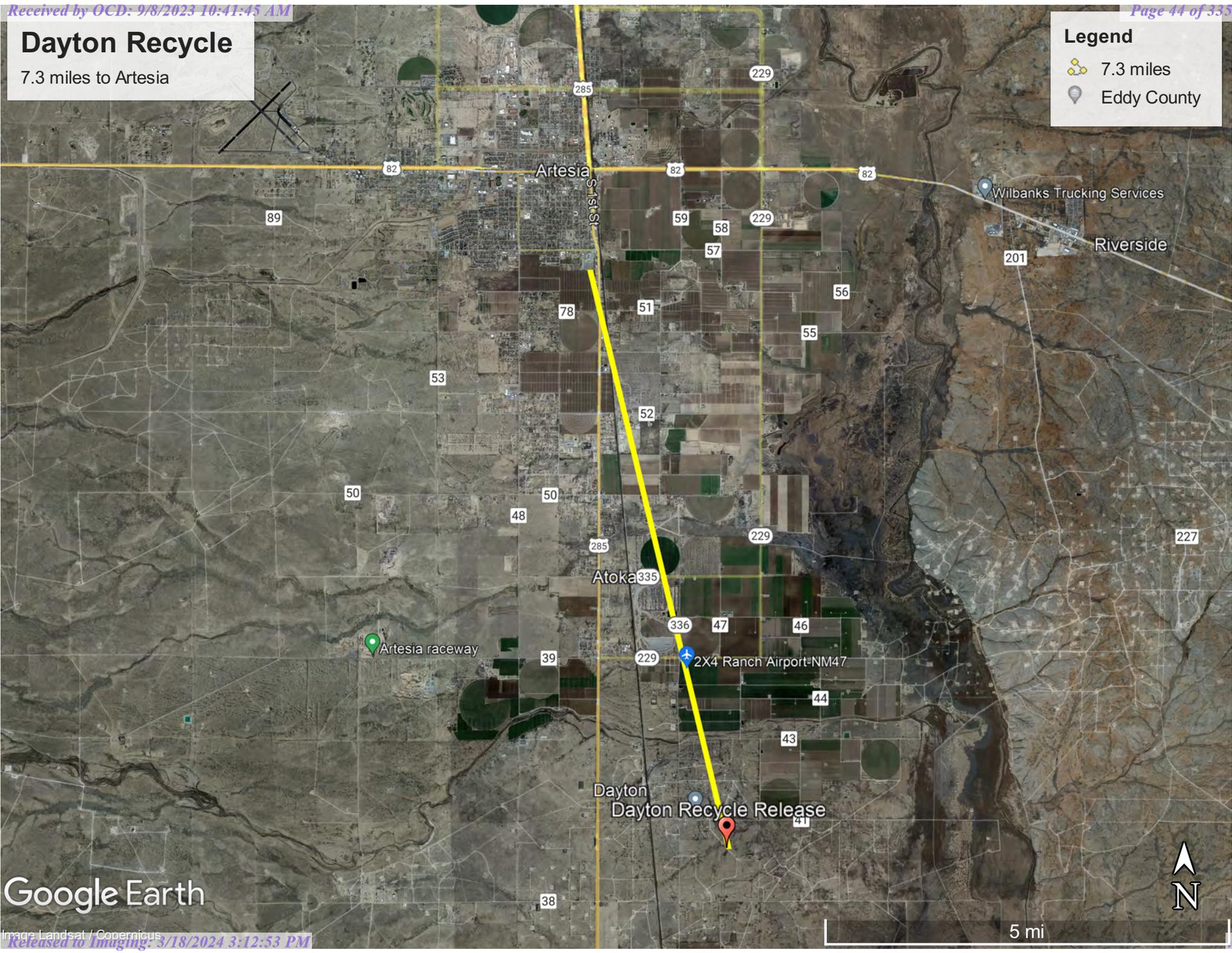
1000 ft

Dayton Recycle

7.3 miles to Artesia

Legend

-  7.3 miles
-  Eddy County

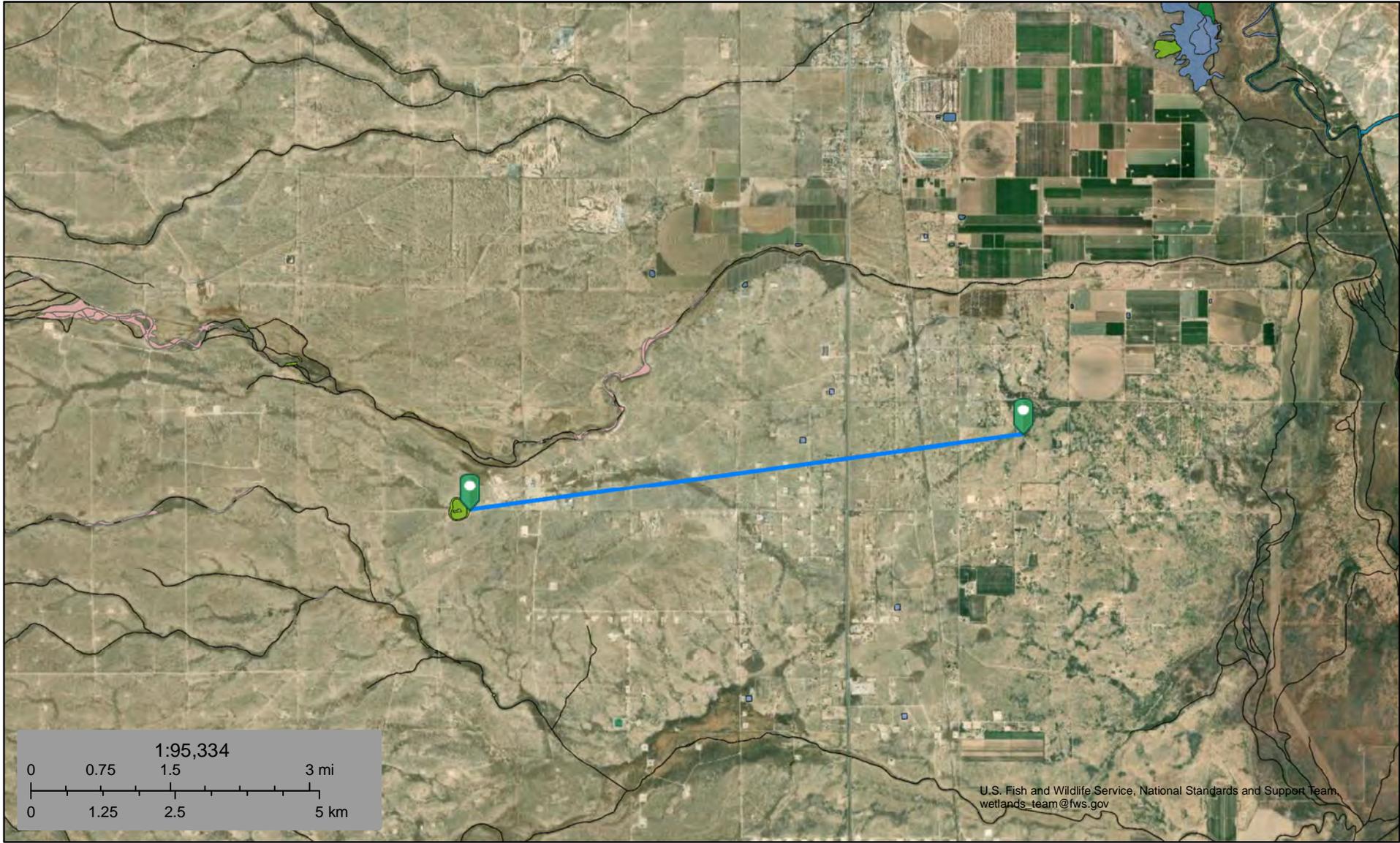


Google Earth

5 mi



Dayton Recycle Wetland 26,752 ft



April 18, 2023

Wetlands

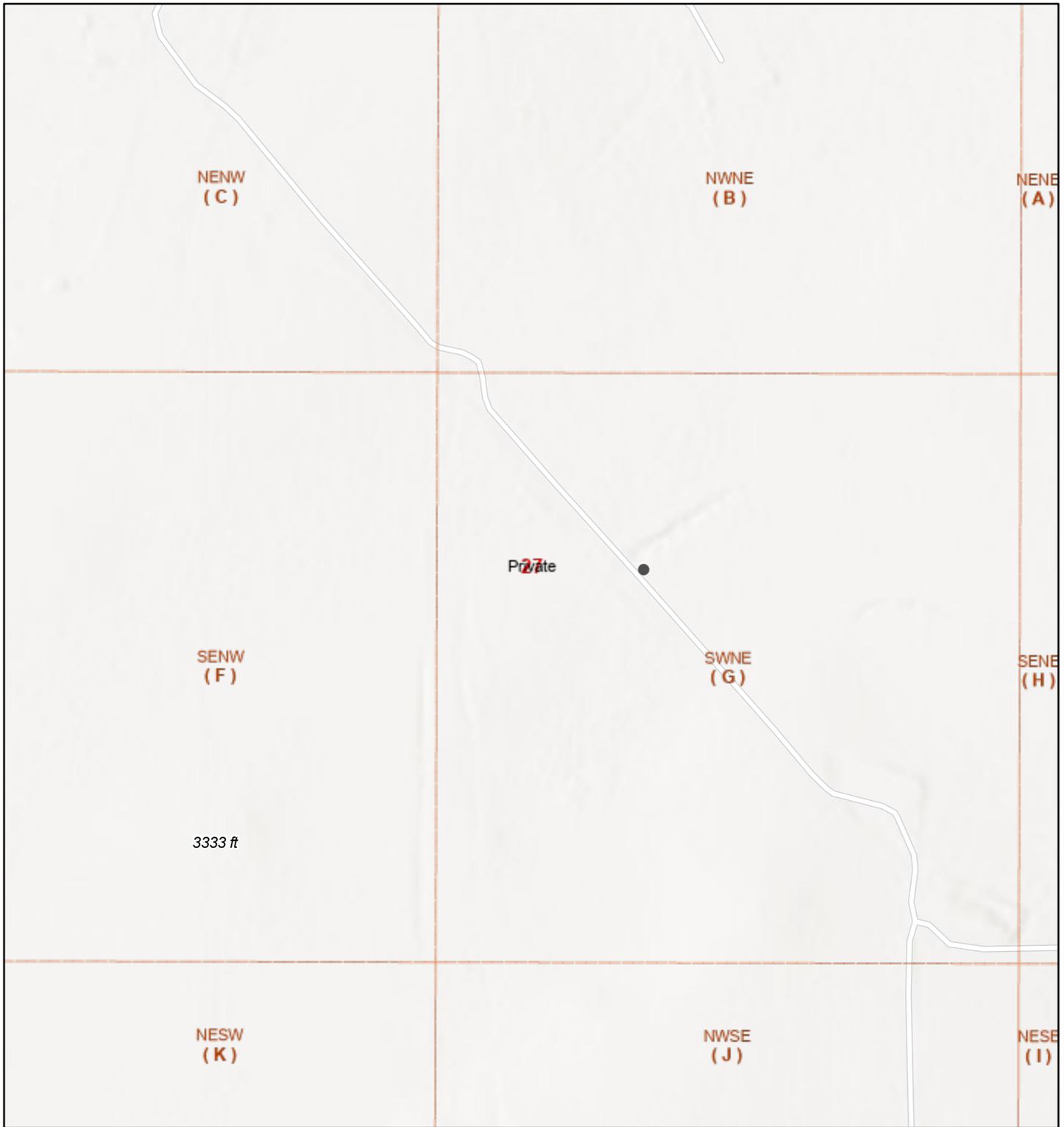
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
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- Riverine

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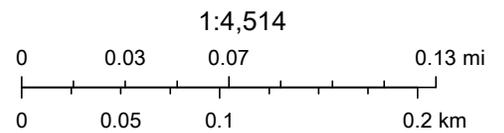
Active Mines in New Mexico



6/9/2023, 4:21:41 PM

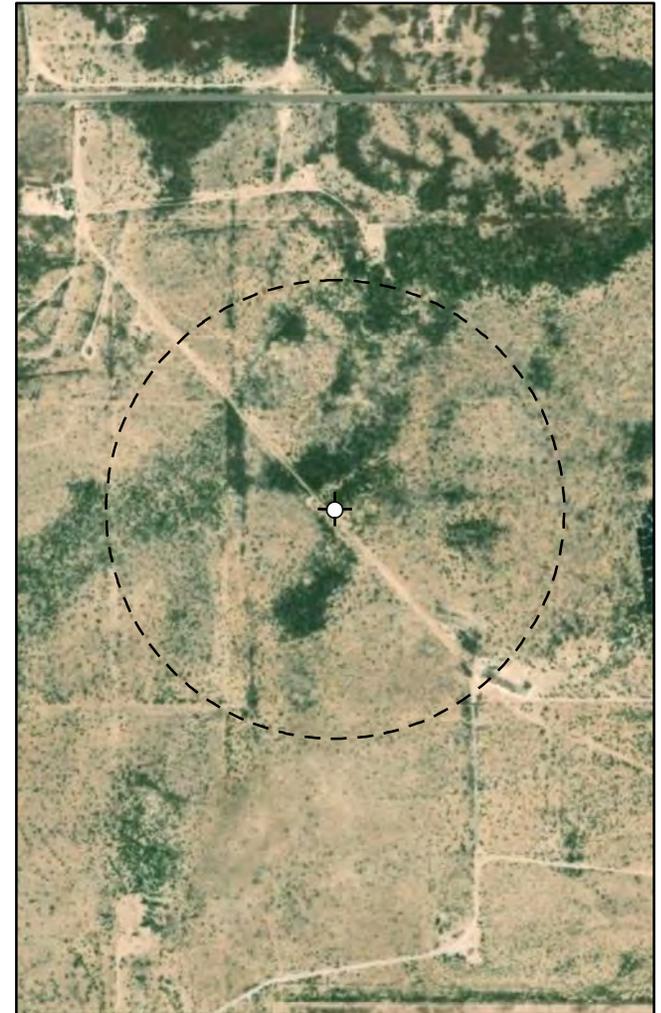
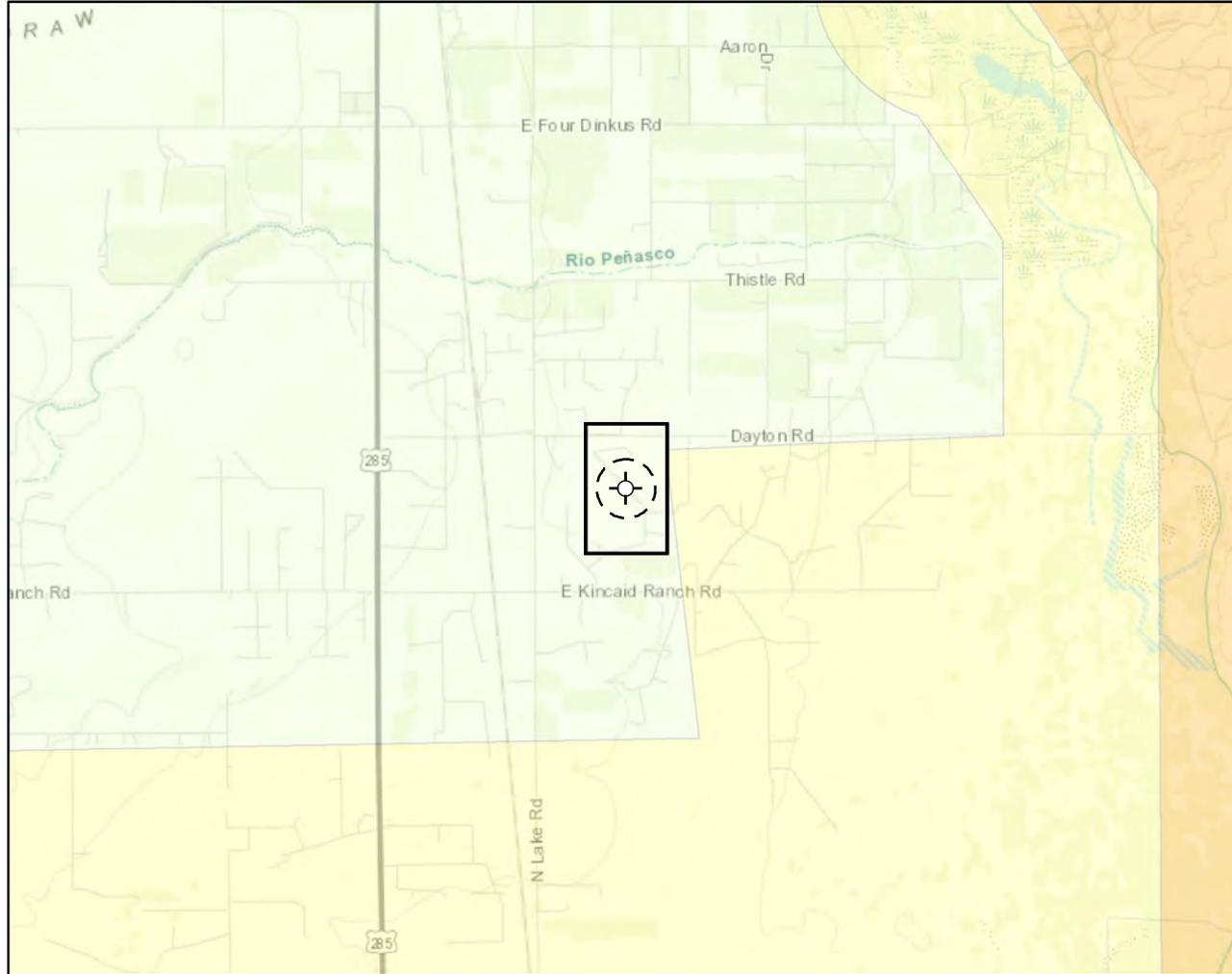
Land Ownership

- P
- PLSS Second Division
- PLSS First Division



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EMNRD MMD GIS Coordinator



Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1,000 sq. ft)

Overview Map

0 0.25 0.5 1 mi



Detail Map

0 150 300 600 ft.



Map Center:
Lat/Long: 32.721190, -104.368270

NAD 1983 UTM Zone 13N
Date: Apr 27/23



**Karst Potential Schematic
Dayton Recycle**

FIGURE:

X



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Inset Map, Georeferenced image from Esri, 2020; Overview Map: ESRI World Topographic. Karst potential data sourced from Roswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management. (2018). Karst Potential.

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette



104°22'25"W 32°43'31"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation 17.5
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/10/2023 at 9:38 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico



June 9, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Rc—Reagan loam, 0 to 1 percent slopes.....	14
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

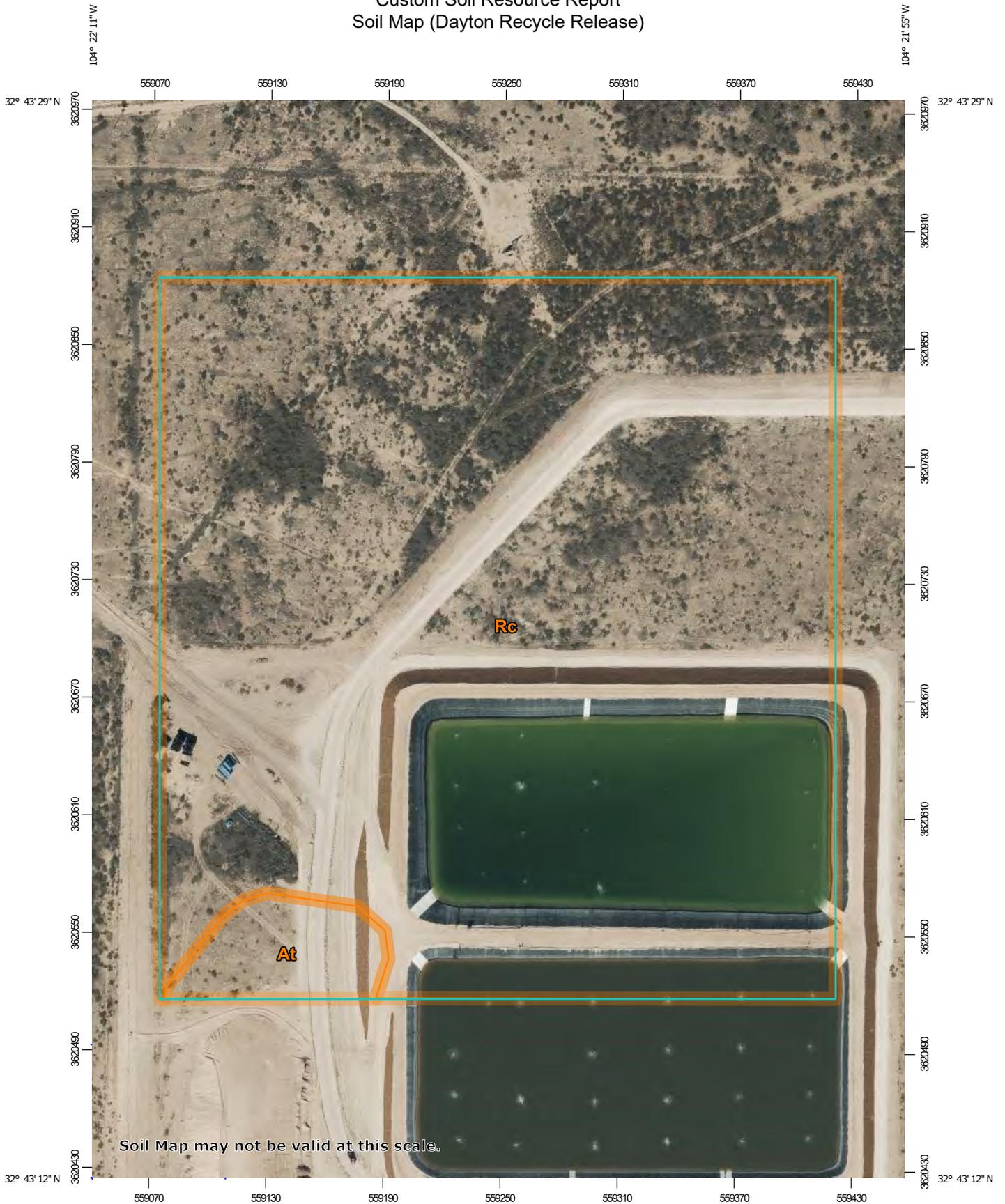
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map (Dayton Recycle Release)



Soil Map may not be valid at this scale.

Map Scale: 1:2,680 if printed on A portrait (8.5" x 11") sheet.

0 35 70 140 210 Meters

0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
 Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Map Unit Legend (Dayton Recycle Release)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
At	Atoka loam, 1 to 3 percent slopes	1.2	3.7%
Rc	Reagan loam, 0 to 1 percent slopes	30.5	96.3%
Totals for Area of Interest		31.6	100.0%

Map Unit Descriptions (Dayton Recycle Release)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

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delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Eddy Area, New Mexico**At—Atoka loam, 1 to 3 percent slopes****Map Unit Setting***National map unit symbol: 1w41**Elevation: 1,100 to 4,300 feet**Mean annual precipitation: 7 to 14 inches**Mean annual air temperature: 60 to 70 degrees F**Frost-free period: 200 to 240 days**Farmland classification: Farmland of statewide importance***Map Unit Composition***Atoka and similar soils: 98 percent**Minor components: 2 percent**Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Atoka****Setting***Landform: Plains**Landform position (three-dimensional): Riser**Down-slope shape: Convex**Across-slope shape: Linear**Parent material: Mixed alluvium***Typical profile***H1 - 0 to 8 inches: loam**H2 - 8 to 33 inches: loam**H3 - 33 to 37 inches: indurated***Properties and qualities***Slope: 1 to 3 percent**Depth to restrictive feature: 20 to 40 inches to petrocalcic**Drainage class: Well drained**Runoff class: High**Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)**Depth to water table: More than 80 inches**Frequency of flooding: None**Frequency of ponding: None**Calcium carbonate, maximum content: 15 percent**Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)**Sodium adsorption ratio, maximum: 1.0**Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)***Interpretive groups***Land capability classification (irrigated): 3e**Land capability classification (nonirrigated): 7e**Hydrologic Soil Group: C**Ecological site: R070BC007NM - Loamy**Hydric soil rating: No*

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Minor Components**Atoka**

Percent of map unit: 1 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Upton

Percent of map unit: 1 percent
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

Rc—Reagan loam, 0 to 1 percent slopes**Map Unit Setting**

National map unit symbol: 1w5l
Elevation: 1,100 to 5,300 feet
Mean annual precipitation: 7 to 15 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan**Setting**

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 82 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
 (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

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Calcium carbonate, maximum content: 40 percent

Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: B

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

Minor Components

Reagan

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

Upton

Percent of map unit: 1 percent

Ecological site: R070BC025NM - Shallow

Hydric soil rating: No

Reeves

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

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A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Information for All Uses

Ecological Sites

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

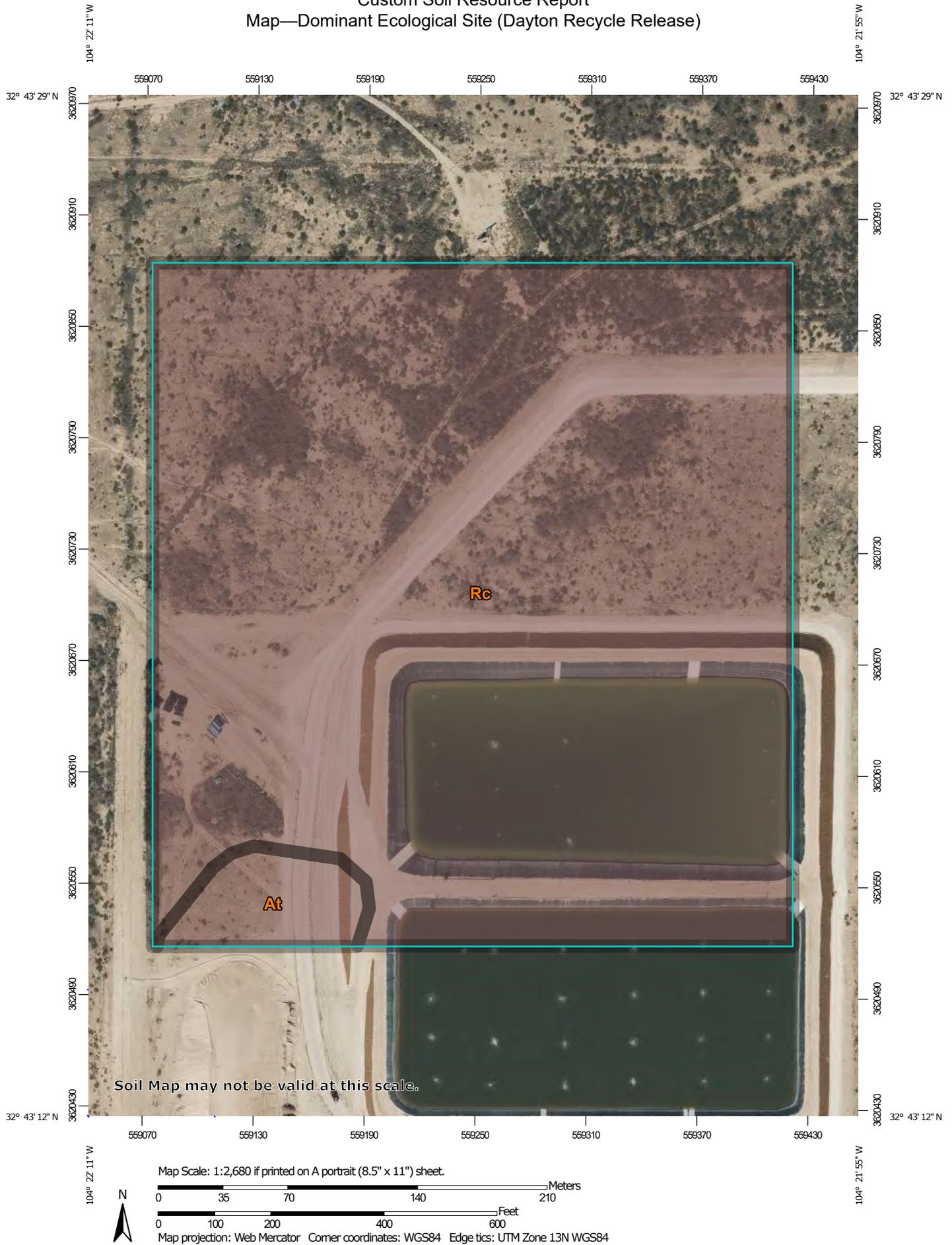
All Ecological Sites — (Dayton Recycle Release)

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

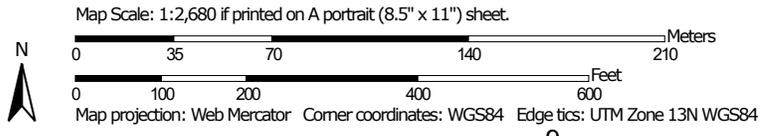
An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

Custom Soil Resource Report Map—Dominant Ecological Site (Dayton Recycle Release)



Soil Map may not be valid at this scale.



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 R070BC007NM
 Not rated or not available

Soil Rating Lines

 R070BC007NM
 Not rated or not available

Soil Rating Points

 R070BC007NM
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
 Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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**Table—Ecological Sites by Map Unit Component
(Dayton Recycle Release)**

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
At	Atoka loam, 1 to 3 percent slopes	Atoka (98%)	R070BC007NM — Loamy	1.2	3.7%
		Atoka (1%)	R070BC007NM — Loamy		
		Upton (1%)	R070BC025NM — Shallow		
Rc	Reagan loam, 0 to 1 percent slopes	Reagan (97%)	R070BC007NM — Loamy	30.5	96.3%
		Reagan (1%)	R070BC007NM — Loamy		
		Reeves (1%)	R070BC007NM — Loamy		
		Upton (1%)	R070BC025NM — Shallow		
Totals for Area of Interest				31.6	100.0%

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- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
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Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

ATTACHMENT 3

Client Name: Silverback Exploration

Site Name: Dayton Recycle Release

NMOCD Tracking #: nAPP2307356662

Project #: 23E-02248

Lab Reports: 2306008, 2305B56, 2305B58, 2305347, 2305404, 2305A89, 2306560 and 2307085

Table 4. Initial Characterization Sample Laboratory Results - Depth to Groundwater 50-100 feet bgs										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration (mg/kg)
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
BH23-01	0	April 30, 2023	-	-	-	-	-	-	-	ND
	2	May 1, 2023	ND	ND	ND	ND	ND	ND	ND	420
	4	May 1, 2023	-	-	-	-	-	-	-	210
BH23-02	0	April 30, 2023	-	-	-	-	-	-	-	5200
	2	May 1, 2023	-	-	-	-	-	-	-	240
	4	May 1, 2023	-	-	-	-	-	-	-	220
BH23-03	0	May 1, 2023	-	-	-	-	-	-	-	ND
	2	May 1, 2023	-	-	-	-	-	-	-	ND
	4	May 1, 2023	-	-	-	-	-	-	-	280
BH23-04	0	May 1, 2023	-	-	-	-	-	-	-	6000
	2	May 1, 2023	-	-	-	-	-	-	-	240
	4	May 1, 2023	-	-	-	-	-	-	-	190
BH23-05	0	May 2, 2023	-	-	-	-	-	-	-	2200
	2	May 2, 2023	ND	ND	ND	ND	ND	ND	ND	410
	4	May 2, 2023	-	-	-	-	-	-	-	190
BH23-06	0	May 2, 2023	-	-	-	-	-	-	-	ND
	2	May 2, 2023	-	-	-	-	-	-	-	ND
	4	May 2, 2023	-	-	-	-	-	-	-	ND
BH23-07	0	May 2, 2023	-	-	-	-	-	-	-	5900
	2	May 2, 2023	-	-	-	-	-	-	-	ND
	4	May 2, 2023	-	-	-	-	-	-	-	ND
BH23-08	0	May 2, 2023	-	-	-	-	-	-	-	7500
	2	May 2, 2023	-	-	-	-	-	-	-	88
	4	May 2, 2023	-	-	-	-	-	-	-	300
BH23-09	0	May 2, 2023	-	-	-	-	-	-	-	2100
	2	May 2, 2023	-	-	-	-	-	-	-	ND
	4	May 2, 2023	-	-	-	-	-	-	-	ND
BH23-10	0	May 3, 2023	-	-	-	-	-	-	-	2800
	2	May 3, 2023	ND	ND	ND	ND	ND	ND	ND	97
	4	May 3, 2023	-	-	-	-	-	-	-	ND
BH23-11	0	May 3, 2023	-	-	-	-	-	-	-	4400
	2	May 3, 2023	-	-	-	-	-	-	-	ND
	4	May 3, 2023	-	-	-	-	-	-	-	ND

BH23-12	0	May 3, 2023	-	-	-	-	-	-	-	2300
	2	May 3, 2023	-	-	-	-	-	-	-	ND
	4	May 3, 2023	-	-	-	-	-	-	-	ND
BH23-13	0	May 3, 2023	-	-	-	-	-	-	-	2600
	2	May 3, 2023	-	-	-	-	-	-	-	220
	4	May 3, 2023	-	-	-	-	-	-	-	270
BH23-14	0	May 3, 2023	-	-	-	-	-	-	-	1400
	2	May 3, 2023	-	-	-	-	-	-	-	ND
	4	May 3, 2023	-	-	-	-	-	-	-	65
BH23-15	0	May 3, 2023	-	-	-	-	-	-	-	590
	2	May 3, 2023	-	-	-	-	-	-	-	330
	4	May 3, 2023	-	-	-	-	-	-	-	210
BH23-16	0	May 3, 2023	-	-	-	-	-	-	-	ND
	2	May 3, 2023	ND	860						
	4	May 3, 2023	-	-	-	-	-	-	-	380
BH23-17	0	May 5, 2023	-	-	-	-	-	-	-	71
	2	May 5, 2023	-	-	-	-	-	-	-	ND
	4	May 5, 2023	-	-	-	-	-	-	-	ND
BH23-18	0	May 5, 2023	-	-	-	-	-	-	-	4800
	2	May 5, 2023	-	-	-	-	-	-	-	ND
	4	May 5, 2023	-	-	-	-	-	-	-	ND
BH23-19	0	May 5, 2023	-	-	-	-	-	-	-	ND
	2	May 5, 2023	-	-	-	-	-	-	-	230
	4	May 5, 2023	-	-	-	-	-	-	-	180
BH23-20	0	May 5, 2023	-	-	-	-	-	-	-	ND
	2	May 5, 2023	ND							
	4	May 5, 2023	-	-	-	-	-	-	-	ND
BH23-21	0	May 6, 2023	-	-	-	-	-	-	-	4900
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	ND
BH23-22	0	May 6, 2023	-	-	-	-	-	-	-	9500
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	ND
BH23-23	0	May 6, 2023	-	-	-	-	-	-	-	4600
	2	May 6, 2023	-	-	-	-	-	-	-	870
	4	May 6, 2023	-	-	-	-	-	-	-	740
BH23-24	0	May 6, 2023	-	-	-	-	-	-	-	700
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	130
BH23-25	0	May 6, 2023	-	-	-	-	-	-	-	5600
	2	May 6, 2023	ND							
	4	May 6, 2023	-	-	-	-	-	-	-	ND
BH23-26	0	May 6, 2023	-	-	-	-	-	-	-	500
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	ND
BH23-27	0	May 6, 2023	-	-	-	-	-	-	-	2600
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	ND
BH23-28	0	May 6, 2023	-	-	-	-	-	-	-	410
	2	May 6, 2023	-	-	-	-	-	-	-	ND
	4	May 6, 2023	-	-	-	-	-	-	-	600
BH23-29	0	May 18, 2023	-	-	-	-	-	-	-	2300
	2	May 18, 2023	-	-	-	-	-	-	-	72
	4	May 18, 2023	-	-	-	-	-	-	-	190
BH23-30	0	May 18, 2023	-	-	-	-	-	-	-	2900
	2	May 18, 2023	-	-	-	-	-	-	-	340



	4	May 18, 2023	ND	300						
BH23-31	0	May 18, 2023	-	-	-	-	-	-	-	13000
	2	May 18, 2023	-	-	-	-	-	-	-	ND
	4	May 18, 2023	-	-	-	-	-	-	-	350
BH23-32	0	May 18, 2023	-	-	-	-	-	-	-	150
	2	May 18, 2023	-	-	-	-	-	-	-	370
	4	May 18, 2023	ND	1100						
BH23-33	0	May 18, 2023	-	-	-	-	-	-	-	440
	2	May 18, 2023	-	-	-	-	-	-	-	ND
BH23-34	0	May 19, 2023	-	-	-	-	-	-	-	310
	2	May 19, 2023	-	-	-	-	-	-	-	ND
	4	May 19, 2023	ND	61						
BH23-35	0	May 19, 2023	-	-	-	-	-	-	-	450
	2	May 19, 2023	-	-	-	-	-	-	-	78
	4	May 19, 2023	-	-	-	-	-	-	-	71
BH23-36	0	May 19, 2023	-	-	-	-	-	-	-	730
	2	May 19, 2023	-	-	-	-	-	-	-	ND
	4	May 19, 2023	ND							
BH23-37	0	May 19, 2023	-	-	-	-	-	-	-	91
	2	May 19, 2023	-	-	-	-	-	-	-	78
	4	May 19, 2023	-	-	-	-	-	-	-	280
BH23-38	0	May 19, 2023	-	-	-	-	-	-	-	3,600
	2	May 19, 2023	-	-	-	-	-	-	-	140
	4	May 19, 2023	ND	430						
BH23-39	0	May 19, 2023	-	-	-	-	-	-	-	320
	2	May 19, 2023	-	-	-	-	-	-	-	ND
	4	May 19, 2023	-	-	-	-	-	-	-	ND
BH23-40	0	May 20, 2023	-	-	-	-	-	-	-	110
	2	May 20, 2023	-	-	-	-	-	-	-	260
	4	May 20, 2023	ND	690						
BH23-41	0	May 20, 2023	-	-	-	-	-	-	-	76
	2	May 20, 2023	-	-	-	-	-	-	-	66
	4	May 20, 2023	-	-	-	-	-	-	-	120
BH23-42	0	May 20, 2023	-	-	-	-	-	-	-	190
	2	May 20, 2023	-	-	-	-	-	-	-	89
	4	May 20, 2023	ND	190						
BH23-43	0	May 20, 2023	-	-	-	-	-	-	-	1,000
	2	May 20, 2023	-	-	-	-	-	-	-	980
	4	May 20, 2023	-	-	-	-	-	-	-	970
BH23-44	0	May 20, 2023	-	-	-	-	-	-	-	86
	2	May 20, 2023	-	-	-	-	-	-	-	660
	4	May 20, 2023	ND	1,500						
BH23-45	0	May 20, 2023	-	-	-	-	-	-	-	ND
	2	May 20, 2023	-	-	-	-	-	-	-	ND
	4	May 20, 2023	-	-	-	-	-	-	-	ND
BH23-46	0	May 20, 2023	-	-	-	-	-	-	-	130
	2	May 20, 2023	-	-	-	-	-	-	-	ND
	4	May 20, 2023	ND							
BH23-47	0	May 20, 2023	-	-	-	-	-	-	-	89
	2	May 20, 2023	-	-	-	-	-	-	-	ND
	4	May 20, 2023	-	-	-	-	-	-	-	480
BH23-48	0	May 20, 2023	-	-	-	-	-	-	-	ND
	2	May 20, 2023	-	-	-	-	-	-	-	ND
	4	May 20, 2023	ND							
BH23-49	0	May 20, 2023	-	-	-	-	-	-	-	360
	2	May 20, 2023	-	-	-	-	-	-	-	ND
	4	May 20, 2023	-	-	-	-	-	-	-	ND



BH23-50	0	May 27, 2023	-	-	-	-	-	-	-	11,000
BH23-51	0	May 27, 2023	-	-	-	-	-	-	-	12,000
BH23-52	0	May 27, 2023	-	-	-	-	-	-	-	17,000
BH23-53	0	May 27, 2023	-	-	-	-	-	-	-	34,000
BH23-54	0	May 27, 2023	—	—	-	-	-	-	-	15,000
BH23-55	0	June 3, 2023	—	—	—	—	—	—	—	480
	2	June 3, 2023	—	—	—	—	—	—	—	ND
BH23-56	0	June 3, 2023	—	—	—	—	—	—	—	11,000
	2	June 3, 2023	—	—	—	—	—	—	—	110
BH23-57	0	June 3, 2023	—	—	—	—	—	—	—	1,000
	2	June 3, 2023	—	—	—	—	—	—	—	130
BH23-58	0	June 3, 2023	—	—	—	—	—	—	—	ND
	2	June 3, 2023	—	—	—	—	—	—	—	1,100
BH23-59	0	June 3, 2023	—	—	—	—	—	—	—	76
	2	June 3, 2023	—	—	—	—	—	—	—	98
BH23-60	0	June 3, 2023	—	—	—	—	—	—	—	100
BH23-61	0	June 3, 2023	—	—	—	—	—	—	—	230
BH23-62	0	June 3, 2023	—	—	—	—	—	—	—	9,200
BH23-63	0	June 3, 2023	—	—	—	—	—	—	—	11,000
BH23-64	0	June 3, 2023	—	—	—	—	—	—	—	8,300
BH23-65	0	June 3, 2023	—	—	—	—	—	—	—	12,000
BH23-66	0	June 3, 2023	—	—	—	—	—	—	—	1,700
BH23-67	0	June 3, 2023	—	—	—	—	—	—	—	13,000
BH23-68	0	June 3, 2023	—	—	—	—	—	—	—	11,000
BH23-69	0	June 9, 2023	-	-	-	-	-	-	-	290
BH23-70	0	June 9, 2023	-	-	-	-	-	-	-	200
BH23-71	0	June 9, 2023	ND	ND	ND	1600	2200	1600	3800	3,100
BH23-72	0	June 9, 2023	-	-	-	-	-	-	-	4,400
BH23-73	0	June 9, 2023	-	-	-	-	-	-	-	2,800
BH23-74	0	June 9, 2023	ND	ND	ND	540	1500	540	2040	3,800
TP23-01	2	May 27, 2023	-	-	-	-	-	-	-	ND
	4	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	84
TP23-02	2	May 27, 2023	-	-	-	-	-	-	-	120
	4	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	380
TP23-03	2	May 27, 2023	-	-	-	-	-	-	-	ND
	4	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	ND
TP23-04	2	May 27, 2023	-	-	-	-	-	-	-	ND
	4	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	ND
TP23-05	2	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	4	May 27, 2023	ND	ND	ND	ND	ND	ND	ND	230
TP23-101	0	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
TP23-102	0	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	4	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	5	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	87
TP23-103	0	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	4	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	5	June 30, 2023	ND	ND	ND	ND	ND	ND	ND	ND

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)





Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 19, 2023

Michael Moffitt

Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Dayton Recycle Release

OrderNo.: 2306008

Dear Michael Moffitt:

Hall Environmental Analysis Laboratory received 21 sample(s) on 6/1/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-01 2'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 9:30:00 AM

Lab ID: 2306008-001

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	6/2/2023 1:11:35 PM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-01 4'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 9:45:00 AM

Lab ID: 2306008-002

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2023 4:24:36 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2023 4:24:36 AM
Surr: DNOP	70.0	69-147		%Rec	1	6/7/2023 4:24:36 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/6/2023 8:17:38 PM
Surr: BFB	67.6	15-244		%Rec	1	6/6/2023 8:17:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	6/6/2023 8:17:38 PM
Toluene	ND	0.049		mg/Kg	1	6/6/2023 8:17:38 PM
Ethylbenzene	ND	0.049		mg/Kg	1	6/6/2023 8:17:38 PM
Xylenes, Total	ND	0.099		mg/Kg	1	6/6/2023 8:17:38 PM
Surr: 4-Bromofluorobenzene	83.4	39.1-146		%Rec	1	6/6/2023 8:17:38 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	84	60		mg/Kg	20	6/2/2023 2:00:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-02 2'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 10:15:00 AM

Lab ID: 2306008-004

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	120	60		mg/Kg	20	6/2/2023 2:37:06 PM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-02 4'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 10:30:00 AM

Lab ID: 2306008-005

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/7/2023 4:49:37 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2023 4:49:37 PM
Surr: DNOP	76.5	69-147		%Rec	1	6/7/2023 4:49:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/6/2023 9:27:32 PM
Surr: BFB	66.3	15-244		%Rec	1	6/6/2023 9:27:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	6/6/2023 9:27:32 PM
Toluene	ND	0.047		mg/Kg	1	6/6/2023 9:27:32 PM
Ethylbenzene	ND	0.047		mg/Kg	1	6/6/2023 9:27:32 PM
Xylenes, Total	ND	0.094		mg/Kg	1	6/6/2023 9:27:32 PM
Surr: 4-Bromofluorobenzene	83.8	39.1-146		%Rec	1	6/6/2023 9:27:32 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	380	60		mg/Kg	20	6/2/2023 3:14:07 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-03 2'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 11:00:00 AM

Lab ID: 2306008-007

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	6/2/2023 3:26:27 PM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-03 4'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 11:15:00 AM

Lab ID: 2306008-008

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2023 5:13:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2023 5:13:26 PM
Surr: DNOP	81.3	69-147		%Rec	1	6/7/2023 5:13:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/6/2023 10:37:36 PM
Surr: BFB	68.0	15-244		%Rec	1	6/6/2023 10:37:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	6/6/2023 10:37:36 PM
Toluene	ND	0.050		mg/Kg	1	6/6/2023 10:37:36 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/6/2023 10:37:36 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/6/2023 10:37:36 PM
Surr: 4-Bromofluorobenzene	83.4	39.1-146		%Rec	1	6/6/2023 10:37:36 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	6/2/2023 3:38:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-04 2'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 11:45:00 AM

Lab ID: 2306008-010

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	6/2/2023 3:51:09 PM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-04 4'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 1:00:00 PM

Lab ID: 2306008-011

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2023 5:37:13 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2023 5:37:13 PM
Surr: DNOP	90.3	69-147		%Rec	1	6/7/2023 5:37:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/6/2023 11:00:57 PM
Surr: BFB	70.6	15-244		%Rec	1	6/6/2023 11:00:57 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	6/6/2023 11:00:57 PM
Toluene	ND	0.049		mg/Kg	1	6/6/2023 11:00:57 PM
Ethylbenzene	ND	0.049		mg/Kg	1	6/6/2023 11:00:57 PM
Xylenes, Total	ND	0.097		mg/Kg	1	6/6/2023 11:00:57 PM
Surr: 4-Bromofluorobenzene	84.5	39.1-146		%Rec	1	6/6/2023 11:00:57 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	6/2/2023 4:03:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-05 2'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 1:30:00 PM

Lab ID: 2306008-013

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2023 6:01:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2023 6:01:00 PM
Surr: DNOP	91.2	69-147		%Rec	1	6/7/2023 6:01:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/6/2023 11:24:15 PM
Surr: BFB	62.3	15-244		%Rec	1	6/6/2023 11:24:15 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	6/6/2023 11:24:15 PM
Toluene	ND	0.049		mg/Kg	1	6/6/2023 11:24:15 PM
Ethylbenzene	ND	0.049		mg/Kg	1	6/6/2023 11:24:15 PM
Xylenes, Total	ND	0.097		mg/Kg	1	6/6/2023 11:24:15 PM
Surr: 4-Bromofluorobenzene	83.1	39.1-146		%Rec	1	6/6/2023 11:24:15 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	6/2/2023 4:15:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: TP23-05 4'

Project: Dayton Recycle Release

Collection Date: 5/26/2023 1:45:00 PM

Lab ID: 2306008-014

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	6/7/2023 6:24:52 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	6/7/2023 6:24:52 PM
Surr: DNOP	93.0	69-147		%Rec	1	6/7/2023 6:24:52 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/6/2023 11:47:38 PM
Surr: BFB	71.0	15-244		%Rec	1	6/6/2023 11:47:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	6/6/2023 11:47:38 PM
Toluene	ND	0.048		mg/Kg	1	6/6/2023 11:47:38 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/6/2023 11:47:38 PM
Xylenes, Total	ND	0.096		mg/Kg	1	6/6/2023 11:47:38 PM
Surr: 4-Bromofluorobenzene	84.6	39.1-146		%Rec	1	6/6/2023 11:47:38 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	230	60		mg/Kg	20	6/2/2023 4:28:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-50 0'

Project: Dayton Recycle Release

Collection Date: 5/27/2023 10:00:00 AM

Lab ID: 2306008-017

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	11000	600		mg/Kg	200	6/5/2023 6:42:31 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-51 0'

Project: Dayton Recycle Release

Collection Date: 5/27/2023 10:15:00 AM

Lab ID: 2306008-018

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	12000	600		mg/Kg	200	6/5/2023 6:54:56 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-52 0'

Project: Dayton Recycle Release

Collection Date: 5/27/2023 10:30:00 AM

Lab ID: 2306008-019

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	17000	1500		mg/Kg	500	6/5/2023 7:19:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-53 0'

Project: Dayton Recycle Release

Collection Date: 5/27/2023 10:45:00 AM

Lab ID: 2306008-020

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	34000	1500		mg/Kg	500	6/5/2023 7:32:09 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2306008**

Date Reported: **6/19/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-54 0'

Project: Dayton Recycle Release

Collection Date: 5/27/2023 11:00:00 AM

Lab ID: 2306008-021

Matrix: SOIL

Received Date: 6/1/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	15000	590		mg/Kg	200	6/5/2023 7:07:21 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306008

19-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75314	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75314	RunNo: 97185								
Prep Date: 6/2/2023	Analysis Date: 6/2/2023	SeqNo: 3529542	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75314	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75314	RunNo: 97185								
Prep Date: 6/2/2023	Analysis Date: 6/2/2023	SeqNo: 3529543	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306008

19-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75369	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 75369	RunNo: 97237								
Prep Date: 6/5/2023	Analysis Date: 6/6/2023	SeqNo: 3531619	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	61.9	130			
Surr: DNOP	4.9		5.000		97.4	69	147			

Sample ID: MB-75369	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 75369	RunNo: 97237								
Prep Date: 6/5/2023	Analysis Date: 6/6/2023	SeqNo: 3531624	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.8	69	147			

Sample ID: 2306008-002AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: TP23-01 4'	Batch ID: 75369	RunNo: 97273								
Prep Date: 6/5/2023	Analysis Date: 6/8/2023	SeqNo: 3533365	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.4	46.95	0	81.4	54.2	135			
Surr: DNOP	3.8		4.695		79.9	69	147			

Sample ID: 2306008-002AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: TP23-01 4'	Batch ID: 75369	RunNo: 97273								
Prep Date: 6/5/2023	Analysis Date: 6/8/2023	SeqNo: 3533367	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.6	47.94	0	85.6	54.2	135	7.13	29.2	
Surr: DNOP	4.1		4.794		85.6	69	147	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306008

19-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75363	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531884		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.7	70	130			
Surr: BFB	4800		1000		476	15	244			S

Sample ID: mb-75363	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531885		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	680		1000		68.4	15	244			

Sample ID: 2306008-002ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TP23-01 4'	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531887		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.65	0	104	70	130			
Surr: BFB	5400		986.2		543	15	244			S

Sample ID: 2306008-002amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TP23-01 4'	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531888		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.63	0	94.5	70	130	9.65	20	
Surr: BFB	4900		985.2		497	15	244	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306008

19-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75363	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531911		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.025	1.000	0	75.5	70	130			
Toluene	0.77	0.050	1.000	0	77.3	70	130			
Ethylbenzene	0.77	0.050	1.000	0	76.9	70	130			
Xylenes, Total	2.3	0.10	3.000	0	78.0	70	130			
Surr: 4-Bromofluorobenzene	0.87		1.000		86.6	39.1	146			

Sample ID: mb-75363	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531912		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		83.8	39.1	146			

Sample ID: 2306008-005ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: TP23-02 4'	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531915		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9461	0	83.8	70	130			
Toluene	0.81	0.047	0.9461	0.01646	84.2	70	130			
Ethylbenzene	0.83	0.047	0.9461	0	87.5	70	130			
Xylenes, Total	2.5	0.095	2.838	0.02700	86.6	70	130			
Surr: 4-Bromofluorobenzene	0.83		0.9461		88.0	39.1	146			

Sample ID: 2306008-005amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: TP23-02 4'	Batch ID: 75363		RunNo: 97227							
Prep Date: 6/5/2023	Analysis Date: 6/6/2023		SeqNo: 3531916		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.023	0.9355	0	79.7	70	130	6.25	20	
Toluene	0.77	0.047	0.9355	0.01646	81.0	70	130	4.91	20	
Ethylbenzene	0.77	0.047	0.9355	0	82.5	70	130	6.94	20	
Xylenes, Total	2.3	0.094	2.806	0.02700	82.2	70	130	6.25	20	
Surr: 4-Bromofluorobenzene	0.79		0.9355		84.8	39.1	146	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2306008 RcptNo: 1

Received By: Tracy Casarrubias 6/1/2023 7:30:00 AM

Completed By: Tracy Casarrubias 6/1/2023 7:58:28 AM

Reviewed By: *KPL 6.1.23*

Chain of Custody

- 1. Is Chain of Custody complete? Yes No Not Present
- 2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes No NA
- 4. Were all samples received at a temperature of >0° C to 6.0° C Yes No NA
- 5. Sample(s) in proper container(s)? Yes No
- 6. Sufficient sample volume for indicated test(s)? Yes No
- 7. Are samples (except VOA and ONG) properly preserved? Yes No
- 8. Was preservative added to bottles? Yes No NA
- 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes No NA
- 10. Were any sample containers received broken? Yes No
- 11. Does paperwork match bottle labels? Yes No
(Note discrepancies on chain of custody)
- 12. Are matrices correctly identified on Chain of Custody? Yes No
- 13. Is it clear what analyses were requested? Yes No
- 14. Were all holding times able to be met? Yes No
(If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: *MD 6/1/23*

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: Phone number, mailing address and Email are missing on COC- TMC 6/1/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes	Morty		
2	5.1	Good	Yes	Morty		

Chain-of-Custody Record

Client: Vortex (Silverback)
 Direct Bill - 60 FRACPLWSP
 Mailing Address: CAHA: Mark Ritchie
on file

Turn-Around Time: Standard Rush 5 Day
 Project Name: Dayton Recycle Release
 Project #: 23E-02248

Phone #:
 email or Fax#:
 QA/QC Package: Standard Level 4 (Full Validation)
 Accreditation: Az Compliance NELAC Other
 EDD (Type):
 Project Manager: Michael Moffitt
 Sampler:
 On Ice: Yes No marty
 # of Coolers: 2
 Cooler Temp (including CF): 5.0 - 0.1 = 4.9 (°C)
 HEAL No. 2306008

Project Manager: Michael Moffitt
 Container Type and # 1 jar 4oz. icc
 Preservative Type
 Cooler Temp (including CF): 5.0 - 0.1 = 4.9 (°C)
 HEAL No. 2306008

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-26-23	9:30	soil	TP23-01	2'										
	9:45		TP23-01	4'		X					X			
	10:00		TP23-01	6'		X					X			
	10:15		TP23-02	2'							X			
	10:30		TP23-02	4'		X					X			
	10:45		TP23-02	6'		X					X			
	11:00		TP23-03	2'							X			
	11:15		TP23-03	4'		X					X			
	11:30		TP23-03	6'		X					X			
	11:45		TP23-04	2'		X					X			
	13:00		TP23-04	4'		X					X			
	13:15		TP23-04	6'		X					X			

Relinquished by: Zach Englebert
 Date: 5/30/23 Time: 17:00
 Relinquished by:
 Date: 5/31/23 Time: 19:00
 Received by:
 Date: 9/30/23 Time: 10:05
 Received by:
 Date: 6/11/23 Time: 7:30

Remarks: Please hold all 6' sample as denoted with an H next to date. This includes TP23-05 at 8'. Please CC Mark Ritchie

Chain-of-Custody Record

Client: Vertex (Silverback)

Mailing Address: on file

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 5 Day

Project Name: Dayton Recycle Release

Project #: 23E-02248

Project Manager: Mike Moffitt

Sampler: Zach Englebert

On Ice: Yes No marby

of Coolers: 2

Cooler Temp (including CF): 5.0 - 0.1 = 4.9 (°C)
5.2 - 0.1 = 5.1 °C

Container Type and # 1 jar 4oz ice

Preservative Type ice

HEAL No. _____

Date	Time	Matrix	Sample Name	Depth	Relinquished by:	Relinquished Time:	Received by:	Received Date:	Received Time:
5-26-23	13:30		TP23-05	2'	Zach Englebert	17:00	Zach Englebert	5/31/23	12:45
5-26-23	13:45		TP23-05	4'					
5-26-23	14:00		TP23-05	6'					
5-26-23	14:15		TP23-05	8'					
5-27-23	10:09		BH23-50	0'					
5-27-23	10:15		BH23-51	0'					
5-27-23	10:30		BH23-52	0'					
5-27-23	10:45		BH23-53	0'					
5-27-23	11:00		BH23-54	0'					

Analysis Request

Analysis Request	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCA 8 Metals	CF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
BTEX / MTBE / TMBs (8021)	X							
TPH:8015D(GRO / DRO / MRO)	X							
8081 Pesticides/8082 PCBs								
EDB (Method 504.1)								
PAHs by 8310 or 8270SIMS								
RCA 8 Metals								
CF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄								
8260 (VOA)								
8270 (Semi-VOA)								
Total Coliform (Present/Absent)								

Remarks: Hold all 6' and 8' samples denoted with an H by the date
CC Mark Ritchie

Received by: [Signature] Date: 5/31/23 Time: 12:45

Relinquished by: Zach Englebert Date: 5/31/23 Time: 17:00

Received by: [Signature] Date: 6/1/23 Time: 7:30



HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Tel. 505-345-3975 Fax 505-345-4107



Hall Environmental Analysis Laboratory
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Website: www.hallenvironmental.com

June 01, 2023

Michael Novak

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Dayton Recycle Release

OrderNo.: 2305B56

Dear Michael Novak:

Hall Environmental Analysis Laboratory received 18 sample(s) on 5/23/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-34 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:00:00 AM

Lab ID: 2305B56-001

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	310	60		mg/Kg	20	5/25/2023 1:55:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-34 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:05:00 AM

Lab ID: 2305B56-002

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 2:08:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-34 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:10:00 AM

Lab ID: 2305B56-003

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/26/2023 4:53:40 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2023 4:53:40 PM
Surr: DNOP	100	69-147		%Rec	1	5/26/2023 4:53:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/26/2023 3:09:00 PM
Surr: BFB	91.1	15-244		%Rec	1	5/26/2023 3:09:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	5/26/2023 3:09:00 PM
Toluene	ND	0.049		mg/Kg	1	5/26/2023 3:09:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/26/2023 3:09:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	5/26/2023 3:09:00 PM
Surr: 4-Bromofluorobenzene	87.6	39.1-146		%Rec	1	5/26/2023 3:09:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	61	60		mg/Kg	20	5/26/2023 11:16:49 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-35 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:20:00 AM

Lab ID: 2305B56-004

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	450	60		mg/Kg	20	5/25/2023 2:20:20 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-35 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:30:00 AM

Lab ID: 2305B56-005

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	78	61		mg/Kg	20	5/25/2023 2:32:41 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-35 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 9:35:00 AM

Lab ID: 2305B56-006

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	71	60		mg/Kg	20	5/25/2023 2:45:02 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-36 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:00:00 AM

Lab ID: 2305B56-007

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	730	60		mg/Kg	20	5/25/2023 2:57:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-36 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:10:00 AM

Lab ID: 2305B56-008

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/25/2023 3:09:44 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-36 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:20:00 AM

Lab ID: 2305B56-009

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/26/2023 5:04:31 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/26/2023 5:04:31 PM
Surr: DNOP	92.6	69-147		%Rec	1	5/26/2023 5:04:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/26/2023 3:31:00 PM
Surr: BFB	97.0	15-244		%Rec	1	5/26/2023 3:31:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	5/26/2023 3:31:00 PM
Toluene	ND	0.048		mg/Kg	1	5/26/2023 3:31:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/26/2023 3:31:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	5/26/2023 3:31:00 PM
Surr: 4-Bromofluorobenzene	87.7	39.1-146		%Rec	1	5/26/2023 3:31:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/26/2023 11:29:14 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-37 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:30:00 AM

Lab ID: 2305B56-010

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	91	60		mg/Kg	20	5/25/2023 3:46:46 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-37 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:35:00 AM

Lab ID: 2305B56-011

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	78	60		mg/Kg	20	5/25/2023 3:59:06 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-37 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:45:00 AM

Lab ID: 2305B56-012

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	280	60		mg/Kg	20	5/25/2023 4:11:27 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-38 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 10:55:00 AM

Lab ID: 2305B56-013

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	3600	150		mg/Kg	50	5/31/2023 1:03:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-38 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 11:00:00 AM

Lab ID: 2305B56-014

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	140	60		mg/Kg	20	5/25/2023 4:36:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-38 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 11:05:00 AM

Lab ID: 2305B56-015

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/26/2023 5:15:21 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2023 5:15:21 PM
Surr: DNOP	85.8	69-147		%Rec	1	5/26/2023 5:15:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/26/2023 4:14:00 PM
Surr: BFB	91.0	15-244		%Rec	1	5/26/2023 4:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	5/26/2023 4:14:00 PM
Toluene	ND	0.049		mg/Kg	1	5/26/2023 4:14:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/26/2023 4:14:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/26/2023 4:14:00 PM
Surr: 4-Bromofluorobenzene	87.3	39.1-146		%Rec	1	5/26/2023 4:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	430	60		mg/Kg	20	5/26/2023 11:41:39 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-39 0'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 11:15:00 AM

Lab ID: 2305B56-016

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	320	60		mg/Kg	20	5/25/2023 4:48:28 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-39 2'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 11:25:00 AM

Lab ID: 2305B56-017

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/25/2023 5:00:49 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B56**

Date Reported: **6/1/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-39 4'

Project: Dayton Recycle Release

Collection Date: 5/19/2023 11:30:00 AM

Lab ID: 2305B56-018

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/25/2023 5:13:09 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B56

01-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75172	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75172	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521873	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75172	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75172	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521874	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Sample ID: MB-75209	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75209	RunNo: 97064								
Prep Date: 5/26/2023	Analysis Date: 5/26/2023	SeqNo: 3522745	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75209	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75209	RunNo: 97064								
Prep Date: 5/26/2023	Analysis Date: 5/26/2023	SeqNo: 3522746	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B56

01-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75186	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75186		RunNo: 97073							
Prep Date: 5/25/2023	Analysis Date: 5/26/2023		SeqNo: 3523198		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	61.9	130			
Surr: DNOP	4.3		5.000		85.4	69	147			

Sample ID: LCS-75197	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75197		RunNo: 97073							
Prep Date: 5/25/2023	Analysis Date: 5/26/2023		SeqNo: 3523201		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.5	69	147			

Sample ID: MB-75186	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75186		RunNo: 97073							
Prep Date: 5/25/2023	Analysis Date: 5/26/2023		SeqNo: 3523202		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.5	69	147			

Sample ID: MB-75197	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75197		RunNo: 97073							
Prep Date: 5/25/2023	Analysis Date: 5/26/2023		SeqNo: 3523205		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		112	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B56

01-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75154	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 75154	RunNo: 97050								
Prep Date: 5/24/2023	Analysis Date: 5/26/2023	SeqNo: 3522418	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.9	70	130			
Surr: BFB	2000		1000		196	15	244			

Sample ID: mb-75154	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 75154	RunNo: 97050								
Prep Date: 5/24/2023	Analysis Date: 5/26/2023	SeqNo: 3522419	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.1	15	244			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B56

01-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75154	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522430		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.5	70	130			
Toluene	0.85	0.050	1.000	0	84.7	70	130			
Ethylbenzene	0.83	0.050	1.000	0	83.4	70	130			
Xylenes, Total	2.5	0.10	3.000	0	82.5	70	130			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	39.1	146			

Sample ID: mb-75154	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522431		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.7	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2305B56 RcptNo: 1

Received By: Tracy Casarrubias 5/23/2023 7:30:00 AM

Completed By: Tracy Casarrubias 5/23/2023 8:17:16 AM

Reviewed By: [Signature] 5-23-23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [] No [x] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [x] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0° C Yes [x] No [] NA []
5. Sample(s) in proper container(s)? Yes [x] No []
6. Sufficient sample volume for indicated test(s)? Yes [x] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []
8. Was preservative added to bottles? Yes [] No [x] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]
10. Were any sample containers received broken? Yes [] No [x]
11. Does paperwork match bottle labels? Yes [x] No []
12. Are matrices correctly identified on Chain of Custody? Yes [] No [x]
13. Is it clear what analyses were requested? Yes [x] No []
14. Were all holding times able to be met? Yes [x] No []

of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? Checked by: [Signature] 5/23/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: Mailing address, phone number and Email are missing on COC- TMC 5/23/23

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 4.4, Good, Yes, Morty, [], []

Chain-of-Custody Record

Client: Vertex (Silverback)
 Mailing Address: on file
 Turn-Around Time: Standard Rush 5 day
 Project Name: Dayton Recycle Release
 Project #: 23E-02248

Project Manager: M Nowak
 Sampler: SPC
 On Ice: Yes No mark
 # of Coolers: 1
 Cooler Temp (including cF): 4.4-6.4 (°C)

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.
5/19/23	9:00	Soil	BH23-34	0'	4oz jar ice		001
	9:05		BH23-34	2'			002
	9:10		BH23-34	4'			003
	9:20		BH23-35	0'			004
	9:30		BH23-35	2'			005
	9:35		BH23-35	4'			006
	10:00		BH23-36	0'			007
	10:10		BH23-36	2'			008
	10:20		BH23-36	4'			009
	10:30		BH23-37	0'			010
	10:35		BH23-37	2'			011
	10:45		BH23-37	4'			012

Relinquished by: Jessy Carter Date: 5/19/23 Time: 1632
 Relinquished by: AMMUNIA Date: 5/20/23 Time: 1900
 Received by: AMMUNIA Date: 5/19/23 Time: 1000
 Received by: AMMUNIA Date: 5/20/23 Time: 730



HALL ENVIRONMENTAL ANALYSIS LABORATORY
 www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	C, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			

Remarks: direct bill Silverback
cc ScarHar@vertex.ca P 1/2

Chain-of-Custody Record

Client: Vertex (Silverback)

Mailing Address: on file

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 5 day

Project Name: Dayton Recycle Release

Project #: 23E-02248

Project Manager: M Nowak

Sampler: SPC

On Ice: Yes No muddy

of Coolers: 1

Cooler Temp (including CP): 44 - 0 = 44 (°C)

Container Type and # 4oz jar Preservative Type ice HEAL No. 2305356

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.
5/19/23	10:55	Soil	BH23-38	0'	4oz jar	ice	013
	11:00		BH23-38	2'			014
	11:05		BH23-38	4'			015
	11:15		BH23-39	0'			016
	11:25		BH23-39	2'			017
	11:30		BH23-39	4'			018

Date: 5/19/23 Time: 10:52 Relinquished by: Jalily Carter

Date: 5/20/23 Time: 1900 Relinquished by: ammmmm

Received by: ammmmm Date: 5/20/23 Time: 7:30

Received by: ammmmm Date: 5/23/23 Time: 7:30

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
✓	✓					✓			

Remarks: direct bill Silverback
cc Scarthar@vertex.ca P 2/2



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2023

Michael Novak
Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX

RE: Dayton Recycle Release

OrderNo.: 2305B58

Dear Michael Novak:

Hall Environmental Analysis Laboratory received 30 sample(s) on 5/23/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-40 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 8:40:00 AM

Lab ID: 2305B58-001

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	110	61		mg/Kg	20	5/25/2023 5:25:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-40 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 8:45:00 AM

Lab ID: 2305B58-002

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	260	60		mg/Kg	20	5/25/2023 5:37:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-40 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 8:50:00 AM

Lab ID: 2305B58-003

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/26/2023 5:58:45 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/26/2023 5:58:45 PM
Surr: DNOP	109	69-147		%Rec	1	5/26/2023 5:58:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/26/2023 5:19:00 PM
Surr: BFB	90.7	15-244		%Rec	1	5/26/2023 5:19:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	5/26/2023 5:19:00 PM
Toluene	ND	0.048		mg/Kg	1	5/26/2023 5:19:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/26/2023 5:19:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	5/26/2023 5:19:00 PM
Surr: 4-Bromofluorobenzene	86.7	39.1-146		%Rec	1	5/26/2023 5:19:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	690	60		mg/Kg	20	5/26/2023 12:43:42 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-41 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 8:55:00 AM

Lab ID: 2305B58-004

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	76	59		mg/Kg	20	5/25/2023 6:39:34 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-41 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:00:00 AM

Lab ID: 2305B58-005

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	66	59		mg/Kg	20	5/25/2023 7:16:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-41 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:05:00 AM

Lab ID: 2305B58-006

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	120	60		mg/Kg	20	5/25/2023 7:53:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-42 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:10:00 AM

Lab ID: 2305B58-007

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	190	60		mg/Kg	20	5/25/2023 8:06:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-42 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:15:00 AM

Lab ID: 2305B58-008

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	89	60		mg/Kg	20	5/25/2023 8:43:02 PM

Analyst: **CAS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-42 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:20:00 AM

Lab ID: 2305B58-009

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/26/2023 6:09:47 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2023 6:09:47 PM
Surr: DNOP	92.3	69-147		%Rec	1	5/26/2023 6:09:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/26/2023 5:41:00 PM
Surr: BFB	91.8	15-244		%Rec	1	5/26/2023 5:41:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	5/26/2023 5:41:00 PM
Toluene	ND	0.050		mg/Kg	1	5/26/2023 5:41:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/26/2023 5:41:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/26/2023 5:41:00 PM
Surr: 4-Bromofluorobenzene	87.5	39.1-146		%Rec	1	5/26/2023 5:41:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	190	60		mg/Kg	20	5/26/2023 1:20:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-43 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:25:00 AM

Lab ID: 2305B58-010

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	1000	60		mg/Kg	20	5/25/2023 8:55:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-43 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:30:00 AM

Lab ID: 2305B58-011

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	980	60		mg/Kg	20	5/25/2023 9:07:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-43 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:35:00 AM

Lab ID: 2305B58-012

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	970	60		mg/Kg	20	5/25/2023 9:20:03 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-44 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:40:00 AM

Lab ID: 2305B58-013

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	86	60		mg/Kg	20	5/25/2023 9:32:24 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-44 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 9:50:00 AM

Lab ID: 2305B58-014

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	660	61		mg/Kg	20	5/25/2023 9:44:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-44 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 10:00:00 AM

Lab ID: 2305B58-015

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/26/2023 6:20:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2023 6:20:51 PM
Surr: DNOP	92.5	69-147		%Rec	1	5/26/2023 6:20:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/26/2023 6:03:00 PM
Surr: BFB	89.9	15-244		%Rec	1	5/26/2023 6:03:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	5/26/2023 6:03:00 PM
Toluene	ND	0.049		mg/Kg	1	5/26/2023 6:03:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/26/2023 6:03:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	5/26/2023 6:03:00 PM
Surr: 4-Bromofluorobenzene	87.6	39.1-146		%Rec	1	5/26/2023 6:03:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	1500	60		mg/Kg	20	5/26/2023 1:33:19 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-45 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 10:10:00 AM

Lab ID: 2305B58-016

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 9:57:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-45 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 10:20:00 AM

Lab ID: 2305B58-017

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 10:09:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-45 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 10:25:00 AM

Lab ID: 2305B58-018

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 10:21:47 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-46 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:00:00 AM

Lab ID: 2305B58-019

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	130	60		mg/Kg	20	5/25/2023 10:34:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-46 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:05:00 AM

Lab ID: 2305B58-020

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 11:11:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-46 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:10:00 AM

Lab ID: 2305B58-021

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/26/2023 6:31:48 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2023 6:31:48 PM
Surr: DNOP	105	69-147		%Rec	1	5/26/2023 6:31:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/30/2023 5:47:00 PM
Surr: BFB	88.4	15-244		%Rec	1	5/30/2023 5:47:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	5/30/2023 5:47:00 PM
Toluene	ND	0.049		mg/Kg	1	5/30/2023 5:47:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/30/2023 5:47:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	5/30/2023 5:47:00 PM
Surr: 4-Bromofluorobenzene	85.4	39.1-146		%Rec	1	5/30/2023 5:47:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/26/2023 1:45:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-47 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:15:00 AM

Lab ID: 2305B58-022

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	89	60		mg/Kg	20	5/25/2023 11:23:29 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-47 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:20:00 AM

Lab ID: 2305B58-023

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 11:35:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-47 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:20:00 AM

Lab ID: 2305B58-024

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	480	60		mg/Kg	20	5/25/2023 11:48:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-48 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:30:00 AM

Lab ID: 2305B58-025

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/26/2023 12:00:31 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-48 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:35:00 AM

Lab ID: 2305B58-026

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	59		mg/Kg	20	5/26/2023 12:12:51 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-48 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:40:00 AM

Lab ID: 2305B58-027

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/26/2023 6:42:49 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2023 6:42:49 PM
Surr: DNOP	79.3	69-147		%Rec	1	5/26/2023 6:42:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/26/2023 6:25:00 PM
Surr: BFB	94.0	15-244		%Rec	1	5/26/2023 6:25:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.023		mg/Kg	1	5/26/2023 6:25:00 PM
Toluene	ND	0.047		mg/Kg	1	5/26/2023 6:25:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/26/2023 6:25:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	5/26/2023 6:25:00 PM
Surr: 4-Bromofluorobenzene	87.1	39.1-146		%Rec	1	5/26/2023 6:25:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	61		mg/Kg	20	5/26/2023 1:58:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-49 0'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:45:00 AM

Lab ID: 2305B58-028

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	360	60		mg/Kg	20	5/25/2023 10:50:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-49 2'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 11:55:00 AM

Lab ID: 2305B58-029

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 11:02:24 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305B58**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-49 4'

Project: Dayton Recycle Release

Collection Date: 5/20/2023 12:00:00 PM

Lab ID: 2305B58-030

Matrix: SOIL

Received Date: 5/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND	60		mg/Kg	20	5/25/2023 11:14:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75198	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75198	RunNo: 97041								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521710	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75198	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75198	RunNo: 97041								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521711	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Sample ID: MB-75172	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75172	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521873	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75172	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75172	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521874	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Sample ID: MB-75176	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75176	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521910	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75176	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75176	RunNo: 97045								
Prep Date: 5/25/2023	Analysis Date: 5/25/2023	SeqNo: 3521911	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75209	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75209	RunNo: 97064								
Prep Date: 5/26/2023	Analysis Date: 5/26/2023	SeqNo: 3522745	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75209	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75209	RunNo: 97064								
Prep Date: 5/26/2023	Analysis Date: 5/26/2023	SeqNo: 3522746	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75186	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 75186	RunNo: 97073								
Prep Date: 5/25/2023	Analysis Date: 5/26/2023	SeqNo: 3523198	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	61.9	130			
Surr: DNOP	4.3		5.000		85.4	69	147			

Sample ID: MB-75186	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 75186	RunNo: 97073								
Prep Date: 5/25/2023	Analysis Date: 5/26/2023	SeqNo: 3523202	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.5	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75154	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522418		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.9	70	130			
Surr: BFB	2000		1000		196	15	244			

Sample ID: mb-75154	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522419		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.1	15	244			

Sample ID: LCS-75211	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524885		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.3	70	130			
Surr: BFB	2000		1000		200	15	244			

Sample ID: MB-75211	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524886		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		90.9	15	244			

Sample ID: 2305B58-021ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH23-46 4'	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524888		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.34	0	84.7	70	130			
Surr: BFB	2000		973.7		203	15	244			

Sample ID: 2305B58-021amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH23-46 4'	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524889		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: 2305B58-021amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH23-46 4'	Batch ID: 75211	RunNo: 97082								
Prep Date: 5/26/2023	Analysis Date: 5/30/2023	SeqNo: 3524889 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.44	0	85.2	70	130	0.955	20	
Surr: BFB	2000		977.5		209	15	244	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305B58

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75154	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522430		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.5	70	130			
Toluene	0.85	0.050	1.000	0	84.7	70	130			
Ethylbenzene	0.83	0.050	1.000	0	83.4	70	130			
Xylenes, Total	2.5	0.10	3.000	0	82.5	70	130			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	39.1	146			

Sample ID: mb-75154	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75154		RunNo: 97050							
Prep Date: 5/24/2023	Analysis Date: 5/26/2023		SeqNo: 3522431		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.7	39.1	146			

Sample ID: LCS-75211	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524912		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	1.000	0	80.5	70	130			
Toluene	0.82	0.050	1.000	0	82.2	70	130			
Ethylbenzene	0.81	0.050	1.000	0	81.2	70	130			
Xylenes, Total	2.4	0.10	3.000	0	80.9	70	130			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.3	39.1	146			

Sample ID: MB-75211	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75211		RunNo: 97082							
Prep Date: 5/26/2023	Analysis Date: 5/30/2023		SeqNo: 3524913		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2305B58 RcptNo: 1

Received By: Tracy Casarrubias 5/23/2023 7:30:00 AM

Completed By: Tracy Casarrubias 5/23/2023 8:32:24 AM

Reviewed By: CMC 5/23/23

Chain of Custody

- 1. Is Chain of Custody complete? Yes No Not Present
- 2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes No NA
- 4. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
- 5. Sample(s) in proper container(s)? Yes No Not required
- 6. Sufficient sample volume for indicated test(s)? Yes No
- 7. Are samples (except VOA and ONG) properly preserved? Yes No
- 8. Was preservative added to bottles? Yes No NA
- 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes No NA
- 10. Were any sample containers received broken? Yes No
- 11. Does paperwork match bottle labels? Yes No
- (Note discrepancies on chain of custody)
- 12. Are matrices correctly identified on Chain of Custody? Yes No
- 13. Is it clear what analyses were requested? Yes No
- 14. Were all holding times able to be met? Yes No
- (If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: MC 5/23/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: Mailing address, phone number and Email are missing on COC- TMC 5/23/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	20.9	Good	Yes	Morty		
2	5.4	Good	Yes	Morty		

Chain-of-Custody Record

Client: VERTX (Silverback)

Mailing Address: on file

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 5 day

Project Name: 23E-02248

Project #: Dayton Recycle Release

Project Manager: Mike Nowak

Sampler: SPC

On Ice: Yes No no ice

of Coolers: 2

Cooler Temp (including CF): 20.9 - 20.9 = 20.9 (°C)
5.4 - 5.4 = 5.4

Container Type and # 4oz jar ice

Preservative Type HEAL No. 7305B58

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.
5/20/23	0840	Soil	BH23-40	0'	4oz jar ice		001
	0845		BH23-40	2'			002
	0850		BH23-40	4'			003
	0855		BH23-41	0'			004
	0900		BH23-41	2'			005
	0905		BH23-41	4'			006
	0910		BH23-42	0'			007
	0915		BH23-42	2'			008
	0920		BH23-42	4'			009
	0925		BH23-43	0'			010
	0930		BH23-43	2'			011
	0935		BH23-43	4'			012

Relinquished by: Sally Conton

Date: 5/20/23 Time: 1810

Relinquished by: [Signature]

Date: 5/20/23 Time: 1900

Received by: [Signature] Date: 5/20/23 Time: 1030

Received by: [Signature] Date: 5/23/23 Time: 7:30



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ⁻ , SO ₄ ⁻	<input checked="" type="checkbox"/>
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: direct bill Silverback
cc scarstar@vertx.ca

P 1/3

Chain-of-Custody Record

Client: Vertex (Silverback)

Mailing Address: on file

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 5 day

Project Name: Dayton Recycle Release

Project #: 23E-07248

Project Manager: Mike Nowak

Sampler: _____

On Ice: Yes No

of Coolers: 2

Cooler Temp (including CF): See Checklist (°C)

Container Type and # 403 jar ice

Preservative Type _____

HEAL No. 235858

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.
5/20/23	0940	Soil	BH23-44	0'	403 jar ice		013
	0950		BH23-44	2'			014
	1000		BH23-44	4'			015
	1010		BH23-45	0'			016
	1020		BH23-45	2'			017
	1025		BH23-45	4'			018
	1100		BH23-46	0'			019
	1105		BH23-46	2'			020
	1110		BH23-46	4'			021
	1115		BH23-47	0'			022
	1120		BH23-47	2'			023
	1120		BH23-47	4'			024

Date: 5/20/23 Time: 1811 Relinquished by: Sally Carttan

Date: 5/20/23 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Date: 5/20/23 Time: 1000

Received by: [Signature] Date: 5/22/23 Time: 7:30



HALL ENVIRONMENTAL ANALYSIS LABORATORY
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 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	<input checked="" type="checkbox"/>
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: direct bill silverback
cc Scarthar@Vertex.ca P 2/3

Chain-of-Custody Record

Client: Vertex (Silverback)

Mailing Address: On file

Phone #: _____

Turn-Around Time: _____

Standard Rush 5 days

Project Name: Dayton Recycle Release

Project #: 23E-02248

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance Other _____

NELAC Other _____

EDD (Type) _____

Project Manager: Mike Nowak

Sampler: _____

On Ice: Yes No

of Coolers: 2

Cooler Temp (including CP): See Worksheet

Date	Time	Matrix	Sample Name	Depth	Container Type and #	Preservative Type	HEAL No.
5/20/23	1130	Soil	BH23-48	0'	40g jar	ice	2305B58
	1135		BH23-48	2'			026
	1140		BH23-48	4'			027
	1145		BH23-49	0'			028
	1155		BH23-49	2'			029
	1200		BH23-49	4'			030

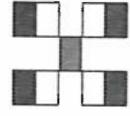
Date	Time	Relinquished by:	Via:	Date	Time
5/20/23	1811	Sally Carttar		5/20/23	1030
5/20/23	1900	[Signature]		5/23/23	7:00

Analysis Request

BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl ₂ , F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
✓	✓					✓			

Remarks: direct bill Silverback
cc scarttar@vertex.ca

P 8/3



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
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Website: www.hallenvironmental.com

May 16, 2023

Mark Ritchie

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Dayton Recycle Release

OrderNo.: 2305347

Dear Mark Ritchie:

Hall Environmental Analysis Laboratory received 48 sample(s) on 5/6/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-01 0.0'

Project: Dayton Recycle Release

Collection Date: 4/30/2023 2:00:00 PM

Lab ID: 2305347-001

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/12/2023 12:26:08 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-02 0.0'

Project: Dayton Recycle Release

Collection Date: 4/30/2023 2:05:00 PM

Lab ID: 2305347-002

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	5200	150		mg/Kg	50	5/12/2023 9:34:27 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-01 2.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:00:00 AM

Lab ID: 2305347-003

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/11/2023 10:03:59 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/11/2023 10:03:59 PM
Surr: DNOP	72.6	69-147		%Rec	1	5/11/2023 10:03:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/11/2023 10:20:34 PM
Surr: BFB	75.1	15-244		%Rec	1	5/11/2023 10:20:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	5/11/2023 10:20:34 PM
Toluene	ND	0.049		mg/Kg	1	5/11/2023 10:20:34 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2023 10:20:34 PM
Xylenes, Total	ND	0.098		mg/Kg	1	5/11/2023 10:20:34 PM
Surr: 4-Bromofluorobenzene	84.6	39.1-146		%Rec	1	5/11/2023 10:20:34 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	420	60		mg/Kg	20	5/12/2023 12:50:49 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-01 4.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:10:00 AM

Lab ID: 2305347-004

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	210	60		mg/Kg	20	5/12/2023 2:46:19 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-02 2.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:20:00 AM

Lab ID: 2305347-005

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	240	60		mg/Kg	20	5/12/2023 2:58:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-02 4.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:30:00 AM

Lab ID: 2305347-006

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	220	59		mg/Kg	20	5/12/2023 3:11:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-03 0.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:40:00 AM

Lab ID: 2305347-007

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 3:23:32 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-03 2.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 9:50:00 AM

Lab ID: 2305347-008

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 3:35:57 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-03 4.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 10:00:00 AM

Lab ID: 2305347-009

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	280	60		mg/Kg	20	5/12/2023 3:48:22 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-04 0.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 10:10:00 AM

Lab ID: 2305347-010

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	6000	300		mg/Kg	100	5/13/2023 4:11:04 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-04 2.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 10:20:00 AM

Lab ID: 2305347-011

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	240	60		mg/Kg	20	5/13/2023 12:27:13 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-04 4.0'

Project: Dayton Recycle Release

Collection Date: 5/1/2023 10:30:00 AM

Lab ID: 2305347-012

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	190	60		mg/Kg	20	5/13/2023 12:39:38 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-05 0.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 8:30:00 AM

Lab ID: 2305347-013

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	2200	60		mg/Kg	20	5/13/2023 12:52:02 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-05 2.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 8:40:00 AM

Lab ID: 2305347-014

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/11/2023 10:14:54 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/11/2023 10:14:54 PM
Surr: DNOP	70.7	69-147		%Rec	1	5/11/2023 10:14:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/11/2023 11:31:02 PM
Surr: BFB	76.7	15-244		%Rec	1	5/11/2023 11:31:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	5/11/2023 11:31:02 PM
Toluene	ND	0.047		mg/Kg	1	5/11/2023 11:31:02 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/11/2023 11:31:02 PM
Xylenes, Total	ND	0.094		mg/Kg	1	5/11/2023 11:31:02 PM
Surr: 4-Bromofluorobenzene	86.3	39.1-146		%Rec	1	5/11/2023 11:31:02 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	410	59		mg/Kg	20	5/12/2023 3:20:43 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-05 4.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 8:50:00 AM

Lab ID: 2305347-015

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	190	60		mg/Kg	20	5/12/2023 3:57:45 PM

Analyst: JTT

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-06 0.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:00:00 AM

Lab ID: 2305347-016

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 4:34:47 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-06 2.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:10:00 AM

Lab ID: 2305347-017

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	5/12/2023 4:47:07 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-06 4.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:20:00 AM

Lab ID: 2305347-018

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	5/12/2023 5:24:09 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-07 0.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:30:00 AM

Lab ID: 2305347-019

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	5900	300		mg/Kg	100	5/13/2023 4:23:28 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-07 2.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:40:00 AM

Lab ID: 2305347-020

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/12/2023 5:48:50 PM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-07 4.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 9:50:00 AM

Lab ID: 2305347-021

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 6:01:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 0.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:00:00 AM

Lab ID: 2305347-022

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	7500	300		mg/Kg	100	5/13/2023 4:35:52 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 2.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:10:00 AM

Lab ID: 2305347-023

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	88	60		mg/Kg	20	5/12/2023 6:25:53 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 4.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:20:00 AM

Lab ID: 2305347-024

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	300	60		mg/Kg	20	5/12/2023 6:38:14 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-09 0.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:30:00 AM

Lab ID: 2305347-025

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	2100	150		mg/Kg	50	5/13/2023 4:48:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-09 2.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:40:00 AM

Lab ID: 2305347-026

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 7:02:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-09 4.0'

Project: Dayton Recycle Release

Collection Date: 5/2/2023 10:50:00 AM

Lab ID: 2305347-027

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 7:15:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-10 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:00:00 AM

Lab ID: 2305347-028

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	2800	150		mg/Kg	50	5/13/2023 5:25:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-10 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:10:00 AM

Lab ID: 2305347-029

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/11/2023 10:25:47 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/11/2023 10:25:47 PM
Surr: DNOP	96.6	69-147		%Rec	1	5/11/2023 10:25:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2023 12:40:54 AM
Surr: BFB	72.5	15-244		%Rec	1	5/12/2023 12:40:54 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	5/12/2023 12:40:54 AM
Toluene	ND	0.049		mg/Kg	1	5/12/2023 12:40:54 AM
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2023 12:40:54 AM
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2023 12:40:54 AM
Surr: 4-Bromofluorobenzene	85.2	39.1-146		%Rec	1	5/12/2023 12:40:54 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	97	60		mg/Kg	20	5/12/2023 8:04:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-10 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:20:00 AM

Lab ID: 2305347-030

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 8:17:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-11 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:30:00 AM

Lab ID: 2305347-031

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	4400	150		mg/Kg	50	5/13/2023 5:37:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-11 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:40:00 AM

Lab ID: 2305347-032

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 8:41:42 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-11 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 9:50:00 AM

Lab ID: 2305347-033

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	5/12/2023 8:54:03 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:00:00 AM

Lab ID: 2305347-034

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	2300	60		mg/Kg	20	5/12/2023 4:38:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:10:00 AM

Lab ID: 2305347-035

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 5:40:02 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:20:00 AM

Lab ID: 2305347-036

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 6:17:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:30:00 AM

Lab ID: 2305347-037

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	2600	150		mg/Kg	50	5/13/2023 5:50:20 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:40:00 AM

Lab ID: 2305347-038

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	220	60		mg/Kg	20	5/12/2023 6:42:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 10:50:00 AM

Lab ID: 2305347-039

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	270	60		mg/Kg	20	5/12/2023 6:54:29 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:00:00 AM

Lab ID: 2305347-040

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	1400	60		mg/Kg	20	5/12/2023 7:06:53 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:10:00 AM

Lab ID: 2305347-041

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	5/12/2023 7:44:07 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:20:00 AM

Lab ID: 2305347-042

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	65	60		mg/Kg	20	5/12/2023 7:56:32 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-15 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:30:00 AM

Lab ID: 2305347-043

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	590	60		mg/Kg	20	5/12/2023 8:08:56 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305347**

Date Reported: **5/16/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-15 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:40:00 AM

Lab ID: 2305347-044

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	330	60		mg/Kg	20	5/12/2023 8:21:20 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-15 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 11:50:00 AM

Lab ID: 2305347-045

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	210	60		mg/Kg	20	5/12/2023 8:33:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-16 0.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 12:00:00 PM

Lab ID: 2305347-046

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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EPA METHOD 300.0: ANIONS

Analyst: JTT

Chloride	ND	61		mg/Kg	20	5/12/2023 8:46:09 PM
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-16 2.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 12:10:00 PM

Lab ID: 2305347-047

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/11/2023 10:36:38 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/11/2023 10:36:38 PM
Surr: DNOP	72.0	69-147		%Rec	1	5/11/2023 10:36:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2023 1:04:17 AM
Surr: BFB	65.4	15-244		%Rec	1	5/12/2023 1:04:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	5/12/2023 1:04:17 AM
Toluene	ND	0.050		mg/Kg	1	5/12/2023 1:04:17 AM
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2023 1:04:17 AM
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2023 1:04:17 AM
Surr: 4-Bromofluorobenzene	83.1	39.1-146		%Rec	1	5/12/2023 1:04:17 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	860	60		mg/Kg	20	5/12/2023 8:58:33 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2305347

Date Reported: 5/16/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-16 4.0'

Project: Dayton Recycle Release

Collection Date: 5/3/2023 12:20:00 PM

Lab ID: 2305347-048

Matrix: SOIL

Received Date: 5/6/2023 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	380	60		mg/Kg	20	5/12/2023 9:10:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305347

16-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-74909	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74909	RunNo: 96704								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3506836	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74909	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74909	RunNo: 96704								
Prep Date: 5/11/2023	Analysis Date: 5/11/2023	SeqNo: 3506837	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: MB-74926	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74926	RunNo: 96731								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507659	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74926	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74926	RunNo: 96731								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507660	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: MB-74915	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74915	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507829	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74915	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74915	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507830	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305347

16-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-74927	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74927	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507859	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74927	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74927	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507860	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

Sample ID: MB-74919	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74919	RunNo: 96710								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507984	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74919	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74919	RunNo: 96710								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507985	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.9	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305347

16-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: 2305347-003AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH23-01 2.0'	Batch ID: 74874	RunNo: 96702								
Prep Date: 5/10/2023	Analysis Date: 5/12/2023	SeqNo: 3506773	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.8	48.78	0	84.6	54.2	135			
Surr: DNOP	3.2		4.878		65.9	69	147			S

Sample ID: 2305347-003AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH23-01 2.0'	Batch ID: 74874	RunNo: 96702								
Prep Date: 5/10/2023	Analysis Date: 5/12/2023	SeqNo: 3506774	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.8	49.12	0	86.9	54.2	135	3.40	29.2	
Surr: DNOP	2.9		4.912		58.9	69	147	0	0	S

Sample ID: LCS-74874	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 74874	RunNo: 96702								
Prep Date: 5/10/2023	Analysis Date: 5/11/2023	SeqNo: 3506800	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	61.9	130			
Surr: DNOP	4.9		5.000		97.4	69	147			

Sample ID: MB-74874	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 74874	RunNo: 96702								
Prep Date: 5/10/2023	Analysis Date: 5/11/2023	SeqNo: 3506803	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305347

16-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-74864	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506809		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.4	70	130			
Surr: BFB	5000		1000		503	15	244			S

Sample ID: mb-74864	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506810		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	760		1000		75.7	15	244			

Sample ID: 2305347-003ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH23-01 2.0'	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506812		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.39	0	91.6	70	130			
Surr: BFB	5200		975.6		532	15	244			S

Sample ID: 2305347-003amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BH23-01 2.0'	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506813		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.41	0	91.7	70	130	0.185	20	
Surr: BFB	5200		976.6		528	15	244	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305347

16-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-74864	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506872		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.025	1.000	0	77.9	70	130			
Toluene	0.81	0.050	1.000	0	81.0	70	130			
Ethylbenzene	0.81	0.050	1.000	0	81.4	70	130			
Xylenes, Total	2.5	0.10	3.000	0	81.8	70	130			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	39.1	146			

Sample ID: mb-74864	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506873		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.8	39.1	146			

Sample ID: 2305347-014ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-05 2.0'	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506876		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9416	0	88.7	70	130			
Toluene	0.89	0.047	0.9416	0.01575	92.7	70	130			
Ethylbenzene	0.91	0.047	0.9416	0	97.0	70	130			
Xylenes, Total	2.8	0.094	2.825	0	98.0	70	130			
Surr: 4-Bromofluorobenzene	0.82		0.9416		87.2	39.1	146			

Sample ID: 2305347-014amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-05 2.0'	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/12/2023		SeqNo: 3506877		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.024	0.9425	0	85.8	70	130	3.27	20	
Toluene	0.85	0.047	0.9425	0.01575	89.0	70	130	3.86	20	
Ethylbenzene	0.88	0.047	0.9425	0	93.6	70	130	3.52	20	
Xylenes, Total	2.7	0.094	2.828	0	94.0	70	130	4.08	20	
Surr: 4-Bromofluorobenzene	0.82		0.9425		87.5	39.1	146	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2305347 RcptNo: 1
Received By: Cheyenne Cason 5/6/2023 8:45:00 AM
Completed By: Cheyenne Cason 5/6/2023 8:56:31 AM
Reviewed By: JP 5/6/23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [] No [x] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [x] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [x] No [] NA []
5. Sample(s) in proper container(s)? Yes [x] No []
6. Sufficient sample volume for indicated test(s)? Yes [x] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []
8. Was preservative added to bottles? Yes [] No [x] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]
10. Were any sample containers received broken? Yes [] No [x]
11. Does paperwork match bottle labels? Yes [x] No []
12. Are matrices correctly identified on Chain of Custody? Yes [x] No []
13. Is it clear what analyses were requested? Yes [x] No []
14. Were all holding times able to be met? Yes [x] No []

of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: CMC 5/6/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified:
By Whom:
Regarding:
Client Instructions:
Date:
Via: [] eMail [] Phone [] Fax [] In Person

16. Additional remarks:
No email, address or Phone number on COC

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 5.8, Good, Not Present, Yogi

Chain-of-Custody Record

Client: Silverback
 Mailing Address: Direct Bill
 Turn-Around Time: Standard Rush 5 Day
 Project Name: Daxton Recycle Release
 Project #: 23E-02248

Phone #: _____
 email or Fax#: _____
 QA/QC Package: Standard Level 4 (Full Validation)
 Accreditation: Az Compliance NELAC Other
 Sampler: AM
 On Ice: Yes No Yog.
 # of Coolers: 1
 Cooler Temp (including CF): 5.8-0=5.8 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
4-30-23	1400	Soil	BH23-01	402	ICE	2305347
4-30-23	1405		BH23-02			001
5-1-23	0900		BH23-01			002
	0910		BH23-01			003
	0920		BH23-02			004
	0930		BH23-02			005
	0940		BH23-03			006
	0950		BH23-03			007
	1000		BH23-03			008
	1010		BH23-04			009
	1020		BH23-04			010
	1030		BH23-04			011
						012

Project Manager: Michael Navack
 Received by: Wumina Date: 9/5/23 Time: 9:45
 Relinquished by: Wumina Date: 9/8/23 Time: 12:33 PM
 Received by: CMK Date: 9/8/23 Time: 0845



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	X
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: ATTN: Mark Ritchie
CC: results to mritchie@silverback.exp.com

Chain-of-Custody Record

Client: Siberback
 Mailing Address: Direct Bill
 Project Name: Darton Recycle Release
 Project #: 23E-02248

Turn-Around Time: Standard Rush 5 Day
 Project Manager: Michael Navak
 Sampler: MM
 On Ice: Yes No Yegi
 # of Coolers: 1
 Cooler Temp (including CF): 5.8-0 = 5.8 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5-2-23	0830	Soil	BH23-05	402	ICE	2305341
	0840		BH23-05			013
	0850		BH23-05			014
	0900		BH23-06			015
	0910		BH23-06			016
	0920		BH23-06			017
	0930		BH23-07			018
	0940		BH23-07			019
	0950		BH23-07			020
	1000		BH23-08			021
	1010		BH23-08			022
	1020		BH23-08			023
						024

Relinquished by: MM Date: 5/5/23 Time: 945
 Received by: One carin 5/6/23 Date: 0845
 Relinquished by: MM Date: 5/5/23 Time: 945
 Received by: One carin 5/6/23 Date: 0845



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 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	<input checked="" type="checkbox"/>
TPH:8015D(GRO / DRO / MRO)	<input checked="" type="checkbox"/>
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	<input checked="" type="checkbox"/>
8260 (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: ATTN: Mark Ritchie
CC results to mritchie@siherback.exp.com

Chain-of-Custody Record

Client: Silverback
Direct Bill
 Mailing Address:
 Turn-Around Time: Standard Rush 5 DM
 Project Name: Duxton Recycle Release
 Project #: 23E-02248

Phone #: _____
 email or Fax#: _____
 QA/QC Package: Standard Level 4 (Full Validation)
 Accreditation: Az Compliance NELAC Other
 Sampler: ABT
 On Ice: Yes No Yes
 # of Coolers: 1
 Cooler Temp (including CF): 5.8-0 = 5.8 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5-2-23	1030	Soil	BH23-09	402	106	2305347
5-2-23	1070		BH23-09			025
5-2-23	1050		BH23-09			026
5-3-23	0900		BH23-10			027
	0910		BH23-10			028
	0970		BH23-10			029
	0930		BH23-11			030
	0940		BH23-11			031
	0950		BH23-11			032
	1000		BH23-12			033
	1010		BH23-12			034
	1020		BH23-12			035
						036

Date: _____ Time: _____ Relinquished by: _____
 Date: 5/13 Time: 1900 Relinquished by: acumino
 Received by: acumino Date: 5/13 Time: 0945
 Received by: CML Corwin Date: 5/13 Time: 0845



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 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMS (8021)	<input checked="" type="checkbox"/>
TPH:8015D(GRO / DRO / MRO)	<input checked="" type="checkbox"/>
8081 Pesticides/8082 PCBs	<input checked="" type="checkbox"/>
EDB (Method 504.1)	<input checked="" type="checkbox"/>
PAHs by 8310 or 8270SIMS	<input checked="" type="checkbox"/>
RCRA 8 Metals	<input checked="" type="checkbox"/>
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	<input checked="" type="checkbox"/>
8260 (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	<input checked="" type="checkbox"/>
Total Coliform (Present/Absent)	<input type="checkbox"/>

Remarks: ATTN: Mark Ritchie
cc results to:
mritchie@silverback.exp.com

Chain-of-Custody Record

Client: Silverback
Direct Bill
 Mailing Address:
 Project Name: Dayton Recycle Release
 Project #: 23E-02248

Turn-Around Time: Standard Rush 5 Day
 Project Manager: Michael Newek
 Sampler: MH
 On Ice: Yes No Yogi
 # of Coolers: 1
 Cooler Temp (including CP): 5.8 - 0 = 5.8 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5-3-23	1030	Sol	BH23-13	402	ICE	2305347
	1070		BH23-13			038
	1050		BH23-13			039
	1100		BH23-14			040
	1110		BH23-14			041
	1120		BH23-14			042
	1130		BH23-15			043
	1140		BH23-15			044
	1150		BH23-15			045
	1200		BH23-16			046
	1210		BH23-16			047
	1220		BH23-16			048

Relinquished by: William Date: 9/13/23 Time: 945
 Received by: CMC Courier Date: 9/13/23 Time: 0845



HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMS (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCBs	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	X
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: Attn: Mark Ritchie
cc results to: mritchie@silverback.exp.com



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 17, 2023

Michael Novak

Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Dayton Recycle Release

OrderNo.: 2305404

Dear Michael Novak:

Hall Environmental Analysis Laboratory received 36 sample(s) on 5/9/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-17 0.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:00:00 AM

Lab ID: 2305404-001

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	71	60		mg/Kg	20	5/13/2023 4:12:54 AM

Analyst: JTT

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-17 2.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:10:00 AM

Lab ID: 2305404-002

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/13/2023 4:25:18 AM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-17 4.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:20:00 AM

Lab ID: 2305404-003

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/13/2023 4:37:43 AM

Analyst: **JTT**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-18 0.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:30:00 AM

Lab ID: 2305404-004

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	4800	150		mg/Kg	50	5/13/2023 6:52:24 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-18 2.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:40:00 AM

Lab ID: 2305404-005

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 11:17:17 AM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-18 4.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 9:50:00 AM

Lab ID: 2305404-006

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 11:54:30 AM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-19 0.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:00:00 AM

Lab ID: 2305404-007

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 12:56:30 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-19 2.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:10:00 AM

Lab ID: 2305404-008

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	230	60		mg/Kg	20	5/15/2023 1:08:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-19 4.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:20:00 AM

Lab ID: 2305404-009

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	180	60		mg/Kg	20	5/15/2023 1:21:19 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 0.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:30:00 AM

Lab ID: 2305404-010

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/15/2023 1:33:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 2.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:40:00 AM

Lab ID: 2305404-011

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/12/2023 12:45:37 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2023 12:45:37 AM
Surr: DNOP	92.0	69-147		%Rec	1	5/12/2023 12:45:37 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2023 6:33:22 AM
Surr: BFB	71.4	15-244		%Rec	1	5/12/2023 6:33:22 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	5/12/2023 6:33:22 AM
Toluene	ND	0.049		mg/Kg	1	5/12/2023 6:33:22 AM
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2023 6:33:22 AM
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2023 6:33:22 AM
Surr: 4-Bromofluorobenzene	84.0	39.1-146		%Rec	1	5/12/2023 6:33:22 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/15/2023 1:46:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 4.0'

Project: Dayton Recycle Release

Collection Date: 5/5/2023 10:50:00 AM

Lab ID: 2305404-012

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 1:58:32 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-21 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:00:00 AM

Lab ID: 2305404-013

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	4900	300		mg/Kg	100	5/16/2023 11:36:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-21 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:10:00 AM

Lab ID: 2305404-014

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 2:23:21 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-21 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:20:00 AM

Lab ID: 2305404-015

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/15/2023 2:35:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:30:00 AM

Lab ID: 2305404-016

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	9500	600		mg/Kg	200	5/16/2023 12:01:32 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:40:00 AM

Lab ID: 2305404-017

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/15/2023 3:25:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 9:50:00 AM

Lab ID: 2305404-018

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/15/2023 3:37:47 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-23 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:00:00 AM

Lab ID: 2305404-019

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	4600	150		mg/Kg	50	5/16/2023 12:26:21 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-23 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:10:00 AM

Lab ID: 2305404-020

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	870	59		mg/Kg	20	5/15/2023 4:02:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-23 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:20:00 AM

Lab ID: 2305404-021

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	740	60		mg/Kg	20	5/15/2023 4:15:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-24 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:30:00 AM

Lab ID: 2305404-022

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	700	60		mg/Kg	20	5/15/2023 4:27:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-24 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:40:00 AM

Lab ID: 2305404-023

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 5:06:26 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-24 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 10:50:00 AM

Lab ID: 2305404-024

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	130	60		mg/Kg	20	5/15/2023 6:08:28 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-25 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:00:00 AM

Lab ID: 2305404-025

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	5600	300		mg/Kg	100	5/16/2023 11:49:08 AM

Analyst: **NAI**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-25 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:10:00 AM

Lab ID: 2305404-026

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/12/2023 12:56:16 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/12/2023 12:56:16 AM
Surr: DNOP	90.0	69-147		%Rec	1	5/12/2023 12:56:16 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2023 6:56:48 AM
Surr: BFB	65.2	15-244		%Rec	1	5/12/2023 6:56:48 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	5/12/2023 6:56:48 AM
Toluene	ND	0.049		mg/Kg	1	5/12/2023 6:56:48 AM
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2023 6:56:48 AM
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2023 6:56:48 AM
Surr: 4-Bromofluorobenzene	82.3	39.1-146		%Rec	1	5/12/2023 6:56:48 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	61		mg/Kg	20	5/15/2023 6:33:17 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-25 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:20:00 AM

Lab ID: 2305404-027

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	59		mg/Kg	20	5/15/2023 6:45:41 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Qualifiers:**
- * Value exceeds Maximum Contaminant Level.
 - D Sample Diluted Due to Matrix
 - H Holding times for preparation or analysis exceeded
 - ND Not Detected at the Reporting Limit
 - PQL Practical Quantitative Limit
 - S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-26 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:30:00 AM

Lab ID: 2305404-028

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	500	60		mg/Kg	20	5/15/2023 6:58:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-26 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:40:00 AM

Lab ID: 2305404-029

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 7:10:29 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-26 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 11:50:00 AM

Lab ID: 2305404-030

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 7:22:54 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-27 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:00:00 PM

Lab ID: 2305404-031

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	2600	150		mg/Kg	50	5/16/2023 12:13:57 PM

Analyst: **NAI**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-27 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:10:00 PM

Lab ID: 2305404-032

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 8:12:32 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-27 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:20:00 PM

Lab ID: 2305404-033

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 8:24:57 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-28 0.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:30:00 PM

Lab ID: 2305404-034

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	410	60		mg/Kg	20	5/15/2023 8:37:22 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: **5/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-28 2.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:40:00 PM

Lab ID: 2305404-035

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	ND	60		mg/Kg	20	5/15/2023 8:49:46 PM

Analyst: **SNS**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305404**

Date Reported: 5/17/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-28 4.0'

Project: Dayton Recycle Release

Collection Date: 5/6/2023 12:50:00 PM

Lab ID: 2305404-036

Matrix: SOIL

Received Date: 5/9/2023 7:39:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	600	60		mg/Kg	20	5/15/2023 9:02:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305404

17-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-74931	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74931	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507891	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74931	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74931	RunNo: 96724								
Prep Date: 5/12/2023	Analysis Date: 5/12/2023	SeqNo: 3507892	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Sample ID: MB-74946	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74946	RunNo: 96761								
Prep Date: 5/15/2023	Analysis Date: 5/15/2023	SeqNo: 3509919	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74946	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74946	RunNo: 96761								
Prep Date: 5/15/2023	Analysis Date: 5/15/2023	SeqNo: 3509920	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: MB-74963	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74963	RunNo: 96761								
Prep Date: 5/15/2023	Analysis Date: 5/15/2023	SeqNo: 3509949	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74963	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74963	RunNo: 96761								
Prep Date: 5/15/2023	Analysis Date: 5/15/2023	SeqNo: 3509950	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305404

17-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-74874	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 74874		RunNo: 96702							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506800		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	61.9	130			
Surr: DNOP	4.9		5.000		97.4	69	147			

Sample ID: MB-74874	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 74874		RunNo: 96702							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506803		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305404

17-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-74864	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506809		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.4	70	130			
Surr: BFB	5000		1000		503	15	244			S

Sample ID: mb-74864	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 74864		RunNo: 96676							
Prep Date: 5/10/2023	Analysis Date: 5/11/2023		SeqNo: 3506810		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	760		1000		75.7	15	244			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305404

17-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-74864	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 74864	RunNo: 96676								
Prep Date: 5/10/2023	Analysis Date: 5/11/2023	SeqNo: 3506872	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.025	1.000	0	77.9	70	130			
Toluene	0.81	0.050	1.000	0	81.0	70	130			
Ethylbenzene	0.81	0.050	1.000	0	81.4	70	130			
Xylenes, Total	2.5	0.10	3.000	0	81.8	70	130			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	39.1	146			

Sample ID: mb-74864	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 74864	RunNo: 96676								
Prep Date: 5/10/2023	Analysis Date: 5/11/2023	SeqNo: 3506873	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.8	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc.

Work Order Number: 2305404

RcptNo: 1

Received By: Tracy Casarrubias 5/9/2023 7:39:00 AM

Completed By: Tracy Casarrubias 5/9/2023 8:08:21 AM

Reviewed By: [Signature] 5-9-23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [] No [x] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [x] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [x] No [] NA []
5. Sample(s) in proper container(s)? Yes [x] No []
6. Sufficient sample volume for indicated test(s)? Yes [x] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []
8. Was preservative added to bottles? Yes [] No [x] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]
10. Were any sample containers received broken? Yes [] No [x]
11. Does paperwork match bottle labels? Yes [x] No []
12. Are matrices correctly identified on Chain of Custody? Yes [x] No []
13. Is it clear what analyses were requested? Yes [x] No []
14. Were all holding times able to be met? Yes [x] No []

of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: [Signature] 5/9/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: Mailing address, phone number and Email are missing on COC- TMC 5/9/23

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 17.7, Good, Yes, Morty, [], []

Chain-of-Custody Record

Client: Silverback

Mailing Address: Direct Bill

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type): _____

Turn-Around Time: Standard Rush 5 Days

Project Name: Dayton Recycle Release

Project #: 23E-02248

Project Manager: Michael Novak

Sampler: MT

On Ice: Yes No MOAY

of Coolers: 1

Cooler Temp (including CF): 17.8-0.1-17.7°C

Container Type and # 4oz

Preservative Type ICE

HEAL No. 2305404

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5-8-23	0900	Soil	BH23-17	4oz	ICE	2305404
	0910		BH23-17			001
	0920		BH23-17			003
	0930		BH23-18			004
	0940		BH23-18			005
	0950		BH23-18			006
	1000		BH23-19			007
	1010		BH23-19			008
	1020		BH23-19			009
	1030		BH23-20			010
	1040		BH23-20			011
	1050		BH23-20			012

Date: _____ Time: _____

Date: 5/8/23 Time: 12:30

Date: 5/9/23 Time: 7:39

Relinquished by: Michael Novak

Relinquished by: Michael Novak



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021) _____

TPH:8015D(GRO / DRO / MRO) _____

8081 Pesticides/8082 PCB's _____

EDB (Method 504.1) _____

PAHs by 8310 or 8270SIMS _____

RCRA 8 Metals _____

Cl, F, Br, NO₃, NO₂, PO₄, SO₄ _____

8260 (VOA) _____

8270 (Semi-VOA) _____

Total Coliform (Present/Absent) _____

Remarks: CC: Mark Ritchie

mmmmmm

mmmmmm

mmmmmm

mmmmmm

Chain-of-Custody Record

Client: Silverback
Direct Bill
 Mailing Address:

Turn-Around Time:
 Standard Rush 5 AM
 Project Name:
Dayton Recycle Release

Project #: 23E-02248

Project Manager:
Michael Navch

Sampler: NA
 On Ice: Yes No mark
 # of Coolers: 1
 Cooler Temp (including CF): 13.8 -0.12 13.7 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5-6-23	0900	Soil	BH23-21 0.0	702	ICE	2305404
	0910		BH23-21 2.0			017
	0920		BH23-21 4.0			014
	0930		BH23-22 0.0			015
	0940		BH23-22 2.0			016
	0950		BH23-22 4.0			019
	1000		BH23-23 0.0			018
	1010		BH23-23 2.0			019
	1020		BH23-23 4.0			020
	1030		BH23-24 0.0			021
	1040		BH23-24 2.0			022
	1050		BH23-24 4.0			023

Date: 5/8/23 Time: 1900
 Relinquished by: Mark Ritche
 Date: 5/8/23 Time: 7:31
 Received by: Mark Ritche Date: 5/8/23 Time: 1200
 Received by: Mark Ritche Date: 5/19/23 Time: 7:31

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ⁻ , SO ₄ ⁻	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: CC: Mark Ritche
mark.ritche@silverback.exp.com

Chain-of-Custody Record

Client: Silverback
Direct Bill

Mailing Address:
 Phone #:
 email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation: Az Compliance
 NELAC Other
 EDD (Type)

Turn-Around Time:
 Standard Rush 5 DAM
 Project Name:
Darton Recycle Release
 Project #:
23E-02248

Project Manager:
Michael Nawak
 Sampler: ABT
 On Ice: Yes No mark
 # of Coolers: 1
 Cooler Temp (including CF): 7.8-0.1: 13.7(C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/8/23	1100	Sa.1	BH23-25	402	ICE	025
	1110		BH23-25			026
	1120		BH23-25			027
	1130		BH23-26			028
	1140		BH23-26			029
	1150		BH23-26			030
	1200		BH23-27			031
	1210		BH23-27			032
	1220		BH23-27			033
	1230		BH23-28			034
	1240		BH23-28			035
	1250		BH23-28			036

Date: 5/8/23 Time: 1900
 Relinquished by: [Signature]
 Date: 5/8/23 Time: 7:39
 Received by: [Signature] Date: 5/8/23 Time: 1230
 Received by: [Signature] Date: 5/15/23 Time: 7:39



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
<input checked="" type="checkbox"/> BTEX / MTBE / TMB's (8021)	
<input checked="" type="checkbox"/> TPH 8015D (GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: CC: Mark Ritchie
mytchie@silverback.exp.com



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2023

Michael Novak

Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Dayton Recycle Release

OrderNo.: 2305A89

Dear Michael Novak:

Hall Environmental Analysis Laboratory received 14 sample(s) on 5/20/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-29 0'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 10:30:00 AM

Lab ID: 2305A89-001

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	2300	59		mg/Kg	20	5/25/2023 2:51:05 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-29 2'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 10:35:00 AM

Lab ID: 2305A89-002

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	72	60		mg/Kg	20	5/25/2023 3:03:30 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-29 4'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 10:40:00 AM

Lab ID: 2305A89-003

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	190	60		mg/Kg	20	5/25/2023 3:15:55 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-30 0'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:00:00 AM

Lab ID: 2305A89-004

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	2900	150		mg/Kg	50	5/25/2023 11:39:53 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-30 2'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:05:00 AM

Lab ID: 2305A89-005

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	340	60		mg/Kg	20	5/25/2023 3:40:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-30 4'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:10:00 AM

Lab ID: 2305A89-006

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/23/2023 9:29:12 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/23/2023 9:29:12 PM
Surr: DNOP	104	69-147		%Rec	1	5/23/2023 9:29:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/25/2023 5:18:00 AM
Surr: BFB	87.0	15-244		%Rec	1	5/25/2023 5:18:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	5/25/2023 5:18:00 AM
Toluene	ND	0.049		mg/Kg	1	5/25/2023 5:18:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	5/25/2023 5:18:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	5/25/2023 5:18:00 AM
Surr: 4-Bromofluorobenzene	83.8	39.1-146		%Rec	1	5/25/2023 5:18:00 AM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	300	60		mg/Kg	20	5/25/2023 4:17:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- | | | | |
|-----|---|----|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quantitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-31 0'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:25:00 AM

Lab ID: 2305A89-007

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	13000	600		mg/Kg	200	5/25/2023 11:52:14 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-31 2'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:30:00 AM

Lab ID: 2305A89-008

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/24/2023 11:16:20 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-31 4'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:35:00 AM

Lab ID: 2305A89-009

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	350	60		mg/Kg	20	5/24/2023 11:28:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-32 0'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:50:00 AM

Lab ID: 2305A89-010

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	150	60		mg/Kg	20	5/24/2023 11:41:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-32 2'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 11:55:00 AM

Lab ID: 2305A89-011

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	370	60		mg/Kg	20	5/25/2023 12:18:04 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-32 4'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 12:05:00 PM

Lab ID: 2305A89-012

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/23/2023 9:40:05 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/23/2023 9:40:05 PM
Surr: DNOP	96.9	69-147		%Rec	1	5/23/2023 9:40:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/25/2023 5:39:00 AM
Surr: BFB	89.3	15-244		%Rec	1	5/25/2023 5:39:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	5/25/2023 5:39:00 AM
Toluene	ND	0.048		mg/Kg	1	5/25/2023 5:39:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/25/2023 5:39:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	5/25/2023 5:39:00 AM
Surr: 4-Bromofluorobenzene	85.0	39.1-146		%Rec	1	5/25/2023 5:39:00 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	1100	60		mg/Kg	20	5/25/2023 12:30:25 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-33 0'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 12:20:00 PM

Lab ID: 2305A89-013

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	440	60		mg/Kg	20	5/25/2023 12:42:46 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2305A89**

Date Reported: **5/31/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-33 2'

Project: Dayton Recycle Release

Collection Date: 5/18/2023 12:25:00 PM

Lab ID: 2305A89-014

Matrix: SOIL

Received Date: 5/20/2023 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	5/25/2023 12:55:06 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305A89

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75159	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75159	RunNo: 96996								
Prep Date: 5/24/2023	Analysis Date: 5/24/2023	SeqNo: 3520080	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75159	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75159	RunNo: 96996								
Prep Date: 5/24/2023	Analysis Date: 5/24/2023	SeqNo: 3520082	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Sample ID: MB-75165	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75165	RunNo: 97007								
Prep Date: 5/24/2023	Analysis Date: 5/24/2023	SeqNo: 3520086	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75165	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75165	RunNo: 97007								
Prep Date: 5/24/2023	Analysis Date: 5/24/2023	SeqNo: 3520088	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305A89

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75110	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 75110	RunNo: 96945								
Prep Date: 5/22/2023	Analysis Date: 5/23/2023	SeqNo: 3518232	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.8	61.9	130			
Surr: DNOP	5.0		5.000		101	69	147			

Sample ID: MB-75110	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 75110	RunNo: 96945								
Prep Date: 5/22/2023	Analysis Date: 5/23/2023	SeqNo: 3518236	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.8	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305A89

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: mb-75105	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 75105	RunNo: 96984								
Prep Date: 5/22/2023	Analysis Date: 5/24/2023	SeqNo: 3519769	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		84.6	15	244			

Sample ID: lcs-75105	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 75105	RunNo: 96984								
Prep Date: 5/22/2023	Analysis Date: 5/24/2023	SeqNo: 3519770	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.6	70	130			
Surr: BFB	1900		1000		191	15	244			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305A89

31-May-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: mb-75105	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 75105	RunNo: 96984								
Prep Date: 5/22/2023	Analysis Date: 5/24/2023	SeqNo: 3519793	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		84.2	39.1	146			

Sample ID: lcs-75105	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 75105	RunNo: 96984								
Prep Date: 5/22/2023	Analysis Date: 5/24/2023	SeqNo: 3519794	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.9	70	130			
Toluene	0.84	0.050	1.000	0	84.5	70	130			
Ethylbenzene	0.83	0.050	1.000	0	82.5	70	130			
Xylenes, Total	2.5	0.10	3.000	0	82.2	70	130			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.2	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2305A89 RcptNo: 1

Received By: Tracy Casarrubias 5/20/2023 9:30:00 AM

Completed By: Tracy Casarrubias 5/20/2023 10:32:43 AM

Reviewed By: jn 5/22/23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [] No [x] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [x] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [x] No [] NA []
5. Sample(s) in proper container(s)? Yes [x] No []
6. Sufficient sample volume for indicated test(s)? Yes [x] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []
8. Was preservative added to bottles? Yes [] No [x] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]
10. Were any sample containers received broken? Yes [] No [x]
11. Does paperwork match bottle labels? Yes [x] No []
12. Are matrices correctly identified on Chain of Custody? Yes [x] No []
13. Is it clear what analyses were requested? Yes [x] No []
14. Were all holding times able to be met? Yes [x] No []

of preserved bottles checked for pH:
(<=2 or >12 unless noted)
Adjusted?
Checked by: TMC 5/20/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: Mailing address, phone number and Email are missing on COC- TMC 5/20/23

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 5.3, Good, Yes, Yogi, [], []

Chain-of-Custody Record

Client: Vertex (Silverback)

Mailing Address: on file

Phone #: _____

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 5 days

Project Name: Dayton Recycle Release

Project #: 23E-02248

Project Manager: Mike Nowak

Sampler: SPC

On Ice: Yes No yes

of Coolers: 1

Cooler Temp (including CF): 5.4-0.1-5.3 (°C)

Container Type and # 4oz jar

Preservative Type ice

HEAL No. 2305A89

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/10/23	1030	Soil	BH23-29 0'	4oz jar	ice	001
	1035		BH23-29 2'			002
	1040		BH23-29 4'			003
	1100		BH23-30 0'			004
	1105		BH23-30 2'			005
	1110		BH23-30 4'			006
	1125		BH23-31 0'			007
	1130		BH23-31 2'			008
	1135		BH23-31 4'			009
	1150		BH23-32 0'			010
	1155		BH23-32 2'			011
	1205		BH23-32 4'			012

Date: 5/18/23 Time: 1801

Relinquished by: Jalily Carter

Date: 5/19/23 Time: 1902

Relinquished by: Manning

Received by: Manning Date: 5/19/23 Time: 9:30

Via: Carrier



4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X								
X	X								

Remarks: direct bill Silverback
cc scarthar@vertex.ca P. 1/2



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 22, 2023

Michael Moffitt

Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Dayton Recycle Release

OrderNo.: 2306560

Dear Michael Moffitt:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/10/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-69 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:00:00 AM

Lab ID: 2306560-001

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	290	60		mg/Kg	20	6/15/2023 10:38:57 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-70 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:05:00 AM

Lab ID: 2306560-002

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	200	60		mg/Kg	20	6/15/2023 10:51:22 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-71 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:10:00 AM

Lab ID: 2306560-003

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	1600	90		mg/Kg	10	6/16/2023 5:15:13 PM
Motor Oil Range Organics (MRO)	2200	450		mg/Kg	10	6/16/2023 5:15:13 PM
Surr: DNOP	0	69-147	S	%Rec	10	6/16/2023 5:15:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/18/2023 2:41:00 AM
Surr: BFB	97.0	15-244		%Rec	1	6/18/2023 2:41:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	6/19/2023 4:40:00 PM
Toluene	ND	0.050		mg/Kg	1	6/19/2023 4:40:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/19/2023 4:40:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/19/2023 4:40:00 PM
Surr: 4-Bromofluorobenzene	97.0	39.1-146		%Rec	1	6/19/2023 4:40:00 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	3100	150		mg/Kg	50	6/19/2023 12:34:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-72 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:15:00 AM

Lab ID: 2306560-004

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	4400	150		mg/Kg	50	6/19/2023 12:46:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-73 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:35:00 AM

Lab ID: 2306560-005

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2800	150		mg/Kg	50	6/19/2023 12:59:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2306560**

Date Reported: **6/22/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-74 0'

Project: Dayton Recycle Release

Collection Date: 6/9/2023 10:40:00 AM

Lab ID: 2306560-006

Matrix: SOIL

Received Date: 6/10/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	540	86		mg/Kg	10	6/16/2023 5:56:32 PM
Motor Oil Range Organics (MRO)	1500	430		mg/Kg	10	6/16/2023 5:56:32 PM
Surr: DNOP	0	69-147	S	%Rec	10	6/16/2023 5:56:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/18/2023 3:02:00 AM
Surr: BFB	97.1	15-244		%Rec	1	6/18/2023 3:02:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	6/19/2023 5:02:00 PM
Toluene	ND	0.048		mg/Kg	1	6/19/2023 5:02:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/19/2023 5:02:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	6/19/2023 5:02:00 PM
Surr: 4-Bromofluorobenzene	96.7	39.1-146		%Rec	1	6/19/2023 5:02:00 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	3800	150		mg/Kg	50	6/19/2023 1:11:31 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: MB-75634	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75634	RunNo: 97471								
Prep Date: 6/15/2023	Analysis Date: 6/15/2023	SeqNo: 3542367	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75634	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75634	RunNo: 97471								
Prep Date: 6/15/2023	Analysis Date: 6/15/2023	SeqNo: 3542368	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: MB-75661	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 75661	RunNo: 97535								
Prep Date: 6/16/2023	Analysis Date: 6/16/2023	SeqNo: 3544534	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-75661	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 75661	RunNo: 97535								
Prep Date: 6/16/2023	Analysis Date: 6/16/2023	SeqNo: 3544535	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75592	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75592		RunNo: 97480							
Prep Date: 6/14/2023	Analysis Date: 6/15/2023		SeqNo: 3541824		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	72.7	61.9	130			
Surr: DNOP	4.7		5.000		93.7	69	147			

Sample ID: MB-75592	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75592		RunNo: 97480							
Prep Date: 6/14/2023	Analysis Date: 6/15/2023		SeqNo: 3541827		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.5	69	147			

Sample ID: LCS-75600	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75600		RunNo: 97480							
Prep Date: 6/14/2023	Analysis Date: 6/15/2023		SeqNo: 3542195		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.4	69	147			

Sample ID: MB-75600	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75600		RunNo: 97480							
Prep Date: 6/14/2023	Analysis Date: 6/15/2023		SeqNo: 3542197		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.1		10.00		80.6	69	147			

Sample ID: LCS-75609	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75609		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546967		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	69	147			

Sample ID: LCS-75623	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75623		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546969		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.8	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: LCS-75644	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 75644		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546970				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.0	69	147			

Sample ID: MB-75609	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75609		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546972				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		112	69	147			

Sample ID: MB-75623	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75623		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546974				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.3	69	147			

Sample ID: MB-75644	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 75644		RunNo: 97521							
Prep Date: 6/15/2023	Analysis Date: 6/16/2023		SeqNo: 3546975				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.3	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75583	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75583		RunNo: 97501							
Prep Date: 6/14/2023	Analysis Date: 6/16/2023		SeqNo: 3543011				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.6	70	130			
Surr: BFB	2200		1000		216	15	244			

Sample ID: mb-75583	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75583		RunNo: 97501							
Prep Date: 6/14/2023	Analysis Date: 6/16/2023		SeqNo: 3543012				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.9	15	244			

Sample ID: ics-75597	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75597		RunNo: 97537							
Prep Date: 6/14/2023	Analysis Date: 6/18/2023		SeqNo: 3544808				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2100		1000		215	15	244			

Sample ID: mb-75597	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75597		RunNo: 97537							
Prep Date: 6/14/2023	Analysis Date: 6/18/2023		SeqNo: 3544809				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	15	244			

Sample ID: ics-75614	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75614		RunNo: 97537							
Prep Date: 6/15/2023	Analysis Date: 6/18/2023		SeqNo: 3545009				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2200		1000		217	15	244			

Sample ID: mb-75614	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75614		RunNo: 97537							
Prep Date: 6/15/2023	Analysis Date: 6/18/2023		SeqNo: 3545010				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		109	15	244			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75597	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 75597		RunNo: 97558							
Prep Date: 6/14/2023	Analysis Date: 6/19/2023		SeqNo: 3545956				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2200		1000		222	15	244			

Sample ID: mb-75597	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 75597		RunNo: 97558							
Prep Date: 6/14/2023	Analysis Date: 6/19/2023		SeqNo: 3545957				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.9	15	244			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: ics-75583	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75583		RunNo: 97501							
Prep Date: 6/14/2023	Analysis Date: 6/16/2023		SeqNo: 3543043		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.0	70	130			
Toluene	0.98	0.050	1.000	0	98.2	70	130			
Ethylbenzene	0.98	0.050	1.000	0	97.8	70	130			
Xylenes, Total	2.9	0.10	3.000	0	97.7	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.5	39.1	146			

Sample ID: mb-75583	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75583		RunNo: 97501							
Prep Date: 6/14/2023	Analysis Date: 6/16/2023		SeqNo: 3543044		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	39.1	146			

Sample ID: ics-75597	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75597		RunNo: 97537							
Prep Date: 6/14/2023	Analysis Date: 6/18/2023		SeqNo: 3544873		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	39.1	146			

Sample ID: mb-75597	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75597		RunNo: 97537							
Prep Date: 6/14/2023	Analysis Date: 6/18/2023		SeqNo: 3544874		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.3	39.1	146			

Sample ID: ics-75614	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75614		RunNo: 97537							
Prep Date: 6/15/2023	Analysis Date: 6/18/2023		SeqNo: 3545011		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306560

22-Jun-23

Client: Vertex Resources Services, Inc.

Project: Dayton Recycle Release

Sample ID: mb-75614	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75614		RunNo: 97537							
Prep Date: 6/15/2023	Analysis Date: 6/18/2023		SeqNo: 3545012				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	39.1	146			

Sample ID: lcs-75597	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 75597		RunNo: 97558							
Prep Date: 6/14/2023	Analysis Date: 6/19/2023		SeqNo: 3546026				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	39.1	146			

Sample ID: mb-75597	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 75597		RunNo: 97558							
Prep Date: 6/14/2023	Analysis Date: 6/19/2023		SeqNo: 3546027				Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources Services, Inc. Work Order Number: 2306560 RcptNo: 1

Received By: Juan Rojas 6/10/2023 7:20:00 AM
Completed By: Juan Rojas 6/10/2023 8:21:26 AM
Reviewed By: [Signature] 6/12/23

Chain of Custody

1. Is Chain of Custody complete? Yes [] No [x] Not Present []
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes [x] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [x] No [] NA []
5. Sample(s) in proper container(s)? Yes [x] No []
6. Sufficient sample volume for indicated test(s)? Yes [x] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []
8. Was preservative added to bottles? Yes [] No [x] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]
10. Were any sample containers received broken? Yes [] No [x]
11. Does paperwork match bottle labels? Yes [x] No []
12. Are matrices correctly identified on Chain of Custody? Yes [x] No []
13. Is it clear what analyses were requested? Yes [x] No []
14. Were all holding times able to be met? Yes [x] No []

of preserved bottles checked for pH:
Adjusted?
Checked by: [Signature] 6/10/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified: [] Date []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:
Client missing mailing address, phone number, and email address. JR 6/10/23

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 1.4, Good, No, Yogi, [], []

Chain-of-Custody Record

Client: VRTX (Silverback)
 Mailing Address: On file
 Phone #: _____

email or Fax#: _____
 QA/QC Package: Level 4 (Full Validation)
 Accreditation: AZ Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time: Sc
 Standard ~~Rush~~ 5 Day
 Project Name: Dayton Recycle Release
 Project #: 23E-02240

Project Manager: Michael Moffitt
 Sampler: AM
 On Ice: Yes No
 # of Coolers: 1
 Cooler Temp (including CF): 37.6 ± 1.9 (°C)

Container Type and # 40y jar ice
 Preservative Type _____
 HEAL No. 2306560
-001
-002
-003
-004
-005
-006

Date	Time	Matrix	Sample Name	Depth
9/9/23	1000	Soil	BH23-69	0'
	1005		BH23-70	0'
	1010		BH23-71	0'
	1015		BH23-72	0'
	1035		BH23-73	0'
	1040		BH23-74	0'

Date: 9/9/23 Time: 1248
 Relinquished by: Sally Cartan
 Date: 9/9/23 Time: 1900
 Relinquished by: AM

Received by: AM Date: 9/13/23 Time: 1248
 Received by: AM Date: 9/13/23 Time: 7:20



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ³⁻ , SO ₄ ²⁻	<input checked="" type="checkbox"/>
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: Chlorides only - 69,70,72,73
Direct bill Silverback
Sample 71 & 74 BTC FULL



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 11, 2023

Mike Moffit

Silverback Exploration
19707 IH10 W Suit 201
San Antonio, TX 78257
TEL: (210) 585-3316
FAX:

RE: Dayton Recycle

OrderNo.: 2307085

Dear Mike Moffit:

Hall Environmental Analysis Laboratory received 8 sample(s) on 7/5/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-101 0'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:00:00 AM

Lab ID: 2307085-001

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/6/2023 6:37:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2023 6:37:09 PM
Surr: DNOP	87.6	69-147		%Rec	1	7/6/2023 6:37:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/7/2023 10:51:00 AM
Surr: BFB	92.5	15-244		%Rec	1	7/7/2023 10:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	7/7/2023 10:51:00 AM
Toluene	ND	0.049		mg/Kg	1	7/7/2023 10:51:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/7/2023 10:51:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/7/2023 10:51:00 AM
Surr: 4-Bromofluorobenzene	91.7	39.1-146		%Rec	1	7/7/2023 10:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/6/2023 11:56:52 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-101 2'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:05:00 AM

Lab ID: 2307085-002

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/6/2023 6:48:14 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/6/2023 6:48:14 PM
Surr: DNOP	83.0	69-147		%Rec	1	7/6/2023 6:48:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/7/2023 11:13:00 AM
Surr: BFB	98.4	15-244		%Rec	1	7/7/2023 11:13:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	7/7/2023 11:13:00 AM
Toluene	ND	0.050		mg/Kg	1	7/7/2023 11:13:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/7/2023 11:13:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/7/2023 11:13:00 AM
Surr: 4-Bromofluorobenzene	94.6	39.1-146		%Rec	1	7/7/2023 11:13:00 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/6/2023 10:55:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-102 2'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:10:00 AM

Lab ID: 2307085-003

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/6/2023 6:59:19 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2023 6:59:19 PM
Surr: DNOP	83.1	69-147		%Rec	1	7/6/2023 6:59:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/7/2023 11:35:00 AM
Surr: BFB	95.8	15-244		%Rec	1	7/7/2023 11:35:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	7/7/2023 11:35:00 AM
Toluene	ND	0.050		mg/Kg	1	7/7/2023 11:35:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/7/2023 11:35:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/7/2023 11:35:00 AM
Surr: 4-Bromofluorobenzene	93.4	39.1-146		%Rec	1	7/7/2023 11:35:00 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/7/2023 12:09:14 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-102 4'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:15:00 AM

Lab ID: 2307085-004

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/6/2023 7:10:23 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2023 7:10:23 PM
Surr: DNOP	82.6	69-147		%Rec	1	7/6/2023 7:10:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/7/2023 11:57:00 AM
Surr: BFB	97.5	15-244		%Rec	1	7/7/2023 11:57:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	7/7/2023 11:57:00 AM
Toluene	ND	0.050		mg/Kg	1	7/7/2023 11:57:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/7/2023 11:57:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/7/2023 11:57:00 AM
Surr: 4-Bromofluorobenzene	94.9	39.1-146		%Rec	1	7/7/2023 11:57:00 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/7/2023 12:21:34 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-102 5'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:20:00 AM

Lab ID: 2307085-005

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/6/2023 7:21:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2023 7:21:27 PM
Surr: DNOP	74.8	69-147		%Rec	1	7/6/2023 7:21:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/7/2023 12:19:00 PM
Surr: BFB	96.4	15-244		%Rec	1	7/7/2023 12:19:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	7/7/2023 12:19:00 PM
Toluene	ND	0.049		mg/Kg	1	7/7/2023 12:19:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/7/2023 12:19:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/7/2023 12:19:00 PM
Surr: 4-Bromofluorobenzene	94.9	39.1-146		%Rec	1	7/7/2023 12:19:00 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	87	60		mg/Kg	20	7/7/2023 12:33:55 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-103 2'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:25:00 AM

Lab ID: 2307085-006

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/6/2023 7:32:27 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/6/2023 7:32:27 PM
Surr: DNOP	86.9	69-147		%Rec	1	7/6/2023 7:32:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/7/2023 12:41:00 PM
Surr: BFB	99.2	15-244		%Rec	1	7/7/2023 12:41:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.025		mg/Kg	1	7/7/2023 12:41:00 PM
Toluene	ND	0.049		mg/Kg	1	7/7/2023 12:41:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/7/2023 12:41:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/7/2023 12:41:00 PM
Surr: 4-Bromofluorobenzene	95.0	39.1-146		%Rec	1	7/7/2023 12:41:00 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/7/2023 12:46:15 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-103 4'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:30:00 AM

Lab ID: 2307085-007

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/6/2023 7:43:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2023 7:43:29 PM
Surr: DNOP	82.8	69-147		%Rec	1	7/6/2023 7:43:29 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/7/2023 1:02:00 PM
Surr: BFB	97.2	15-244		%Rec	1	7/7/2023 1:02:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	7/7/2023 1:02:00 PM
Toluene	ND	0.048		mg/Kg	1	7/7/2023 1:02:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/7/2023 1:02:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/7/2023 1:02:00 PM
Surr: 4-Bromofluorobenzene	95.4	39.1-146		%Rec	1	7/7/2023 1:02:00 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/7/2023 12:58:36 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

Lab Order **2307085**

Date Reported: **7/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Silverback Exploration

Client Sample ID: TP23-103 5'

Project: Dayton Recycle

Collection Date: 6/30/2023 10:35:00 AM

Lab ID: 2307085-008

Matrix: SOIL

Received Date: 7/5/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/6/2023 7:54:27 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/6/2023 7:54:27 PM
Surr: DNOP	83.7	69-147		%Rec	1	7/6/2023 7:54:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/7/2023 1:24:00 PM
Surr: BFB	97.5	15-244		%Rec	1	7/7/2023 1:24:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: KMN
Benzene	ND	0.024		mg/Kg	1	7/7/2023 1:24:00 PM
Toluene	ND	0.048		mg/Kg	1	7/7/2023 1:24:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/7/2023 1:24:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/7/2023 1:24:00 PM
Surr: 4-Bromofluorobenzene	96.4	39.1-146		%Rec	1	7/7/2023 1:24:00 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	7/7/2023 1:10:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307085

11-Jul-23

Client: Silverback Exploration

Project: Dayton Recycle

Sample ID: MB-76040	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 76040	RunNo: 98000								
Prep Date: 7/6/2023	Analysis Date: 7/6/2023	SeqNo: 3565793	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-76040	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 76040	RunNo: 98000								
Prep Date: 7/6/2023	Analysis Date: 7/6/2023	SeqNo: 3565794	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.7	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307085

11-Jul-23

Client: Silverback Exploration

Project: Dayton Recycle

Sample ID: LCS-76032	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 76032	RunNo: 97976								
Prep Date: 7/6/2023	Analysis Date: 7/6/2023	SeqNo: 3564808	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.6	61.9	130			
Surr: DNOP	3.9		5.000		77.1	69	147			

Sample ID: MB-76032	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 76032	RunNo: 97976								
Prep Date: 7/6/2023	Analysis Date: 7/6/2023	SeqNo: 3564811	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		83.5	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307085

11-Jul-23

Client: Silverback Exploration

Project: Dayton Recycle

Sample ID: ics-76025	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 76025	RunNo: 97992								
Prep Date: 7/6/2023	Analysis Date: 7/7/2023	SeqNo: 3565537	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.8	70	130			
Surr: BFB	2000		1000		199	15	244			

Sample ID: mb-76025	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 76025	RunNo: 97992								
Prep Date: 7/6/2023	Analysis Date: 7/7/2023	SeqNo: 3565538	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.6	15	244			

Sample ID: 2307085-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: TP23-101 0'	Batch ID: 76025	RunNo: 97992								
Prep Date: 7/6/2023	Analysis Date: 7/7/2023	SeqNo: 3566883	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.61	0	103	70	130			
Surr: BFB	2300		984.3		232	15	244			

Sample ID: 2307085-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: TP23-101 0'	Batch ID: 76025	RunNo: 97992								
Prep Date: 7/6/2023	Analysis Date: 7/7/2023	SeqNo: 3566884	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.44	0	94.1	70	130	9.23	20	
Surr: BFB	2100		977.5		215	15	244	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307085

11-Jul-23

Client: Silverback Exploration
Project: Dayton Recycle

Sample ID: ics-76025	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 76025		RunNo: 97992							
Prep Date: 7/6/2023	Analysis Date: 7/7/2023		SeqNo: 3565540		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.6	70	130			
Toluene	0.90	0.050	1.000	0	89.6	70	130			
Ethylbenzene	0.91	0.050	1.000	0	90.5	70	130			
Xylenes, Total	2.7	0.10	3.000	0	90.5	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.9	39.1	146			

Sample ID: mb-76025	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 76025		RunNo: 97992							
Prep Date: 7/6/2023	Analysis Date: 7/7/2023		SeqNo: 3565541		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	39.1	146			

Sample ID: 2307085-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: TP23-101 2'	Batch ID: 76025		RunNo: 97992							
Prep Date: 7/6/2023	Analysis Date: 7/7/2023		SeqNo: 3566907		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	0.9960	0	93.0	70	130			
Toluene	0.97	0.050	0.9960	0	97.5	70	130			
Ethylbenzene	0.99	0.050	0.9960	0	99.3	70	130			
Xylenes, Total	3.0	0.10	2.988	0	99.4	70	130			
Surr: 4-Bromofluorobenzene	0.97		0.9960		97.2	39.1	146			

Sample ID: 2307085-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: TP23-101 2'	Batch ID: 76025		RunNo: 97992							
Prep Date: 7/6/2023	Analysis Date: 7/7/2023		SeqNo: 3566908		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	0.9921	0	86.8	70	130	7.37	20	
Toluene	0.90	0.050	0.9921	0	90.2	70	130	8.08	20	
Ethylbenzene	0.92	0.050	0.9921	0	92.6	70	130	7.41	20	
Xylenes, Total	2.8	0.099	2.976	0	92.4	70	130	7.66	20	
Surr: 4-Bromofluorobenzene	0.95		0.9921		95.6	39.1	146	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Silverback Exploration Work Order Number: 2307085 RcptNo: 1

Received By: Tracy Casarrubias 7/5/2023 7:35:00 AM

Completed By: Tracy Casarrubias 7/6/2023 9:10:22 AM

Reviewed By: [Handwritten signature] 7/6/23

Chain of Custody

1. Is Chain of Custody complete? Yes [] No [x] Not Present []

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes [x] No [] NA []

4. Were all samples received at a temperature of >0° C to 6.0°C Yes [x] No [] NA []

5. Sample(s) in proper container(s)? Yes [x] No []

6. Sufficient sample volume for indicated test(s)? Yes [x] No []

7. Are samples (except VOA and ONG) properly preserved? Yes [x] No []

8. Was preservative added to bottles? Yes [] No [x] NA []

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [x]

10. Were any sample containers received broken? Yes [] No [x]

11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes [x] No []

12. Are matrices correctly identified on Chain of Custody? Yes [x] No []

13. Is it clear what analyses were requested? Yes [x] No []

14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes [x] No []

of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? Checked by: [Handwritten signature] 07/06/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes [] No [] NA [x]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: Mailing address, phone number and Email/ Fax are missing on COC- TMC 7/6/23

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 5.8, Good, Yes, Morty, [], []

ATTACHMENT 4

**FW: [EXTERNAL] Dayton Recycle Facility: Incident ID nAPP2307356662
(Deferral/Variance Request)**

Michael Moffitt <MMoffitt@vertex.ca>

Thu 7/6/2023 10:47 AM

To:Sally Carttar <SCarttar@vertex.ca>

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Sent: Wednesday, June 21, 2023 8:25 AM

To: Michael Moffitt <MMoffitt@vertex.ca>; Mark Ritchie <mritchie@silverbackexp.com>

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: RE: [EXTERNAL] Dayton Recycle Facility: Incident ID nAPP2307356662 (Deferral/Variance Request)

Michael,

The only part of the releases that would qualify for a deferral would be the contaminated area up against the pond at the Dayton Recycle Facility. The release needs to be on an Active Well Pad or within the boundary of a Facility to qualify for a deferral. The remainder of the releases are off Pad and require immediate reclamation. This includes anything located within the pasture area or on roads.

Spill Rule Procedures September 6, 2019 Page 2 & 3

VI. ON-SITE vs. OFF-SITE REMEDIATION:

- a. Remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction. A major facility deconstruction is determined by the OCD on a case by case basis. The remediation, restoration, and reclamation may be deferred with OCD's written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first. For the deferral request the contamination must be fully delineated. In addition, the contamination must not pose an imminent risk to human health, the environment, or groundwater. Deferrals are not forever and remediation must be completed in a timely fashion once the equipment is out of use for oil and gas operations.
- b. Cleanup of off-site impacts cannot be deferred as they would not meet the deferral requirements of 19.15.29.12(C)(2) NMAC.
- c. The difference between on- and off-site releases is when the reclamation and restoration must occur. Off-site releases must be reclaimed and restored immediately. On-site reclamation and restoration can wait until operations have ceased, but still must be done.

The OCD Spill Rule requires that all samples be tested/analyzed for all components in Table 1 of the spill rule.

All roads will need to be delineated/sampled and reclaimed immediately.

The variance for 600 ft² confirmation sample size is denied. The largest variance we can approve at the moment is 400 ft² for confirmation samples.

If you would like to move forward with the deferral request up against the Dayton Recycling Facility Pond and the 400 ft² confirmation sample size, please upload the variance request to the OCD Permitting Portal so all the documents make it into the Incident Files and we will take a look at it.

Regards,

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Michael Moffitt <MMoffitt@vertex.ca>
Sent: Tuesday, June 20, 2023 4:00 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Mark Ritchie <mritchie@silverbackexp.com>
Subject: [EXTERNAL] Dayton Recycle Facility: Incident ID nAPP2307356662 (Deferral/Variance Request)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Robert,

Vertex is in the process of finalizing a remediation plan on behalf of Silverback regarding their Dayton Recycle Facility. The event occurred during pigging operations of a lay flat line back in February, and the total volume released was 2,312 bbls. Zero hydrocarbons/BTEX impacts have been encountered during characterization of the site, which directly correlates to the nature of the release being diluted mixture of fresh and produced water. Moreover, the surface of the spill encompasses part of a major road to Silverback's facility as well as a small part of the earthen ramp and perimeter road at the base of the ponds. Due to operational concerns related to the remediation of soils in the affected area around the facility, I have listed below two deferral and two variance requests for review. A closure criterion work sheet, updated characterization schematic, and deferral area specific map have all been included for reference. Per the laboratory analytical results received to date, most impacts were found to be superficial and did not migrate past the surface. Only a few areas exceeded 2 feet in depth out 74 sample locations. This includes test pits and hand auguring efforts by Vertex technicians.

Roadway Deferral #1: (Dayton Deferral Request Outline PDF - Red Area)

1. Elevated chlorides were encountered at surface but not at depth due to the road being hard packed. The entire affected area along the road from the south to the north will be scraped out from 6" to 1' pending field screening results. After removal of the impacted surface materials, Vertex would like to leave in situ any soils that test below 10,000 ppm chloride within the road boundaries. The results will be backed by laboratory analytical and will be included with the work plan. Screening would only be used for guidance.
2. With hydrocarbons having not been detected in any prior samples, Vertex would like to send samples from this area to lab for chlorides only. Any soils above 10,000 ppm chloride will still be removed and sent to disposal. This correlates to reclamation criteria standards and relates to the DTGW boring within the half mile radius being at 85 feet bgs. The well was drilled on 1/12/2013.
3. It is to my understanding that NMOCD has considered roads as part of pasture in the past. With that in mind, the surface is owned by Silverback, and excavation beyond the initial scraping of the road would affect traffic to and from the active facility. The road to the site was built within the last two years. Lastly, the impacted areas left in situ within the roadway would be addressed when reclamation of the ponds/facility occurs at end of life.

Recycle Facility Entrance Ramp and Pond Perimeter Road: (Dayton Deferral Request Outline PDF - Yellow Area)

1. The point of release occurred parallel to the northern most pond of the two located at facility. It traveled from the perimeter road around at the western edge of the pond, down the ramp, and to the north. The characterization schematic shows the release path and where sampling has taken place.
2. As this area is part of the active/leased facility, which has the capacity for 1.2 million barrels total of water storage, any excavation into the foundation of the elevated berm area, road, and ramp would be a major liability for all parties involved. The risk is not worth the outcome.
3. While a light surface scrape is feasible, anything more could affect the structural integrity of the ponds. If the deferral is accepted, this area would only be horizontally characterized since vertical delineation at depth could lead to a breach. As with deferral request #1, the impacted materials left in situ will be removed at the end of life of the facility when reclamation activities occur.

Variance Request: Sampling

1. Vertex would like to request on Silverback’s behalf for a 600 square foot variance for confirmation sampling due to the size of the affected surface area. This will help expedite the remedial process. Horizontal side walls would still be collected every 200 square feet per NMAC 19.15.29.
2. Due to TPH and BTEX having not been detected in any analytical samples during site characterization, Vertex would also like to request a variance that for every 5th sample collected be tested during confirmation activities for all 3 parameters, respectively. This would still allow for checks and balances related to our sampling regimen. Additionally, bottom samples collected in pasture that are left in situ at 4’ bgs and greater that field screen for chlorides below 10,000 ppm but exceed 600 ppm would additionally be sent to lab for TPH and BTEX.

If you have any questions or concerns on what has been provided, please let me know and I will address asap. All documentation pertaining to the deferral and variance request will be included in our reports pending potential acceptance of the conditions presented.

Kind regards,

Michael Moffitt

Michael Moffitt

Manager Environment

Vertex Resource Services Inc.
3101 Boyd Drive,
Carlsbad, NM 88220

P 575.725.5001 Ext.705

C 575.988.2681

F

www.vertex.ca

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 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 263358

CONDITIONS

Operator: Silverback Operating II, LLC 19707 IH10 West, Suite 201 San Antonio, TX 78256	OGRID: 330968
	Action Number: 263358
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Work plan approved.	3/18/2024
amaxwell	A remediation report containing reclamation activities will need to include the following:	3/18/2024
amaxwell	•The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	3/18/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	3/18/2024
amaxwell	OR Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	3/18/2024
amaxwell	Submit a report via the OCD permitting portal by July 19, 2024.	3/18/2024